OFITE®

OFI Testing Equipment

Worldwide Supplier of Instruments and Reagents for Testing:

- *Drilling Fluids*
- *Cement*
- *Cores*
- *Water*
- *Wastewater*
- *Completion Fluids*

2008 Product Catalog

Dependable Products From People You Trust

Who we are...
Since 1982, OFI Testing Equipment (OFITE) has manufactured instruments and reagents for testing drilling fluids, completion fluids, oil-well cements, and wastewater.

Our mission…
Our main goal is to provide innovative and dependable instruments using the latest technology, while providing the best customer service available anywhere. We strive to be an indispensable resource to our customers by truly understanding their business, responding quickly to their requests, and by becoming the recognized leader in instrument technology and service.

We're experienced...
We've been in business over 25 years. Many of OFITE's engineers and technicians have been employed by other operators or service companies and have considerable experience in the field and laboratory environments.

Quality-Certified...
All OFITE equipment is built to API specifications, where applicable. OFITE's quality system is certified to ISO 9001:2000 standards.

Full line of products...
OFITE offers a complete line of testing equipment and replacement parts for the oilfield service and related industries. Our products are engineered to provide reliability, ease of operation, and user-friendly maintenance to keep downtime to a minimum.

Worldwide service and support...
As an independent manufacturer and supplier, OFITE has one priority - our customers. We prove this by offering quick response times for new orders, extensive repair services, and custom-designed equipment. With the help of our extensive worldwide distributor network, we're available to render assistance 24 hours a day 7 days a week.

Poised to Compete...
We have the resources, the knowledge, and the experience to compete with the market players in this industry and we have satisfied customers to prove it. We are serious about our quality and competitive on our prices. Insist on genuine OFI Testing Equipment - Dependable Products from People You Trust®.

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One of the most important properties monitored throughout the drilling operation is mud density. The OFITE mud balance is engineered so that the mud cup at one end of the beam is balanced by a fixed counterweight at the other end, with a sliding-weight rider that moves along a graduated scale. A level bubble is mounted on the beam to ensure accurate balancing. The OFITE metal and plastic mud balances are rugged instruments built to withstand the hardships of field testing, and are designed to reduce the need for re-calibration.

The sleek new 4-scale OFITE Metal Mud Balance features a Computer Numerically Controlled (CNC) all-machined manufacturing process, instead of the old die-cast molded method which has been utilized for years. This uniform method of construction results in a much stronger, more rugged instrument that sets the industry standard for accuracy, and is easier to calibrate. The zinc-aluminum alloy anodized beam is corrosion resistant and the smooth silk-screen finish is easily cleaned and promotes clear, accurate readings. This truly represents the “next generation” of mud balance design, and will result in many years of useful service.

Density Measurement Ranges:

- 6.5 - 23.0 lb/gal
- 0.79 - 2.72 specific gravity
- 49 - 172 lb/ft^3
- 340 - 1,190 PSI/1,000 ft

The full-sized plastic mud balance is imprinted with four density scales with the following ranges:

- 8 - 25 lb/gal
- 960 - 3,000 specific gravity
- 60 - 189 lb/ft^3
- 420 - 1,300 PSI/1,000 ft.

The plastic balance is more resistant to corrosive fluids, which is a major advantage in some applications.

Each balance may be readily transported in a lightweight carrying case fitted for its usage and storage.

#115-01 OFITE Metal Mud Balance Without Case

OFITE 4-SCALE METAL MUD BALANCE WITH CASE #115-00

Size: **21.5" × 4.5" × 4" (55 × 11 × 10 cm)**
Weight: **4 lb 3 oz (1.9 kg)**

Components:

#100-25-2	Rider
#100-29	Level Bubble Vial
#100-40	Case, Beige
#100-56-001	Lead Shot for Calibrating
#115-02	Arm
#115-06	Lid, Stainless Steel
#115-22	Base, Stainless Steel
#115-32	Knife Edge
#115-34	Shotwell for Lead Shot

Optional:

#115-01	OFITE Metal Mud Balance Without Case

#115-00 OFITE Metal Mud Balance

OFITE Innovation

OFITE was the first to develop a rugged, corrosion-resistant metal mud balance made of a zinc-aluminum alloy.

OFITE 4-SCALE PLASTIC MUD BALANCE WITH CASE
#100-00

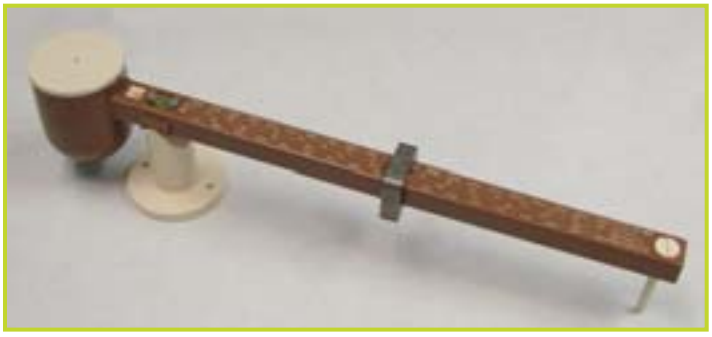
Size: **21.5" × 5" × 4.5" (55 × 13 × 11 cm)**
Weight: **3 lb (1.4 kg)**

Components:

#100-00-001	Screw, #2 × ⅜, Pan HD, Phillips Head, Stainless Steel
#100-02	Mud Balance Arm, Leg Base Assembly
#100-10	Base, Plastic
#100-20	Lid, Plastic
#100-25	Rider
#100-30	Level Bubble
#100-40	Beige Case
#100-56-001	Lead Shot for Calibrating

Optional:
#100-01 OFITE 4-Scale Plastic Mud Balance Without Case

#100-00 OFITE 4-Scale Plastic Mud Balance



#100-01 OFITE 4-Scale Plastic Mud Balance Without Case

OFITE Innovation

OFITE was the first to develop a rugged, corrosion-resistant metal mud balance made of a zinc-aluminum alloy.

HALLIBURTON TRU-WATE™ PRESSURIZED FLUID DENSITY SCALE WITH FULCRUM AND CASE

#100-60 STANDARD
#100-60-X METRIC

Size: 22.5" × 5.5" × 5.5" (57 × 14 × 14 cm)
Weight: 9 lb 6 oz (4.3 kg)

Arm Components:
#100-56 Lead Shot for Calibrating
#100-60-10 Balance Beam, Standard Scale (459.04715)
#100-60-10-1 Balance Beam, Metric Scale (459.04715)
#100-60-11 Bubble Level Assembly (459.04716)
- #100-29 Vial for Level Bubble
- #100-60-28 Screw (70.44363)

#100-60-25 Roll Pin for Rider Stop, 5/32" × 3/4", Stainless Steel
#100-60-30 Casting-Weight-Sliding Level (8459.04713)
#100-60-31 Pipe Plug, 1/8" Allen Socket Head, 304 Stainless Steel (458.84913)

Case Components:
#100-60-02 Carrying Case (459.04723)
#100-60-05 Fulcrum Point Assembly (90° Angle) (459.04719)
- #100-60-19 Stand (459.04721)
- #100-60-23 Knife Edge (459.04722)
- #100-60-27 Screw for Knife Edge (70.44364)

#100-60-20 Screw for Stand (70.44703)
#100-60-21 Wing Nut for Stand (70.33154)
#100-60-22 Flat Washer for Stand (70.58791)

Sample Cup Components:
#100-60-01 O-ring for Lid (70.33394)
#100-60-06 Sample Fluid Cup (459.04711)
#100-60-07 Cap for Lid Cup, Brass (459-04709)
#100-60-08 Lid Cup (459.04712)
#100-60-09 Check Valve for Sample Cup (459.04714)
#100-60-24 Retaining Ring for Valve (70.42295)
#142-54 O-ring for T-Fitting (30129)
#142-56 O-ring for Coupling (30127) (70.33386)

Plunger Assembly Components:
#100-60-04 Pressurized Plunger Assembly (459.04701)
- #100-60-12 Stop-Piston-Plunger, Brass (459.04703)
- #100-60-13 Packing Cup, Plastic (459.04707)
- #100-60-14 Washer-Backup-Plunger, Brass (459.04706)
- #100-60-15 Cylinder-Compression (459.04705)
- #100-60-16 Guide-Piston Rod-Plunger, Brass (459.04704)
- #100-60-17 Rod-Piston-Plunger (459.04702)
- #100-60-18 Screw Shoulder for Packing Cup (459.04708)
- #100-60-26 Red Knob, Plastic (70.28242)
- #170-07 O-ring (70.33817)

Optional:
#100-60-32 Multi-Purpose Grease, Mystik JT-6
#100-60-SP Spare Parts for One Year for #100-60
#100-60-L Tru-Wate Balance Arm without Case, Standard
#100-60-XL Tru-Wate Balance Arm without Case, Metric

#100-60 Halliburton Tru-Wate™ Pressurized Fluid Density Scale

Did you know?

OFITE shipping specialists are certified for air flight transport of hazardous chemicals and they have been trained to build EU certified crates.

FANN® METAL MUD BALANCE WITH CASE #100-50

Size: **23" × 5.5" × 4.25" (58 × 14 × 11 cm)**
Weight: **3 lb 15 oz (1.8 kg)**

Components:
#100-52 Base
#100-53 Lid
#100-54 Knife Edge and Level
#100-55 Case
#100-56 Lead Shot for Calibrating

MUD DEAERATOR WITH VACUUM PUMP #110-00

A hand-operated vacuum pump removes gas or air from fluids to provide a more accurate density measurement. Density readings are then provided using the conventional mud balance. This product comes complete with mud chamber, paddle assembly, and pump.

Size: **16" × 13" × 11" (41 × 33 × 28 cm)**
Weight: **7 lb (3.2 kg)**

Components:
#110-02 Vacuum Pump with Gauge
#141-05 Gasket, Neoprene
#142-54 O-ring
#152-85 Shaft Collar
#153-55 Stopcock Grease, Silicone
#171-90-14 Hose Barb, ⅛" NPT × ¼"

#110-00 Mud Deaerator with Vacuum Pump

HYDROMETER SET WITH CARRYING CASE #153-52

The Hydrometer Kit measures the true specific gravity of liquids in the range of 0.700 to 2.000 specific gravity. The kit consists of eight 265 mm / 10.5" glass hydrometers and a thermometer range -30 to 120°F in 1° divisions, all packed in a protective foam-lined carrying case. The hydrometer scale is standardized at 60°F. For maximum efficiency, special hydrometer cylinders are available in 250 mL and 500 mL sizes. Other specific gravity ranges and types of hydrometers are available upon request.

Size: **13.5" × 10" × 2.5" (34 × 25 × 6 cm)**
Weight: **2 lb 10 oz (1.2 kg)**

Components (may be ordered separately):
#153-52-03 Hydrometer, 0.700 to 0.810 Specific Gravity
#153-52-04 Hydrometer, 0.800 to 0.910 Specific Gravity
#153-52-05 Hydrometer, 0.900 to 1.010 Specific Gravity
#153-52-06 Hydrometer, 1.000 to 1.220 Specific Gravity
#153-52-07 Hydrometer, 1.200 to 1.420 Specific Gravity
#153-52-08 Hydrometer, 1.400 to 1.620 Specific Gravity
#153-52-09 Hydrometer, 1.600 to 1.820 Specific Gravity
#153-52-10 Hydrometer, 1.800 to 2.000 Specific Gravity
#153-52-13 Case
#153-52-14 Thermometer, -30 - 120°F

#153-52 Hydrometer Set with Carrying Case

Optional:
#153-52-01 Hydrometer Cylinder, 250 mL, Glass, 13.5 × 1.5"
#153-52-02 Hydrometer Cylinder, 500 mL, Plastic, 14.25 × 2"
#153-52-11 Hydrometer, 2.000 to 2.200 Specific Gravity
#153-52-12 Hydrometer, 2.200 to 2.400 Specific Gravity
#153-52-15 Hydrometer, Soil Test, ASTM 151H, .995 to 1.038 Specific Gravity

OFITE offers a complete line of viscometers for use in analyzing drilling fluids and completion fluids.

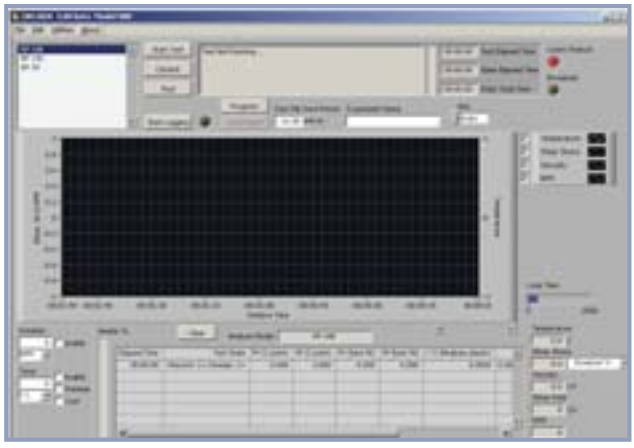
OFITE's Model 900 Viscometer is extremely versatile. Its simplicity makes it ideally suited for the field, yet with the addition of a computer can perform as well as any lab instrument available today. Mud engineers will appreciate the push button calibration, not to mention getting standard API tests with one command.

For enhanced data collection, OFITE offers the Model 1100 Pressurized Viscometer. This fully-automated system accurately determines the flow characteristics of completion fluids and drilling fluids in terms of shear stress, shear rate, time, and temperature at pressure up to 1,000 PSI. You can clean the cup and change fluids without disassembling the unit. The rugged viscometer is suitable for both field and laboratory use. An optional waterproof case makes the unit completely portable.

The Model 800 Viscometer is suitable for both field and laboratory use and uses a motor-driven electronic package to provide drilling fluid engineers with an extremely accurate and versatile tool. Field-proven 2-speed models are also available. OFITE also sells and services viscometers from other manufacturers, including the Fann® 35A (60 Hz) and 35SA (50 Hz) 6-Speed Viscometers, as well as the Brookfield LVDV-II+.

ORCADA™ System
The exclusive ORCADA™ (OFITE Rheometer Control and Data Acquisition) software is simple enough to be run by a computer novice, yet versatile enough for advanced research and demanding test parameters. You can even store your data in an ASCII text format or in an Excel® spreadsheet file for easy access and reporting capabilities. It is available on the OFITE Model 900, Model 1100, and HTHP Viscometers.

The ORCADA™ system can also be used to upgrade older pressurized high-temperature rheometers, such as the Fann® Model 50C and its copies. All of the electronic hardware and physical modifications required to upgrade an older unit are included.



ORCADA™ Software

Viscometers

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Did you know?

We want to make ordering easy for you! You can email us at sales@ofite.com, call us at 1-877-TEST-MUD (1-877-837-8683) or 713-880-9885, fax us at 713-880-9886, or shop online at www.ofite.com.

HTHP VISCOMETER, 30,000 PSI (206.9 MPA), 500°F (260°C)

#130-77 115-VOLT
#130-77-1 230-VOLT

When extremely high-temperature and/or high-pressure viscosity measurements are required, the OFITE HTHP Viscometer is the solution. This fully-automated system accurately determines the rheological properties of completion fluids and drilling fluids in terms of shear stress, shear rate, time, and temperature at pressures up to 30,000 PSI (207 MPa) and temperatures up to 500°F (260°C). An optional Chiller is available for those situations in which the fluid sample needs to be cooled, rather than heated, further increasing the flexibility of the system.

Like OFITE's other computer-controlled viscometers, the HTHP Viscometer features our easy-to-use ORCADA™ software. Using this exclusive software, a computer novice can operate the HTHP Viscometer, and yet the system is versatile enough for advanced research and demanding test parameters.

The HTHP Viscometer uses a compass to detect the rotation of a magnet at the top of the torsion assembly. The influence of the powerful drive magnets inside of the shield, the earth's magnetic field, the magnetic properties of the shield, spring non-linearities, magnetic fields and masses in the laboratory, non-ideal fluid flow, and small geometry variations all combine to make the angle display non-linear if not compensated. The microprocessor allows for easy compensation for those effects.

Crated Size: **39" × 35" × 47" (99 × 89 × 119 cm)**
Crated Weight: **365 lb (165.6 kg)**

Components:

#120-00-016-1	Pressure TDR, 50,000 PSI (345 MPa)
#120-00-053	Elbow Connector, ¼"
#120-106	High-Pressure Filter
#120-75-2	Water Solenoid Valve, 115-Volt
#122-210-3	9-Pin DBA Connector (17-DE095)
#130-75-31	Motor Slide Nut
#130-75-71	Monitor
#130-75-74	Desktop Computer
#130-76-04	Main Bearing
#130-76-05	Retaining Ring
#130-76-06	Drive Belt
#130-76-11	Terminal
#130-76-23	Gear, 20-Tooth
#130-76-38	Control Card
#130-76-43	Solid-State Relay
#130-77-002	O-ring for Lower Seal, #226
#130-77-022	Rupture Disk, 33,000 PSI (227.5 MPa)
#130-77-025	Leveling Leg
#130-77-071	MU Metal, 4" Wide × 0.010" Thick
#130-77-072	MU Metal, 15" Wide × 0.010" Thick
#130-77-080	Torsion Spring Module, F1
#130-77-1	Bearing, Vee Jewel
#130-77-2	Cell Assembly
#130-77-3	O-ring, 1.359" × .139", NIT-C67
#130-77-4	O-ring, 2" × ⅛", VIT-V25
#130-77-5	O-ring, 7/32" × 1/16" NIT-C67
#130-77-6	O-ring, 3" × ⅛", VIT-V14
#130-77-7	Retaining Ring for 0.8125" Shaft, RS-81S, Stainless Steel
#130-77-9	Bearing, Angular Contact
#130-77-10	Ball, 3/16", Stainless Steel
#130-77-11	Shoulder Screw, 10-32 × 0.2495"
#130-77-20	Rotor Bushing
#130-77-21	RTD Sensor, 3-Wire, 18" Long, ⅛" 316 Stainless Steel Sheathwidth, 24" Leads
#130-77-22	Backup Ring, Upper
#130-77-23	Backup Ring, Lower
#130-77-25	Test Stand Assembly
#130-77-27	Stator Magnet Assembly
#130-77-28	Driven Magnet
#130-77-34-1	Pivot Thermowell
#130-77-37	Retainer Nut
#130-77-38	Rotor, R1
#130-77-49	High-Pressure Connector
#130-78-017	Terminal Block
#130-78-019	Jumper for Fuse Holder
#130-78-045	Male Connector, ¼" Tube OD × ¼"
#130-78-046	Tube Fitting, Swagelok, Male Connector, ¼" Tube OD × ⅜" Male NPT, Stainless Steel
#130-79-04	DAQ Card for Desktop Computer
#130-79-05	Cable for Use with DAQ Card
#130-79-14	Printer
#130-79-15	Serial Cable, OB9 M/F
#130-79-24	Connector, 5-Pin Female
#130-79-25	Connector, 5-Pin Male
#130-79-26	Connector, 3-Pin Female
#130-79-27	Connector, 3-Pin Male
#132-80	Calibration Fluid, Certified, 100 cP, 16 oz
#152-37	AC Power Cord, 3-Conductor
#171-84-03	Strap Wrench
#172-14	On/Off Toggle Switch
#172-24	Solid State Relay, 25-Amp, 230-Volt

Optional:

#130-77-12	Pivot
#130-77-080-1	Torsion Spring

#130-77 OFITE HTHP Viscometer

MODEL 1100 PRESSURIZED VISCOMETER WITH ORCADA™ SOFTWARE AND HASTELLOY®-WETTED PARTS, 500°F (260°C), 1,000 PSI (6.9 MPA)

#130-81-A WITH DESKTOP PC, 115-VOLT
#130-81-B WITH LAPTOP PC, 115-VOLT
#130-81-C WITH LAPTOP PC AND PADDED CARRYING CASE, 115-VOLT
#130-81-1-A WITH DESKTOP PC, 230-VOLT
#130-81-1-B WITH LAPTOP PC, 230-VOLT
#130-81-1-C WITH LAPTOP PC AND PADDED CARRYING CASE, 230-VOLT

The OFITE Pressurized Viscometer is a fully-automated system that accurately determines the flow characteristics of completion fluids and drilling fluids in terms of shear stress, shear rate, time and temperature at pressures of up to 1,000 PSI (6.9 MPa). It is suitable for both field and laboratory use. An optional waterproof case with wheels makes the unit completely portable.

Size: **14" × 13" × 30" (36 × 33 × 76 cm)**
Weight: **85 lb (37.6 kg)**

Components:

#120-910-061	Union Elbow, ¼" Tube
#130-75-003	Heater
#130-75-02	O-ring for Cap
#130-75-04	O-ring for Thermocouple
#130-75-14	O-ring
#130-75-18	Transducer Cable Assembly
#130-75-20	Spanner Wrench, 3/16"
#130-75-21	R1B1 Tube Fill Assembly
#130-75-21-1	Tube
#130-75-21C	Suction Bulb
#130-75-27	Allen Key, T-Handle, 3/16"
#130-75-28	Allen Key, 1/16"
#130-75-31	Motor Slid Nut
#130-75-461	Coil Retainer
#130-75-75	Standoff
#130-75-76	Set Screw, Socket Head, 6-32 × ⅛"
#130-75-78	Screw, Flat Socket Head, 8-32 × ½"
#130-75-79	Screw, Socket Head, 8-32 × ½"
#130-76-11	Terminal
#130-76-43	Solid State Relay
#130-76-44	Thermocouple Jack
#130-76-47	Retaining Ring Pliers, External
#130-77-054	⅛" Male Elbow
#130-78-017	Terminal Block
#130-78-019	Jumper for Fuse Holder
#130-78-04	Sample Thermocouple
#130-78-05	Main Seal
#130-78-13	Bob, B1 Hastelloy® with Threads for Stainless Steel
#130-78-17	Bearing for Bob Shaft
#130-78-18	Bearing for Main Body, Sealed
#130-78-22	Stop Pin
#130-78-25	Heater Bath Oil, 16 oz
#130-78-34	Packing Washer
#130-78-36	O-ring, 13/16" × 1", Viton® V75
#130-78-42	Retainer Ring for Main Shaft, External
#130-79-15	Serial Cable, OB9, M/F
#130-79-20	Model LF Controller 525F, Limit Switch, 115-Volt
#130-79-24	Connector, 5-Pin Female
#130-79-25	Connector, 5-Pin Male
#130-79-26	Connector, 3-Pin Female
#130-79-27	Connector, 3-Pin Male
#130-79-31	Control Card
#130-81-036	Tube Fitting, Swagelok, Male Elbow, ⅛" Tube OD × ¼" Male NPT, Stainless Steel
#130-81-037	Tube Fitting, Swagelok, Union Cross, ⅛" Tube OD, Stainless Steel
#130-81-04	Retaining Ring, Spiral, Single Turn, 302 Stainless Steel
#130-81-16	Bob Shaft Assembly
#130-81-27	Screw, Socket Head, ¼-28 × 1"
#130-81-35	Cable Chain
#130-81-36	Vlier Quick-Release Plunger
#130-81-37	Allen Key, .050
#130-81-38	Seal Nut Wrench
#130-81-39	Allen Key, ¼"
#130-87-011	Standoff, 4-40 × ½" × ¼"
#132-83	Calibration Fluid, Certified, 200 cP, 16 oz
#135-05	Bushing
#150-80-047	Fuse Holder
#152-38	AC Power Cord, 3-Conductor, International (Continental European)
#153-00	Bottle Brush
#153-55	Stopcock Grease, Silicone, 150 g Tube
#153-67	Syringe, Disposable, 60 cc
#165-40	Power Cable, 115-Volt
#170-17	O-ring for Valve Stem
#170-66	Female Elbow Adapter, ⅛" Tube × ⅛" Female Elbow
#171-44	Rubber Foot, ¾"

OFITE Model 1100 Pressurized Viscometer

OFITE MODEL 900 VISCOMETER WITH DIGITAL THERMOMETER SYSTEM, THERMOCUP, COMPUTER, SOFTWARE, CALIBRATION FLUID, AND CARRYING CASE WITH ROLLERS

#130-76-C 115-VOLT
#130-76-1-C 230-VOLT

A high tech testing instrument doesn't have to be difficult to use or maintain. Take a look at the Model 900, OFITE's newest addition to their viscometer line, and one word comes to mind - simple: simple to operate, simple to calibrate, simple to maintain.

As a stand-alone field unit, the press of a single button prompts the viscometer to perform standard API test sweeps for your choice of mud or cement rheologies. Standard speeds (i.e. 600, 300, etc.) are also provided as single button operations on the keypad. Need a specific shear rate? Just enter the parameters on the numbered keypad and press 'Enter'.

Have a need for advanced research and demanding test parameters? Just hook up a computer to the Model 900 and turn it into a fully automated system that includes complete data acquisition using OFITE's exclusive ORCADA™ software.

OFITE's Model 900 Viscometer is extremely versatile. Its simplicity makes it ideally suited for the field, yet with the addition of a computer, it can perform as well as any lab machine available today. Mud engineers will appreciate the push button calibration, not to mention getting standard API tests with one command.

You no longer have to be without a critical piece of equipment every time you need a viscometer calibrated or a bearing changed. Your technicians can handle it in the lab or in the field.

Size: **17.3" × 15" × 11" (44 × 38 × 28 cm)**
Weight: **19 lb (8.6 kg)**

Crated Size: **22" × 15" × 9.4" (56 × 38 × 24 cm)**
Crated Weight: **35.3 lb (16 kg)**

#130-76-C OFITE Model 900 Viscometer

Components:

#130-75-04	O-ring for Thermocouple
#130-76-03	Thermocouple
#130-76-04	Main Bearing
#130-76-05	Retaining Ring
#130-76-06	Drive Belt
#130-76-07	Drive Gear
#130-76-09	1.5 mm Allen Key
#130-76-10	**Universal Heat Cup (115-Volt Only)**
#130-76-10-1	**Universal Heat Cup (230-Volt Only)**
#130-31	Thermostat, 50° - 300°F
#130-38-10	Locator Pin
#130-38-2	Red Lens for Lamp
#130-38-3	Lamp
#130-38-7	Cup, Stainless Steel
#130-76-10-004	Sheath
#130-76-10-005	Bottom
#130-76-10-2	Heater, 150-Watt, 115 / 230-Volt
#130-76-10-3	Sheath Cover
#130-76-10-4	Power Cord
#130-76-10-5	O-ring, Viton® 75
#130-76-10-6	Strain Relief
#130-76-10-7	Locknut
#130-76-10-8	O-ring for Strain Relief
#135-43	Base for Indicator Lamp
#171-32	Midget Knob
#130-76-11	Terminal
#130-76-12	Header
#130-76-14	Standoff
#130-76-15	Washer, Nylon
#130-76-16	Washer, Nylon
#130-76-17	Washer, Nylon, ⅝" ID
#130-76-23	Gear
#130-76-24	Bob Shaft Assembly
#130-76-28	Motor
#130-76-34	Bob Shaft Spacer, Shield
#130-76-35	Touch Key Pad
#130-76-36	Motor Spacer, 70 Durometer, ⅛", Neoprene
#130-76-37	Transducer
#130-76-38	Control Card
#130-76-40	Back Panel
#130-76-41	Cover
#130-76-42	Display
#130-76-43	Solid-State Relay
#130-76-44	Thermocouple Jack
#130-76-45	Sensor Plate
#130-76-46	Display Cable
#130-76-48	Power Supply
#130-76-49	Carrying Case with Custom Foam
#130-79-15	Serial Cable, OB9, M/F
#132-56	Sleeve
#132-58	Bob, B1, Stainless Steel
#132-80	Calibration Fluid, Certified, 100 cP, 16 oz
#134-05-2	Bearing for Bob Shaft, Sealed
#134-10	Torsion Spring Assembly, F1.0
#135-02	Retainer Ring, External
#135-19	Socket Set Screw for Spring Bushing, Nylon Tip
#135-19-1	Socket Set Screw, 8-32 × 3⁄16", Nylon Tip
#142-63	Locking Screw
#152-37	AC Power Cord, 3-Conductor
#171-44	Rubber Foot, ¾"

Optional:

#130-76-C-SP	Spare Parts for One Year for #130-76-C
#130-76-1-C-SP	Spare Parts for One Year for #130-76-1-C
#130-76-P	pH Meter
#132-56-C	Rotor, R1, Closed Cup, 316 Stainless Steel

For additional bobs and springs, see page 17.

OFITE MODEL 800 8-SPEED VISCOMETER WITH MULTI-VOLTAGE POWER SUPPLY, 8/12/115/230-VOLT

#130-10-C WITH CARRYING CASE
#130-10-L WITH RETRACTABLE LEGS

Size: **22" × 10" × 15" (56 × 25 × 38 cm)**
Weight: **28 lb (12.6 kg)**

The OFITE Model 800 Viscometer determines the flow characteristics of oils and drilling fluids in terms of shear rate and shear stress over various time and temperature ranges at atmospheric pressure. Speeds are easily changed with a control knob, and shear stress values are displayed on a lighted, magnified dial for easy reading. An optional cup heater is used to raise the temperature of the test sample. The Model 800 is suitable for both field and laboratory use and uses a motor-driven electronic package to provide drilling fluid engineers with an extremely accurate and versatile tool. The Model 800 operates from a 12-Volt battery, or standard rig power, either 115 or 230-Volt, 50-60 Hz. The viscometer's motor RPM is continuously monitored and automatically adjusted by the OFITE Pulse-Power electronic speed regulator to maintain a constant shear rate under varying input power and drilling fluid shear conditions. The eight precisely regulated test speeds (shear rates in RPM) are as follows: 3 (Gel), 6, 30, 60, 100, 200, 300, and 600. A stir speed is also provided.

#130-10-C OFITE Model 800 8-Speed Viscometer

Advantages:

- Voltage requirement - 230, 115, or 12-Volt / 50 or 60 Hz (12-Volt operation requires a special cable)
- Operates anywhere in the world without flipping switches or re-wiring.
- Lighted dial makes reading easier and more accurate.
- Conventional oilfield rotor, bob, and torsion springs maintains rheology history and reproducibility between instruments and laboratories.
- Threaded rotor - mechanically attaches to the unit the same way every time.
- Comes with a carrying case.

Components:

#130-10-0	Body
#130-10-02	Round Spacers
#130-10-2	Speed Reference PC Board
#130-10-3	Speed Control PC Board
#130-10-5	Switch Plate, Wired Assembly
#130-10-6	Wiring Harness
#130-10-8	Encoder Disk
#130-10-9	Speed Control Dial
#130-10-13	Carrying Case with Foam Insert
#130-10-14	Motor
#130-10-16	Belt for Drive Gear
#130-10-17	Cover
#130-10-18	Lens for Cover
#130-10-19	Lamp
#130-10-20	Torsion Shaft
#130-10-22	Card Guide for PC Boards
#130-10-23	Pulley for Motor
#130-10-24	Drive Gear
#130-10-25	Sample Holder Assembly
#130-10-26	Bearing Mount
#130-10-27	Lens Bezel
#130-10-27-1	Lens Bezel Nut
#130-10-28	Bracket for Rotary Switch
#130-10-30	Power Supply
#130-10-34	Bridge
#130-10-35	Encoder Support
#130-10-36	Encoder Hub
#130-10-37	Index
#130-10-39	Knob, Zero Calibration
#130-10-40	Bob Shaft Dial and Hub Assembly
#130-10-41	Base
#130-10-48	Spring Sleeve
#130-10-51	Dowel Pin, ⅛" × 1", Stainless Steel
#130-10-52	Jam Nut, ⅜ - 24
#130-10-53	Split Pin, ⅛" × ¾", Stainless Steel
#130-10-54	Split Pin, ⅛" × 1", Stainless Steel
#130-10-55	Socket Set Screw, ¼-28 × ¼, Hardened
#130-10-503	Fuse, 4-Amp
#130-21	Cup, Stainless Steel
#132-50	Rotor
#132-56	Sleeve
#132-57	Shield
#132-58	Bob, B1, 303 Stainless Steel
#132-59	Bearing Retainer
#132-71	Bearing for Main Shaft, 20mm × 42mm
#132-74	Locking Ring, 1.653" Internal
#132-75	Locking Ring, ½" Internal
#132-76	Locking Ring, 25/32" External
#134-05-2	Bearing for Bob Shaft
#134-10	Torsion Spring Assembly, F1.0
#134-40	Shim, ⅝" × ⅜"
#135-02	Retainer Ring for Bob Shaft, External
#135-18	Socket Set Screw for Clamp Sleeve
#142-63	Locking Screw
#152-37	AC Power Cord, 3-Conductor
#163-26	Small Clip
#170-21	Stand Support Rod
#170-44	Rubber Foot, ½"
#171-32	Midget Knob

Optional:

#130-10-SP	Spare Parts for One Year for #130-10
#130-10-31	Adapter to Convert Old Style Viscometer to New Power Supply
#132-56-C	Rotor, R1 Closed Cup, 316 Stainless Steel
#132-80	Calibration Fluid, Certified, 100 cP, 16 oz
#130-10-33	Power Cord for 12-Volt Cigarette Lighter Adapter

OFITE 2-SPEED HAND-CRANK RHEOMETER #132-00

Size: 9" × 4" × 6.5" (23 × 10 × 17 cm)
Weight: 8 lb (3.6 kg)

#132-00 OFITE 2-Speed Hand-Crank Rheometer

Components:

#130-41	Sample Cup (Beaker), Plastic
#132-00-002	Bob Shaft Shim, .193" × .250" × .005"
#132-01	Frame
#132-02-1	Cover, Plastic
#132-03	Nameplate
#132-04	Jewel
#132-05	Base, Plated
#132-09	Leg with Groove, Inside
#132-10	Leg without Groove, Inside
#132-11	Leg Spring
#132-12	Leg, Outside Left
#132-13	Leg Lock Ring
#132-14	Leg Lock Nut
#132-15	Leg, Outside Right
#132-16	Leg Cap
#132-17	Screw for Leg Cap
#132-18	Key
#132-19	Stop Spring
#132-20	Governor Body
#132-21	Washer, Brass
#132-22	Drive Spindle
#132-23	Weight
#132-24	Pressure Plate
#132-26	Thrust Collar
#132-28	Control Rod
#132-29	Control Spring
#132-30	Gear Block
#132-31	Drive Shaft
#132-32	Nut for Drive Shaft
#132-33	Spacer for Drive Shaft, Set
#132-34	Drive Shaft Pinion
#132-35	Idler Pinion
#132-36	Gear for Idler
#132-37	Crank Shaft
#132-38	Gear for Crank Shaft
#132-39	Idler Shaft
#132-40	Shift Housing
#132-41	Shift Pin
#132-42	Speed Nut
#132-43	Shift Cam
#132-44	Gel Knob
#132-45	Crank Handle
#132-50	Rotor
#132-51-1	Gear for Rotor, Bevel
#132-51-2	Gear for Spindle, Pinion Bevel
#132-56	Sleeve
#132-57	Shield
#132-58	Bob, B1, 303 Stainless Steel
#132-59	Bearing Retainer
#132-60	Dial
#132-61	Torsion Body
#132-62	Stop
#132-64	Lock Collet and Bushing
#132-66	Torsion Shaft
#132-67	Torsion Spring Assembly
#132-68	Bearing, Shielded
#132-69	Governor Bearing
#132-70	Bearing for Drive Shaft
#132-71	Bearing for Main Shaft
#132-73	Locking Ring, Internal, 1⅞"
#132-74-1	Locking Ring
#132-75	Locking Ring, Internal, ½"
#132-76	Locking Ring, External, $^{25}/_{32}$"
#132-77	Bushing, ⅛"
#132-78	Bushing, ¼"
#132-86	Split Pin $^{1}/_{16}$" × ⅜", Stainless Steel
#135-02	Retainer Ring, External
#135-23	Upper Cap Screw
#170-44	Rubber Foot, ½"

Optional:

#132-00-SP	Spare Parts for #132-00
#132-06	Case with Foam Insert
#132-80	Calibration Fluid, Certified, 100 cP, 16 oz

Did you know?

You can download or print OFITE Instruction Manuals on our web site at www.ofite.com.

RECONDITIONED 2-SPEED VISCOMETER, 12-VOLT (WHEN AVAILABLE) #130-98

General Components:

#130-41	Beaker, Nalgene®, 400 mL, Polypropylene
#130-42	Power Cord, 12-Volt (10572)
#130-47	Connector for Female Plug (32985)
#134-09-2	Overlay Dial (31497)
#134-10	Torsion Spring Assembly, F1 (30752)
#134-11	Gear Key (30804)
#134-15	Bob, B1, Hollow, 303 Stainless Steel (30844)
#134-16	Rotor Sleeve, R1, Chrome Plated Brass (30847)
#134-17	Splash Guard (30887)
#134-25	Steel Ball, ⅛" (31271)
#134-31	Ohmite Resistor, 4 OHMS (32321)
#134-32	On-Off Switch for Model 34 (32917)
#134-34	High-Speed Switch (32996)
#134-35	Bulb (33076)
#134-38	Bushing (30734)
#134-39	Clamp Sleeve for Torsion Spring (30986)
#134-40	Shim, ⅝" × ⅜" (31275)
#134-41	Gel Knob (30983)
#134-44	Dust Cap (30973)
#134-45	Zeroing Sleeve (30985)
#134-52	Insert Clutch (30916)
#134-53	Bearing Shield (30912)
#134-57	Plug Screw (30999)
#134-60	Pointer (30862)
#134-64	Spring Bushing (30924)
#134-66	Detent Spring (30987)
#134-67	Gear Shaft (30970)
#134-68	Support Tube Plug (30192)
#134-69	Rod Bushing, L.H. (30982)
#134-70	Rod Clamp Bushing (30996)
#134-72	Support Tube (Leg) (30191)
#134-73	Support Rod Stop (30189)
#134-74	Clamp Spacer for Locking Screw (30979)
#134-75	Clamp Nut for Leg (30978)
#134-76	Base (30861)
#135-00	Retainer Ring for Main Shaft, External (30027)
#135-01	Retainer Ring, Internal (35146)
#135-02	Lock Ring for Bearing Retainer (31397)
#135-05	Bushing
#135-07	Thrust Washer, Nylon
#135-09	Washer, 3⁄16" (30715)
#135-12	Lens (30975)
#135-17	Switch Plate (32918)
#135-30	Temperature Warning Tag (31974)
#135-41	Nameplate, 12-Volt AC-DC
#135-42	Spring Counter Balance for Leg (30981)
#135-43	Base for Indicator Lamp (33062)
#135-44	Lens for Lamp (33063)
#135-45	Capacitor, 1.0 MFD (32477)
#171-44	Rubber Foot, ¾"

Bearings:

#134-01	Upper (30922)
#134-02	Rear (30713)
#134-03	Lower (30923)
#134-04	Main Shaft (30729)

Gears:

#134-13	Center Shaft and Gear (30829)
#134-14	Center Shaft and Gear Assembly (30830)
#134-18	Change Gear (30913)
#134-19	Upper Change Gear (30914)
#134-20	Cluster Gear (30921)
#134-22	Idler Cluster Gear (30933)
#134-50-06	Main Shaft Gear (30995)

Screws and Pins:

#135-14	Roll Pin, 3⁄32" × ⅜" (30722)
#135-15	Roll Pin for Main Shaft, 1⁄16" × 3⁄16" (30873)
#135-18	Socket Set Screw for Clamp Sleeve (31025)
#135-19	Socket Set Screw for Spring Bushing (31267)
#135-20	Socket Set Screw for Knob (30137)
#135-21	Cover Screw (31017)
#135-23	Upper Cap Screw (31022)
#135-26	Stop Screw for Shift Rod (30779)
#135-37	Cap Screw (31046)
#135-38	Screw for Motor Mount (30782)
#142-63	Locking Screw (30977)

Shafts and Rods:

#134-09	Bob Shaft (30719)
#134-12	Shift Rod (30822)
#134-29	Main Shaft Assembly (31775)
#134-71	Support Rod (Leg) (30190)

Optional:

#130-43	Power Pak for 12-Volt Viscometers, 230/115 to 12 Volt
#130-54	Sample Cup, Stainless Steel

Did you know?

OFITE specializes in refurbishing older equipment. Be sure and call us for a custom quote.

FANN® MODEL 35 VISCOMETER, 115-VOLT*:

#130-60 MODEL 35A, 6-SPEED, 60 HZ
#130-70 MODEL 35SA, 6-SPEED, 50 HZ
#130-60-12 MODEL 35A/SR12 12-SPEED, 60 HZ
#130-70-12 MODEL 35SA/SR12 12-SPEED, 50 HZ

Size: 15.5" × 5.5" × 10.25" (39 × 14 × 26 cm)
Weight: 17 lb 11 oz (8 kg)

General Components:

#130-54	Sample Cup, Scribed, 350 mL, Stainless Steel
#134-00	Bearing for Motor
#134-07	Motor, 115-Volt, 60 Hz (30724)
#134-07-1	Motor, 115-Volt, 50 Hz (30725)
#134-08	Flex Coupling, Modified (30053)
#134-09-2	Overlay Dial (31497)
#134-10	Torsion Spring Assembly, F1 (30752)
#134-11	Gear Key (30804)
#134-15	Bob, B1, 303 Stainless Steel, Hollow (30844)
#134-16	Rotor Sleeve, R1, Chrome Plated Brass (30847)
#134-17	Splash Guard (30887)
#134-23	Clutch Spring (30939)
#134-25	Ball, ⅛", Steel (6 required) (31271)
#134-26	Switch Boot (31288)
#134-33	On-Off Switch (32919)
#134-37	Washer, Teflon®
#134-38	Bushing (30734)
#134-39	Clamp Sleeve for Torsion Spring (30986)
#134-40	Shim, ⅝" × ⅜" (31275)
#134-41	Gel Knob (30983)
#134-44	Dust Cap (30973)
#134-45	Zeroing Sleeve (30985)
#134-48	Spacer (30701)
#134-49	Drive Shaft Tube (30054)
#134-52	Insert Clutch (30916)
#134-54	Stop Collar for Leg (30984)
#134-55	Clamp Nut (30988)
#134-56	Clamp Spacer for Locking Screw (30989)
#134-60	Pointer (30862)
#134-64	Spring Bushing (30924)
#134-65	Base Cover Plate (30743)
#134-66	Detent Spring (30987)
#134-93	Stage (30726)
#135-02	Bearing Retainer Lock Ring (31398)
#135-05	Bushing, ⅜" × ½"
#135-12	Lens (30975)
#135-13	Speed Selection Nameplate
#135-29	High-Low-Off Nameplate
#135-30	Temperature Warning Tag (31974)
#135-31	Nameplate, 115-Volt, 60 Hz
#135-32	Capacitor, 6.0 UF 370 VAC, Size A (32426)
#135-33	16 Gauge Power Cord with Male Plug, 115-Volt, (L7113)
#170-07	O-ring for Stage, Buna
#171-44	Rubber Foot, ¾"

Bearings:

#134-01	Upper (30922)
#134-02	Rear (30713)
#134-04	Main Shaft (30729)
#134-53	Bearing Shield (30912)

Gears:

#134-18	Change Gear (30913)
#134-21	Cluster Gear (30928)
#134-28	Worm Gear Assembly (31771)
#134-30	Idler Gear Assembly, 60 Hz Model (31918)
#134-51-01	Lower Change Gear (30917)
#134-51-03	Main Shaft Gear (30920)
#134-51-07	Drive Shaft Gear, 60 Hz Model (30935)
#134-80	Drive Shaft Gear, 50 Hz Model (30934)
#134-81	Idler Gear Assembly, 50 Hz Model (31919)
#134-94	Jackshaft Gear Assembly (30717)

Screws and Pins:

#134-57	Plug Screw (30999)
#135-14	Roll Pin for Bob Shaft, 3⁄32" × ⅜" (30722)
#135-15	Roll Pin for Main Shaft, 1⁄16" × 3⁄16" (30873)
#135-16	Roll Pin for Wormgear, 1⁄16" × 5⁄16" (30937)
#135-18	Socket Set Screw for Clamp Sleeve (31025)
#135-19	Socket Set Screw for Spring Bushing (31267)
#135-20	Socket Set Screw for Knob (30137)
#135-21	Cover Screw (31017)
#135-22	Lower Cap Screw (31031)
#135-23	Upper Cap Screw (31022)
#135-24	Screw for Cover Plate (31033)
#135-25	Mounting Screw for Jackshaft Assembly (30780)
#135-26	Stop Screw for Shift Rod (30779)
#135-27	Screw for Motor (31016)
#142-63	Locking Screw (30977)

Shafts and Rods:

#134-29	Main Shaft Assembly (31775)
#134-46	Idler Shaft (30976)
#134-47	Support Rod (Leg) (30991)
#134-61	Upper Drive Shaft (30905)
#134-62	Lower Drive Shaft (30925)

Optional:

#151-50	Carrying Case
#130-72	Custom Foam Inserts
#130-60-SP	Spare Parts for One Year for #130-60
#130-74	Transformer, 230 to 115 Volts, 1.10 Amps, 50 / 60 Hz (31775) Required for All 230-Volt Usage

#130-74 Transformer, 230 to 115 Volts, 1.10 Amps, 50 / 60 Hz

*Note: Fann® 6-Speed and 12-Speed Viscometers operate at 115 volts only. Choose the appropriate model for your frequency and add a transformer to convert to 230 volts.

SHEAROMETER KIT #166-08

An alternative measuring device used in determining the gel strength of a drilling fluid is the Shearometer. The set includes two 5-gram, 3.5" × 1.4" hollow shear tubes and a sample cup with a graduated scale mounted in the center of the cup base. The scale measures gel strength in pounds per 100 square feet.

Size: **4" × 4" × 8.5" (10 × 10 × 22 cm)**
Weight: **11 oz (0.3 kg)**

#166-08 Shearometer

Components:
#162-77 Sample Bottle, Polypropylene, 4 oz
#166-12 Shearometer Tube, Aluminum, 5 g

SHEAROMETER TUBE WITH WEIGHT SUPPORT #166-10

This 20 gram shearometer tube with weight support is used for testing heavier muds and is specifically designed for testing high gel strength drilling fluids. It is common for 10 minute gels to reach 35 lb / 100 ft². Drilling conditions and economics will determine the need to reduce gel strengths.

Optional:
#166-02 Weight Set with Box, 50 g - 10 mg

#166-10 Shearometer Tube with Weight Support

OFITE PLASTIC MARSH FUNNEL VISCOMETER #110-10

Viscosity and gel strengths are measurements that relate to the flow properties of fluids. The Marsh Funnel Viscometer has been used for many years to obtain an indication of the relative viscosity of drilling fluids. It is calibrated to outflow one quart (946 mL) of fresh water at a temperature of 70 ± 5°F (21 ± 3°C) in 26 ± 0.5 seconds. The OFITE Marsh Funnel is molded from a tough, durable plastic that resists breaking or cracking. A brass orifice assures consistency in all readings.

Size: **6.5" × 6.25" × 14.5" (17 × 16 × 37 cm)**
Weight: **12 oz (340.2 g)**

#110-10 Marsh Funnel

OFITE 1,000 ML PLASTIC MEASURING CUP #110-20

The OFITE Measuring Cup is graduated in fluid ounces (2 - 32 oz) and cubic centimeters (100 - 1,000 cc) and is designed to be used with the OFITE Marsh Funnel Viscometer. The heavy duty plastic measuring cup features a double spout and has the two scales molded into the inside of the cup for convenience.

Size: **5.75" × 5.5" × 7.25" (15 × 14 × 18 cm)**
Weight: **8 oz (227 g)**

#110-20 Measuring Cup

OFITE DIGITAL STOPWATCH
#155-25

To properly perform the Marsh Funnel viscosity test, the OFITE electronic digital electronic stopwatch may be used. The quartz crystal timer counts up to 30 minutes in .01 seconds and counts in seconds if over 30 minutes. Each stopwatch is calibrated against the National Institute of Standards and a test certificate is supplied with each timer. The calibration complies fully with the requirements of ISO 9000 Certification.

Size: **2.4" × 2" × 0.6" (6 × 5 × 2 cm)**
Weight: **1.5 oz (42.5 grams)**

Also Available:

#155-26	Basic Stopwatch, Bodytronics
#110-30	Measuring Cup, Stainless Steel, 500 mL
#110-40	Measuring Cup, Stainless Steel, 1,000 mL
#110-50	Measuring Cup, Stainless Steel, 2,000 mL

Stainless Steel Measuring Cups

Did you know?

When you send something to us for repair, we know you are without a critical piece of equipment. That's why we make your repairs first priority (even equipment from other manufacturers!).

ACCESSORIES AND CONSUMABLE PARTS FOR VISCOMETERS

Bearings:

#130-77-9	Angular Contact Bearing (A4004) for HTHP Viscometer
#130-78-18	Main Body Bearing, Sealed (30418) (Alternate),
#130-78-18-1	Main Body Bearing (30418)
#130-78-39	Bearing for Model 50 Idler Gear (303414)
#132-68	Bob Shaft Bearing, Shielded, for Hand-Crank Rheometer
#132-69	Bearing Gear Block for Hand-Crank Rheometer
#132-70	Governor Bearing for Hand-Crank Rheometer
#132-71	Main Shaft Bearing for Hand-Crank Rheometer and 8-Speed Viscometer
#133-10	Bearing for Variable-Speed Rheometers
#133-12	Lower Bearing for Variable-Speed Rheometer
#134-01	Upper Bearing for 2-Speed and 6-Speed Viscometers
#134-02	Rear Driveshaft Bearing for 2-Speed and 6-Speed Viscometers
#134-03	Lower Bearing for 2-Speed and 6-Speed Viscometers
#134-04	Main Shaft Bearing for 2-Speed and 6-Speed Viscometers
#134-05-2	Bob Shaft Bearing, Shielded

Bob for OFITE HTHP Viscometer:

#130-77-39	B1 (35517)

Bobs for OFITE Model 1100 and Fann® Model 50 Viscometers:

#130-78-07	B1, 316 Stainless Steel (36514)
#130-78-23	B1X, 316 Stainless Steel (35254)
#130-78-08	B2, 316 Stainless Steel
#130-78-24	B2X, 316 Stainless Steel (30088)
#130-78-09	B5, 316 Stainless Steel (35687)
#130-78-10	B5X, 316 Stainless Steel
#130-78-13	B1, Hastelloy® (with Threads for Stainless Steel)
#130-78-14	B2, Hastelloy® (with Threads for Stainless Steel)
#130-78-24-H	B2X, Hastelloy® (with Threads for Stainless Steel)
#130-78-15	B5, Hastelloy® (with Threads for Stainless Steel)
#130-78-16	B5X, Hastelloy® (with Threads for Stainless Steel)

Bobs for Model 800, Model 900, and Hand-Crank Rheometer:

#132-58	B1, 303 Stainless Steel
#132-58-1	B2, 303 Stainless Steel
#132-58-2	B3, 303 Stainless Steel
#132-58-3	B4, 303 Stainless Steel
#132-58-4	B5, 303 Stainless Steel
#132-58H	B1, Hastelloy®

Bobs for Fann® Model 35:

#134-15	B1 Hollow (30844), 303 Stainless Steel
#134-15-1	B2 (30843), 303 Stainless Steel
#134-15-2	B3 (30842), 303 Stainless Steel

Calibration:

#130-45	Calibration Instrument for 6-Speed Viscometer, DW-3
#130-45-1	Calibration Instrument for 8-Speed Viscometer
#132-49	Calibration Check Kit:
#130-21	Cup, Stainless Steel, for Viscometer
#132-49-1	Lid, Aluminum
#132-80	Calibration Fluid, Certified, 100 cP, 16 oz
#132-81	Calibration Fluid, Certified, 50 cP, 16 oz
#154-24	Thermometer, 0 - 30°C (ASTM 90C)
#163-22	Tool Box
#296-05	Kimwipes

Calibration Fluid, Certified:

#132-84	20 cP, 16 oz
#132-84-5	20 cP, 5 gal
#132-81	50 cP, 16 oz
#132-81-5	50 cP, 5 gal
#132-80	100 cP, 16 oz
#132-80-5	100 cP, 5 gal
#132-83	200 cP, 16 oz
#132-83-5	200 cP, 5 gal
#132-82	500 cP, 16 oz
#132-82-5	500 cP, 5 gal

Carrying Case:

#132-06	Carrying Case for Hand-Crank Rheometer
#130-10-13-5	Carrying Case for Model 800
#130-76-49	Carrying Case for Model 900
#130-75-70	Carrying Case for Model 1100

Cups:

#130-21	Stainless Steel, for OFITE Viscometers
#130-41	Polypropylene, for Hand-Crank Rheometer and Fann®-Style 2-Speed Viscometers
#130-54	Scribed, Stainless Steel, 350 mL
#130-55	Polypropylene, for 6-Speed Viscometers

Gears:

#132-51	Bevel Gear (Pair) for Hand-Crank Rheometer
#134-13	Center Shaft and Gear for 2-Speed Viscometers
#134-14	Center Shaft and Gear Assembly for 6-Speed Viscometer
#134-18	Change Gear for 2-Speed Viscometers (Lower) or Change Gear for 6-Speed Viscometers (Upper)
#134-19	Change Gear for 2-Speed Viscometers (Upper)
#134-20	Cluster Gear for 2-Speed Viscometers
#134-21	Cluster Gear for 6-Speed Viscometers
#132-38	Crank Shaft Gear for Hand-Crank Rheometer
#132-36	Idler Gear for Hand-Crank Rheometer
#134-30	Idler Gear for 6-Speed Viscometers
#134-22	Idler Cluster Gear for 12-Volt Viscometers
#134-24	Idler Cluster Gear for Hand-Crank Viscometers
#134-28	Worm Gear for 6-Speed Viscometers

Rotor/Sleeve:

#132-50	Rotor for Hand-Crank Rheometer and Model 800
#132-56	Sleeve for Hand-Crank Rheometer and Model 800
#132-56-C	R1 Rotor, Closed Cup, 316 Stainless Steel
#132-56H	R1 Sleeve for Models 800 and 900, Hastelloy®
#134-16	R1 Rotor for 2-Speed and 6-Speed Viscometers, Chrome Plated Brass

Shafts and Rods:

#134-09	Bob Shaft for 2-Speed Viscometers
#134-12	Shift Rod for 2-Speed Viscometers
#134-29	Main Shaft Assembly for 2-Speed and 6-Speed Viscometers
#134-46	Idler Shaft for 6-Speed Viscometers
#134-47	Support Rod (Leg) for 6-Speed Viscometers
#134-61	Upper Drive Shaft for 6-Speed Viscometers
#134-62	Lower Drive Shaft for 6-Speed Viscometers
#134-71	Support Rod (Leg) for 2-Speed Viscometers
#154-74	T-Handle Reamer for Marsh Funnel

Shields/Splash Guards:

#132-57	Shield for Hand-Crank Rheometer and Model 800
#134-17	Splash Guard for 2-Speed and 6-Speed Viscometers

Torsion/Bob Shafts:

#130-10-20	Torsion Shaft for Model 800
#130-76-24H	Bob Shaft Assembly for Model 900, Hastelloy®
#130-78-440	No. 440 Torsion Spring Assembly
#132-66	Torsion Shaft for Hand-Crank Rheometer
#133-16	Torsion Shaft for Variable-Speed Rheometers
#134-09	Bob Shaft Assembly for 2-Speed and 6-Speed Viscometers

Torsion Spring Assemblies:

#130-78-410	No. 410 Spring Assembly for OFITE Model 1100 and Fann® Model 50
#132-67	For Hand-Crank Rheometer
#134-10	F1, for 6-Speed Viscometer and Model 800
#134-10-2	F0.2 (31068), for Model 800, Model 900, and 6-Speed
#134-10-3	F0.5 (31069), for Model 800, Model 900, and 6-Speed
#134-10-4	F2.0 (31070), for Model 800, Model 900, and 6-Speed
#134-10-5	F3.0 (31071), for Model 800, Model 900, and 6-Speed
#134-10-6	F4.0 (31072), for Model 800, Model 900, and 6-Speed

Transformers/Power Supply:

#130-43	Power Pak, 230/115/12-Volt
#130-74	Transformer, 230 to 115 Volts, 1.10 Amps, 50 / 60 Hz
#159-10	Auto Control Panel, 12-Volt

Thermocups

Thermocups and cup heaters are designed for controlling the temperature of a mud sample while taking readings with a rheometer or viscometer. Normal heat-up time is 15 minutes. Drilling fluid has a low thermal conductivity, so it must be agitated in order to reach a uniform temperature within a reasonable length of time. For safety considerations, the fluid should never be heated above 200°F (93°C). The rotor and bob should not be immersed for long periods in the fluid as vapors will rise up into the bearings and condense, causing corrosion. The holes in the stage of the OFITE Viscometers have been positioned to hold the heated cups at a 45° angle to the line of the instrument for better accommodation of thermometers and power cables.

CUP HEATER WITH STAINLESS STEEL CUP

#130-20 115-VOLT, AC-DC
#130-30 230-VOLT, AC-DC

Size: **4.5" × 4.75" × 5.5" (11 × 12 × 14 cm)**
Weight: **4 lb 8 oz (2 kg)**

Components:

#130-20-01	Cover, Stainless Steel
#130-20-02	Locator Pin
#130-21	Cup, Stainless Steel
#130-25	Heating Element, 150-Watt (115-Volt Only)
#130-31	Thermostat, 50° - 300°F (10° - 148.9°C)
#164-32	Male Connector for Power Cable (230-Volt Only)
#165-40-2	Cable, 3-Conductor, SJ00W, 18 Gauge (230-Volt Only)
#170-09	Insulation Board
#170-10	Thermostat Pilot Light
#171-32	Midget Knob
#171-82	Power Cord with Male Plug, 16/3 SJ; Round, 8' (115-Volt Only)

#130-20 Cup Heater

#130-38-20 TC Thermocup

THERMOCUP WITH THERMOMETER

#130-38 OFITE, 115-VOLT
#130-38-1 OFITE, 230-VOLT
#130-38-4 OFITE, WITH REMOVABLE STAINLESS STEEL CUP, 115-VOLT
#130-38-6 OFITE, WITH REMOVABLE STAINLESS STEEL CUP, 230-VOLT
#130-38-20 TC, ANODIZED, 115-VOLT
#130-38-25 TC, ANODIZED, 230-VOLT
#130-38-30 TC, ANODIZED, WITH STAINLESS STEEL CUP, 115-VOLT
#130-38-35 TC, ANODIZED, WITH STAINLESS STEEL CUP, 230-VOLT

Size: **3" × 4" × 4.5" (8 × 10 × 11 cm)**
Weight: **2.6 lb (1.2 kg)**

#130-26	Heating Element, 150-Watt (115-Volt Only)
#130-26-1	Heating Element, 150-Watt (230-Volt Only)
#130-31	Thermostat, 50° - 300°F (10° - 148.9°C)
#130-38-10	Locator Pin (OFITE-Style Only)
#130-38-2	Red Lens
#130-38-3	Lamp
#130-38-5	Power Cord (OFITE-Style, 115-Volt Only)
#130-38-7	Stainless Steel Cup for #130-38-4, #130-38-8, #130-38-30, and #130-38-35
#130-38-8	Gasket, Fish Paper
#130-38-9	Power Cord, 6' (TC-Style Only)
#130-39	Thermostat Cover
#135-18	Socket Set Screw for Clamp Sleeve, Hardened, #6-32 × ⅛"
#135-43	Base for Indicator Lamp
#154-00	Thermometer with Metal Dial, 5" Stem, 0° - 220°F
#164-32	Male Connector for Power Cable, (OFITE-Style, 230-Volt Only)
#164-34	European Plug (TC-Style, 230-Volt Only)
#165-40-2	Cable, 3-Conductor, SJ00W, 18-Gauge (OFITE-Style, 230-Volt Only)
#171-32	Midget Knob

#130-38 Thermocup

#130-38-4 Thermocup

UNIVERSAL HEAT CUP FOR MODEL 900 VISCOMETER
#130-76-10 115-VOLT
#130-76-10-1 230-VOLT

Size: 4.5" × 4.5" × 4" (11 × 11 × 10 cm)
Weight: 3 lb (1.36 kg)

Components:

#130-31	Thermostat, 50° - 300°F
#130-38-10	Locator Pin
#130-38-2	Red Lens for Lamp
#130-38-3	Lamp
#130-38-7	Cup, Stainless Steel
#130-76-10-004	Sheath
#130-76-10-005	Bottom
#130-76-10-2	Heater, 150-Watt, 115 / 230-Volt
#130-76-10-3	Sheath Cover
#130-76-10-4	Power Cord
#130-76-10-5	O-ring, Viton® 75
#130-76-10-6	Strain Relief
#130-76-10-7	Locknut
#130-76-10-8	O-ring for Strain Relief
#135-43	Base for Indicator Lamp
#171-32	Midget Knob

#130-76-10 Universal Heat Cup

Did you know?

OFITE offers the most competitive labor rates in the industry!

DOUBLE-WALLED CIRCULATING CUP #130-15

Size: 4.5" × 4" × 6" (11 × 10 × 15 cm)
Weight: 2 lb 3 oz (1 kg)

Components:

#130-15-02	O-ring, #040, N304
#130-15-04	O-ring, #043, N304
#130-38-10	Locator Pin
#130-38-7	Cup, Stainless Steel
#130-76-10-52	Screw, Socket Button Head, 6-32 × ¼", Stainless Steel

#130-15 Double Walled Circulating Cup

REFRIGERATED AND HEATED BATH/CIRCULATOR, CARON MODEL 2050W, 5.2 L
#152-55 115-VOLT, 60 HZ
#152-55-1 230-VOLT, 50 HZ

Size: 13.5" × 13.5" × 14" (34 × 34 × 36 cm)
Weight: 49 lb (22.2 kg)

#152-55 CARON Model 2050W Bath/Circulator

Optional:

#152-55-2	Hoses and Fittings Set
#152-55-3	Case
#152-55-4	Ethylene Glycol, 1 Liter

Low-Pressure Filtration

Measurement of the filtration or water loss and wall cake building characteristics are basic to drilling fluid control and treatment. The filtrate collected is a measure of the relative amount of fluid in the drilling mud lost to permeable formations. Fluid loss values of 10 to 20 mL per 30 minutes are sufficient in most situations. Chemical studies of the filtrate are necessary in any successful mud control program. Analysis of the filter cake deposited in terms of thickness, composition, and consistency are also important considerations. These characteristics are controlled by the type and quantities of solids in the fluid and their physical and chemical interactions. Different temperatures and pressures can have a big effect on filtration control. Therefore, tests are run at both low-pressure / low-temperatures and high-pressure / high-temperatures.

The OFITE low-pressure filter press design features a cell body to hold the mud sample, a pressure inlet, and a base cap with screen and filter paper. Suitable for field and laboratory use, these units have become the industry standard for low-pressure / low-temperature filtration testing.

OFITE also manufactures other types of filter press units and inventories a full line of replacement and consumable parts. Stainless steel cases are available for most of the units. When several tests must be run simultaneously, as in a laboratory environment, multi-units are available in either two, four, or six-cell designs. These multi-units come complete with manifolds and all necessary air hoses and bleed-off valves. The field portable units are supplied with various pressurization assemblies and manifolds and rely mainly on carbon dioxide bulbs and nitrogen gas to provide pressure. The American Petroleum Institute (API) recommends a standard 100 ± 1.0 PSI (690 ± 6.9 kPa) cell pressure be applied within 30 seconds for a 30 minute test.

Did you know?

OFITE specializes in refurbishing older equipment. Be sure and call us for a custom quote.

BENCH MOUNT FILTER PRESS - BASIC #140-20

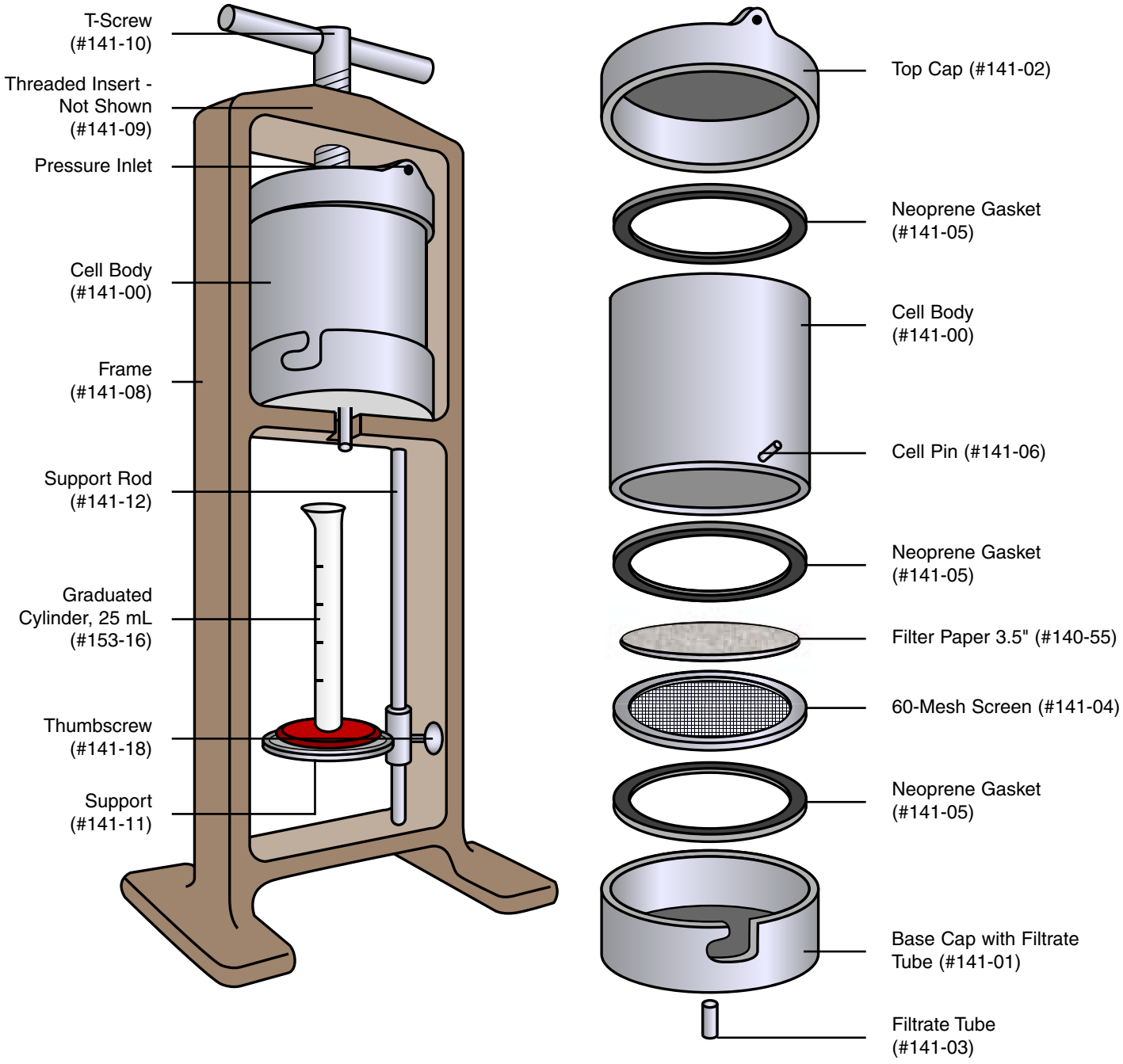
Size: **8" × 5.5" × 19" (20 × 14 × 48 cm)**
Weight: **9 lb 4 oz (4.2 kg)**

Cell Assembly Components:
#141-00 Cell Body with #141-06 Pins
#141-01 Base Cap with #141-03 Filtrate Tube
#141-02 Top Cap for Cell
#141-04 Screen, 60-Mesh
#141-05 Gasket, 3/32", Neoprene
#141-19 Air Hose Adapter for Top Cap
#141-22 Filter, Felt

Frame Assembly Components:
#141-08 Frame
#141-09 Threaded Insert with Set Screw for T-Screw
#141-10 T-Screw
#141-11 Support for Graduated Cylinder
#141-12 Support Rod
#141-18 Thumb Screw

API Low-Pressure Filter Press

#140-20 - Low-Temperature, Low-Pressure Filter Press



Note: Refer to page 31 for a diagram of the CO_2 Pressuring Assembly.

BENCH-MOUNT FILTER PRESS WITH CO_2 PRESSURE ASSEMBLY #140-30

Size: 9" × 8" × 19" (23 × 20 × 48 cm)
Weight: 12 lb 7 oz (5.6 kg)

Components:

#140-55 Filter Paper, 3½" (9.0 cm), WLP, Box of 100
#141-00 Cell Body
#141-01 Base Cap
#141-04 60-Mesh Screen
#141-05 Gasket, 3/32", Neoprene
#141-08 Frame
#141-09 Threaded Insert
#141-10 T-Screw
#141-11 Support for Graduated Cylinder
#141-12 Support Rod
#141-18 Thumb Screw
#142-00 CO_2 Pressuring Assembly with Top Cap
- #141-02 Top Cap for Cell
- #141-05 Gasket, 3/32", Neoprene
- #141-22 Filter, Felt
- #143-00 Regulator, CONCOA
- #143-01 Gauge, 200 PSI, ⅛" Bottom Connection
- #143-02-10 CO_2 Puncture Head Assembly
- #143-03 Barrel for CO_2 Cartridge, Polished Chrome
- #143-06 Safety Bleeder Valve, ¼" NPT

#153-16 Graduated Cylinder, 25 mL × 2/10 mL, Glass

Note: CO_2 bulb must be ordered separately.

Optional:
#140-30-SP Spare Parts for One Year for #140-30
#143-05 *CO_2 Bulbs, Package of 10 **UN1013**

#140-30 Bench-Mount Filter Press with CO_2 Assembly

BENCH-MOUNT FILTER PRESS WITH REGULATOR AND HOSE #140-31

Size: 19" × 11" × 8" (48 × 28 × 20 cm)
Weight: 11 lb 7 oz (5.2 kg)

Components:

#140-55 Filter Paper, 3½" (8.9 cm), Package of 100
#141-00 Cell Body
#141-01 Base Cap for Cell
#141-02 Top Cap for Cell
#141-04 Screen, 60-Mesh
#141-05 Gasket, 3/32", Neoprene
#141-08 Frame
#141-09 Threaded Insert
#141-10 T-Screw
#141-11 Support for Graduated Cylinder
#141-12 Support Rod
#141-14 Air Hose, Low-Pressure, 3'
#141-18 Thumb Screw
#141-19 Air Hose Adapter
#141-22 Filter, Felt
#143-00 Regulator, CONCOA
#143-01 Gauge, 200 PSI, ⅛" Bottom Connection
#143-06 Safety Bleeder Valve, ¼" NPT
#153-16 Graduated Cylinder, 25 mL × 2/10 mL, Glass

#140-31 Filter Press with Regulator and Air Hose

Optional:
#140-31-SP Spare Parts for One Year for #140-31

*Requires special handling for shipping.

BENCH-MOUNT FILTER PRESS WITH NITROGEN REGULATOR AND CYLINDER #140-35

Size: **20" × 13" × 13" (51 × 33 × 33 cm)**
Weight: **34 lb 3 oz (15.5 kg)**

Components:

#140-55	Filter Paper, 3½" (8.9 cm), Package of 100
#141-00	Cell Body
#141-01	Base Cap for Cell
#141-02	Top Cap for Cell
#141-04	Screen, 60-Mesh
#141-05	Gasket, 3/32", Neoprene
#141-08	Frame
#141-09	Threaded Insert
#141-10	T-Screw
#141-11	Support for Graduated Cylinder
#141-12	Support Rod
#141-14	Air Hose, Low-Pressure, 3'
#141-18	Thumb Screw
#141-19	Air Hose Adapter
#141-22	Filter, Felt
#142-39	Pipe Plug, ¼"
#143-06	Safety Bleeder Valve, ¼" NPT
#144-17	Adapter, ¼" FNPT × ¼" MNPT, 316 Stainless Steel
#153-16	Graduated Cylinder, 25 mL × 2/10 mL Glass
#170-36	Regulator for Nitrogen Pressure, Victor
#170-37	Nitrogen Cylinder, 21" × 7", Right-Hand Thread

#140-35 Filter Press with Nitrogen Pressurization

BENCH-MOUNT FILTER PRESS WITH DEAD-WEIGHT HYDRAULIC ASSEMBLY #140-75

The Dead Weight Hydraulic Assembly provides the operator of a standard API Filter Press with a convenient source of hydraulic pressure. This alleviates the need for a regulator, separate pressure source, or outside connections. The assembly is composed of a water reservoir that requires a pint of fresh water for each test, a piston and cylinder, a dead weight gauge, two check valves, and a bleed-off valve. When the system is closed, the dead weight causes the piston to exert a continuous pressure of 100 PSI against the fluid inside the filter press cell. Pressure on the cell is released promptly at the completion of the test with a bleed-off valve. The hydraulic system has sufficient volume to run the complete 30-minute filtration test without further attention from the operator, and the assembly requires a minimum amount of maintenance.

Size: **9" × 10" × 19" (23 × 25 × 48 cm)**
Weight: **37 lb (16.8 kg)**

Components:

#140-20	API Bench-Mount Filter Press - Basic
#140-55	Filter Paper, 3½" (8.9 cm), Package of 100
#140-70	**Dead Weight Hydraulic Assembly**
#140-70-007	Female Tee, Plated
#140-70-008	Adapter, ⅛" × ¼", Plated
#140-70-01	Nut, Acorn Cap, ⅜ - 16, Stainless Steel
#140-71	O-ring, Buna N
#141-13	Air Hose, Low-Pressure, 15"
#143-01	Gauge, 200 PSI, ⅛" Bottom Connection
#144-14	Hex Nipple, ⅛" × ⅛", Plated
#170-32	Male Needle Valve, ⅛" × ⅛" NPT
#153-16	Graduated Cylinder, 25 mL × 2/10 mL, Glass

Optional:
#140-75-SP Spare Parts for One Year for #140-75

#140-75 Filter Press with Dead Weight Assembly

WALL-MOUNT FILTER PRESS WITH TIMER IN STAINLESS STEEL CASE #144-10

Size: 8.75" × 15.5" × 16.25" (22 × 39 × 41 cm)
Weight: 32 lb (14.5 kg)

Components:

#140-10 Wall-Mount Filter Press with CO_2 Assembly
- #140-55 Filter Paper, 3½" (8.9 cm), Package of 100
- #141-00 Cell Body
- #141-01 Base Cap for Cell
- #141-04 Screen, 60-Mesh
- #141-05 Gasket, 3/32", Neoprene
- #141-07 Frame, Wall-Mount
- #141-09-002 Threaded Insert
- #141-10 T-screw
- #141-16 Support for Graduated Cylinder
- #141-20 Frog Bracket (Attaches to Wall)
- #141-21 Wall Bracket (Attaches to Equipment)
- **#142-00 CO_2 Pressuring Assembly with Top Cap**
  - #141-02 Top Cap for Cell
  - #141-05 Gasket, 3/32", Neoprene
  - #141-22 Filter, Felt
  - #143-00 Regulator, CONCOA
  - #143-01 Gauge, 200 PSI, ⅛" Bottom Connection
  - #143-02-10 CO_2 Puncture Head Assembly
  - #143-03 Barrel for CO_2 Cartridge, Polished Chrome
  - #143-06 Safety Bleeder Valve, ¼" NPT
- #153-16 Graduated Cylinder, 25 mL × 2/10 mL, Glass
- #170-44 Rubber Foot, ½"

#141-04 Screen, 60-Mesh
#153-16 Graduated Cylinder, 25 mL × 2/10 mL
#155-10 Interval Timer, 30 Minute

Case:
#134-36-1 Red Knob
#141-20 Frog Bracket, Plated (Attaches to Wall)
#144-09 Case, Stainless Steel
#141-17 Clip for Graduated Cylinder

Note: CO_2 bulbs must be ordered separately.

Optional MES (Mud Engineering Supply) Design:
#141-08-1 Square Frame for MES Wall-Mount Filter Press
#141-08-2 Mounting Bracket, MES Design
#142-70 Clear Acrylic Cell Body
#143-05 *CO_2 Bulbs, Package of 10 **UN1013**

#144-10 Filter Press with CO_2 Assembly and Case

*May require special handling for shipping.

WALL-MOUNT FILTER PRESS #140-00

Size: 11" × 7" × 4" (28 × 18 × 10 cm)
Weight: 5 lb 8 oz (2.5 kg)

Cell Assembly Components:
#141-00 Cell Body
#141-01 Base for Cell
#141-02 Top Cap for Cell
#141-04 Screen, 60-Mesh
#141-05 Gasket, 3/32", Neoprene
#141-19 Air Hose Adapter
#141-22 Filter, Felt

Frame Assembly Components:
#141-07 Frame, Wall-Mount
#141-09-002 Threaded Insert
#141-10 T-Screw
#141-16 Support for Graduated Cylinder
#141-20 Frog Bracket, Plated (Attaches to Wall)
#141-21 Wall Bracket (Attaches to Equipment)
#170-44 Rubber Foot, ½"

#140-00 Wall-Mount Filter Press

WALL-MOUNT FILTER PRESS WITH CO_2 PRESSURE ASSEMBLY #140-10

Size: 10" × 8.5" × 9" (25 × 22 × 23 cm)
Weight: 8 lb 6 oz (3.8 kg)

Components:

#140-55	Filter Paper, 3½" (8.9 cm), Package of 100
#141-00	Cell Body
#141-01	Base Cap for Cell
#141-04	Screen, 60-Mesh
#141-05	Gasket, 3/32", Neoprene
#141-07	Frame, Wall-Mount
#141-09-002	Threaded Insert
#141-10	T-screw
#141-16	Support for Graduated Cylinder
#141-20	Frog Bracket (Attaches to Wall)
#141-21	Wall Bracket (Attaches to Equipment)
#142-00	**CO_2 Pressuring Assembly with Top Cap**
#141-02	Top Cap for Cell
#141-05	Gasket, 3/32", Neoprene
#141-22	Filter, Felt
#143-00	Regulator, CONCOA
#143-01	Gauge, 200 PSI, ⅛" Bottom Connection
#143-02-10	CO_2 Puncture Head Assembly
#143-03	Barrel for CO_2 Cartridge, Polished Chrome
#143-06	Safety Bleeder Valve, ¼" NPT
#153-16	Graduated Cylinder, 25 mL × 2/10 mL, Glass
#170-44	Rubber Foot, ½"

Note: CO_2 bulbs must be ordered separately

Optional:

#140-10-SP	Spare Parts for One Year for #140-10
#143-05	*CO_2 Bulbs, Package of 10 **UN1013**

#140-10 Wall-Mount Filter Press with CO_2 Assembly

MODEL MB FILTER PRESS WITH CO_2 PRESSURE ASSEMBLY #142-53

Size: 7" × 7.5" × 6.5" (18 × 19 × 17 cm)
Weight: 5 lb 6 oz (2.4 kg)

Components:

#142-37	Regulator, Victor Model 1225, Low-Pressure
#142-53-1	**Complete Cell Assembly**
#142-53-1-1	Cell Body
#142-53-2	Cell Lid
#142-53-7	Male Connector for Cell
#142-56	O-ring for Coupling
#142-60	O-ring for Cell
#142-53-10	Graduated Cylinder Holder
#142-53-3	CO_2 Cap Holder
#142-53-4	CO_2 Cartridge Holder Assembly
#142-53-5	Female Coupling Assembly, Polished Chrome
#142-53-6	Valve Stem, Bleed Off Screw
#142-53-9	Support Bracket
#142-54	O-ring for T-fitting
#142-58	O-ring for HTHP Coupling
#143-01	Gauge, 200 PSI, ⅛" Bottom Connection
#143-09	Relief Valve, 200 PSI (1,379 kPa)
#144-15	Bushing, ¼" NPT Male to ⅛" NPT Female, Plated Brass

Note: CO_2 bulbs must be ordered separately.

Optional:

#142-53-8	Case, Stainless Steel
#142-53-SP	Spare Parts for One Year for #142-53
#143-05	*CO_2 Bulbs, Package of 10 **UN1013**

#142-53 Model MB Filter Press with Bracket and Graduated Holder

*May require special handling for shipping.

HALF-AREA FILTER PRESS WITH CO_2 PRESSURING ASSEMBLY #140-60

Size: 7.5" × 6" × 6" (19 × 15 × 15 cm)
Weight: 4 lb 3 oz (1.9 kg)

Components:

#140-60-01	O-ring for Bleeder Valve
#140-60-02	Piston Valve
#140-60-03	C-Ring for Bleeder Valve
#140-60-04	E-Ring for Base Cap
#140-60-05	Sample Boot, Rubber
#140-60-06	Spring Housing Cap with Bushing (0799-1215)
#140-60-07	Body, Stainless Steel
#140-60-08	Pop Valve Body
#140-60-09	Gasket for Seat Assembly (1408-0086)
#140-60-10	Friction Washer (1408-0033)
#140-60-11	Cell Cap
#140-60-12	Screen Retainer with Filtrate Tube
#140-60-13	Spring Button
#140-60-14	Adjusting Spring
#140-60-15	T-Screw for New Models (0799-1226)
#140-60-16	Spring for Pop Valve
#140-60-17	Valve Seat, Rubber
#141-20	Frog Bracket (Goes on Wall)
#141-21	Wall Bracket (Goes on Equipment)
#142-38	Nozzle (0702-0005)
#142-41	Gland (0708-0003)
#142-46	Valve Spring (0762-0003)
#142-47	Seat Assembly (0740-0010)
#142-48	Diaphragm Assembly (0730-0024)
#142-49	Slip Ring (0705-0004)
#143-00-6	Ball, ¼", Stainless Steel
#143-01-1	Gauge, 200 PSI, Back Connection
#143-02-10	CO_2 Puncture Head Assembly
#143-03	Barrel for Puncture Head Assembly
#153-18	Graduated Cylinder, 10 mL × .2 mL, Glass
#170-19	Filter Paper, 2½" (6.4 cm), Package of 100

Note: CO_2 bulbs must be ordered separately.

Optional:

#140-60-SP	Spare Parts for One Year for #140-60
#140-84	Stand for NSD or Half Area Filter Press
#143-05	*CO_2 Bulbs, Package of 10 **UN1013**

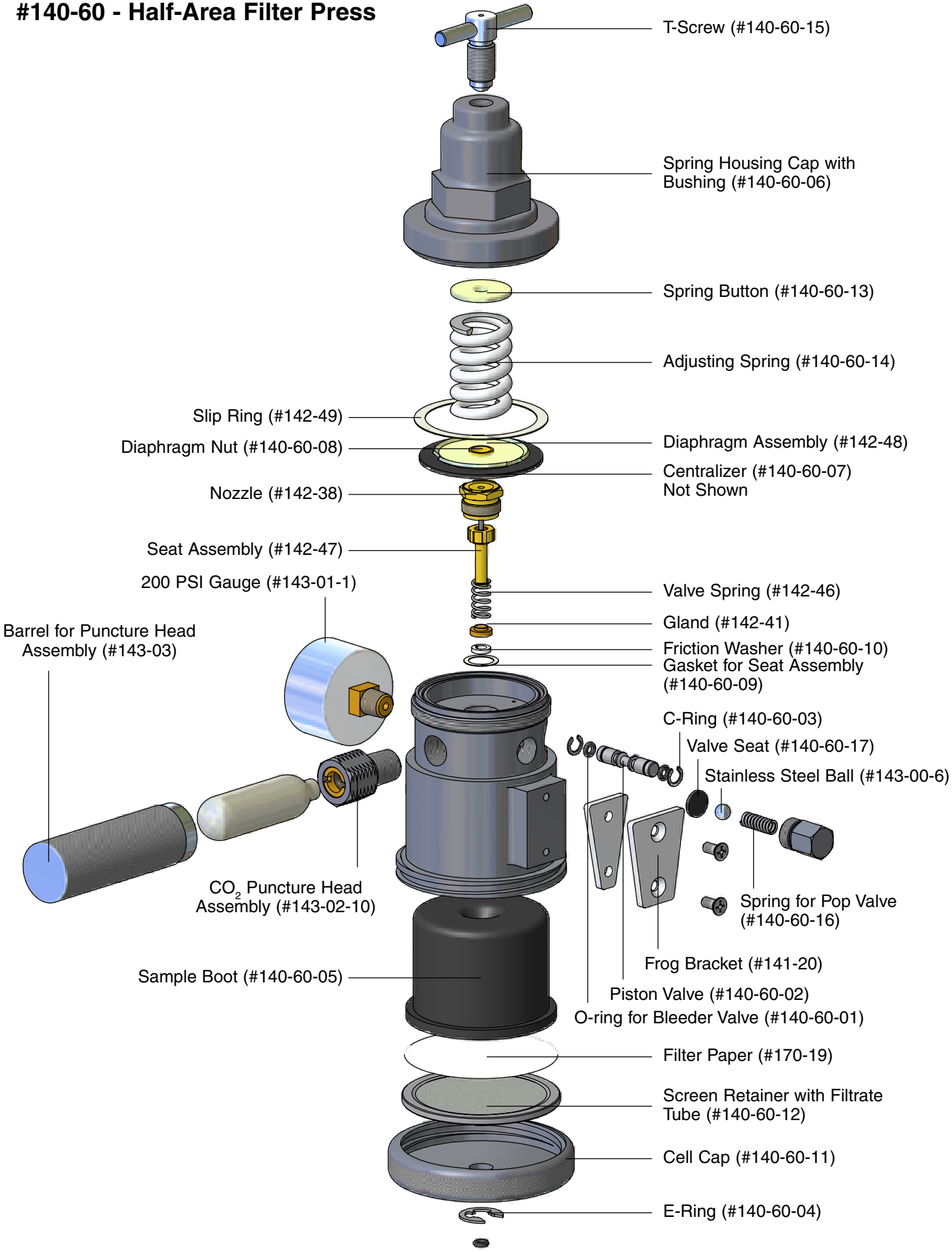
#140-60 Half-Area Filter Press

*May require special handling for shipping.

Did you know?

When you send something to us for repair, we know you are without a critical piece of equipment. That's why we make your repairs first priority (even equipment from other manufacturers!).

#140-60 - Half-Area Filter Press



MODEL 12BL MULTI-UNIT FILTER PRESS

#140-42 6-UNIT, MODEL 12BL-6
#140-41 4-UNIT, MODEL 12BL-4
#140-43 2-UNIT, MODEL 12BL-2

Components:

#140-44 Valve Body Assembly, 12 BL
#140-55 Filter Paper, 3½" (8.9 cm), Package of 100
#140-60-01 O-ring for Bleeder Valve
#141-19 Adapter for Air Hose
#142-54 O-ring for T-Fitting
#142-56 O-ring for Coupling
#142-59 Cell Assembly
#143-01-1 Gauge, 200 PSI, ⅛" Back Connection
#153-16 Graduated Cylinder, 25 mL × .2 mL, Glass

Optional:

#140-41-SP Spare Parts for One Year for #140-41

#140-41 Model 12BL-2 Filter Press, 4-Unit

Pressurization assemblies must be ordered separately.

Did you know?

As with all of our equipment, our test kits may be custom fitted to meet specific requirements.

6-UNIT LAB MODEL FILTER PRESS #140-50

Size: 37.5" × 13" × 24.5" (95 × 33 × 62 cm)
Weight: 52 lb 10 oz (23.9 kg)

#140-50 OFITE 6-Unit Filter Press

4-UNIT LAB MODEL FILTER PRESS #140-40

Size: 27.5" × 10" × 24.5" (70 × 25 × 62 cm)
Weight: 36 lb 10 oz (16.6 kg)

Components:

#140-50-1 Frame and Manifold
#141-00 Cell Body with #141-06 Pins
#141-01 Base Cap for Cell with #141-03 Filtrate Tube
#141-02 Top Cap for Cell
#141-04 Screen, 60-Mesh
#141-05 Gasket, 3/32", Neoprene
#141-09-002 Threaded Insert
#141-10 T-Screw
#141-11 Graduated Holder
#141-12 Support Rod for Graduated Holder
#141-13 Air Hose, Low-Pressure, 15"
#141-18 Thumb Screw for Graduated Holder
#141-19 Air Hose Adapter for Top Cap
#141-22 Filter for Top Cap, Felt
#142-39 Pipe Plug, ¼"
#143-06 Safety Bleeder Valve, ¼" NPT
#144-16 Female Coupling, Plated
#170-34 Needle Valve, Male, ¼" × ¼" NPT

Optional:

#140-40-SP Spare Parts for One Year for #140-40
#140-50-SP Spare Parts for One Year for #140-50
#141-15 Air Hose, Low-Pressure, 6'
#170-36 Nitrogen Regulator with Gauges
#171-24-1 Nut for Pressure Fitting
#171-24-2 Nipple for Pressure Fitting

DIFFERENTIAL STICKING TESTER #150-50

The OFITE Differential Sticking Tester measures the "stuck pipe tendency" of drilling fluids and determines how effective lubricants might be in any given fluid. By measuring the area of cake building during a test, the Bulk Sticking Coefficient is obtained and read directly at the conclusion of the test. This coefficient takes into account both the friction, or "stickiness" of the filter cake, as well as the amount of cake building that would occur to stick the pipe in the hole. How likely a given fluid is to produce a "stuck pipe" situation and how effective a given treatment may be can be immediately determined on site. The unit is normally pressurized by a CO_2 assembly, but any nitrogen source will work. The standard test uses 477.5 PSI (3291 kPa) applied to a stainless steel vessel of approximately 200 mL. Both a flat-faced plate and a plate of 12½" spherical radius that simulates the pipe inside casing or collars in the borehole are provided.

Size: **6" × 6" × 18" (15 × 15 × 46 cm)**
Weight: **26 lb (11.8 kg)**

Components:
#130-10-52 Jam Nut, 3/8-24
#142-56 O-ring for Torque Plate
#150-52 Gasket for Cell, Neoprene
#150-53 Gasket for Cell, Plastic
#150-54 Torque Wrench with Gauge
#150-55 Spanner Wrench
#150-56 O-ring for Cell
#150-57 Socket with ⅜" Drive, 5/16"
#150-58 Torque Plate, Flat Bottom
#150-59 Torque Plate, Spherical
#153-16 Graduated Cylinder, 25 × 2/10 mL, Glass
#170-04 CO_2 Pressuring Assembly:
- #143-02-10 CO_2 Puncture Head Assembly
- #143-03 Barrel for CO_2 Bulb
- #170-08 Regulator, High-Pressure, CONCOA/AIRCO
- #170-20 Manifold Block
- #170-32 Needle Valve, Male, ⅛" × ⅛" NPT
- #171-22 Retainer Pin
- #171-34 Gauge, 1,500 PSI, 2" face, ¼" NPT

#170-13 O-ring for Cell, Buna N
#170-15 Base Stand
#170-16 Valve Stem for Pressuring
#170-17 O-ring for Valve Stem
#170-19 Filter Paper, 2½", Package of 100
#170-35 6" Adjustable Wrench
#170-44 ½" Rubber Foot
#171-79 Hex Wrench, ¼"

Note: **CO_2 Bulbs must be ordered separately**

Optional:
#143-05 *CO_2 Bulbs, Package of 10 **UN1013**
#150-50-SP Spare Parts for One Year for #150-50
#170-03 Carrying Case, Stainless Steel

#150-50 Differential Sticking Tester

PARTS FOR DISCONTINUED MODEL 12B FILTER PRESS

#140-44 Valve Body Assembly
#140-55 Filter Paper, 3½" 100/box
#142-30 Bleed-Off Screw
#142-32 T-Coupling
#142-33 C-Locking Ring for Male Coupling
#142-35 ¼" Hex Nipple, Chrome Plated
#142-37 Model SR-200 Victor Regulator (10634)
#142-52 Piercer Pin (Older Models) (30512)
#142-54 O-ring for T-Fitting (30129)
#142-58 O-ring for HTHP Coupling
#142-59 Complete Cell Assembly (30501):
- #142-23 Screen, 60-Mesh, 3⅛" Diameter, Stainless Steel
- #142-33 Lock Ring for Coupling
- #142-51 Cell Coupling (30527)
- #142-56 O-ring for Male Coupling (30127)
- #142-60 O-ring for Cell

#142-61 Gauge, 2" Face, 200 PSI (30491)
#142-63 Locking Screw (30977)
#142-64 Locking Nut (30504)
#143-02-11 Puncture Pin Holder Assembly
#143-03 Barrel for CO_2 Cartridge
#153-16 Graduated Cylinder, Glass, 25 × .2 mL
#171-44 Rubber Foot, ¾"

*May require special handling for shipping.

CO_2 PRESSURE ASSEMBLY WITH TOP CAP #142-00

Size: 9.5" × 2.5" × 5" (24 × 6 × 13 cm)
Weight: 2 lb 9 oz (1.2 kg)

Components:

#141-02	Top Cap for Cell
#141-05	Gasket, 3/32", Neoprene
#141-22	Filter, Felt
#143-00	Regulator, CONCOA
#143-01	Gauge, 200 PSI, 1/8" Bottom Connection
#143-02-10	CO_2 Puncture Head Assembly
#143-03	Barrel for CO_2 Cartridge, Polished Chrome
#143-06	Safety Bleeder Valve, 1/4" NPT

Note: **CO_2 bulbs must be ordered separately.**

#142-00 CO_2 Pressure Assembly with Top Cap

#142-10 CO_2 Pressure Assembly

OFITE CO_2 PUNCTURE HEAD ASSEMBLY #143-02-10

Components:

#143-02-11 Puncture Pin Holder Assembly, OFITE Design

#143-02-12	Puncturing Pin
#143-02-13	O-ring for CO_2 Bulb
#143-02-14	O-ring for Puncturing Pin Holder Assembly

Note: Must use #143-03 barrel with this puncture assembly.

#143-02-10 CO_2 Puncturing Head Assembly

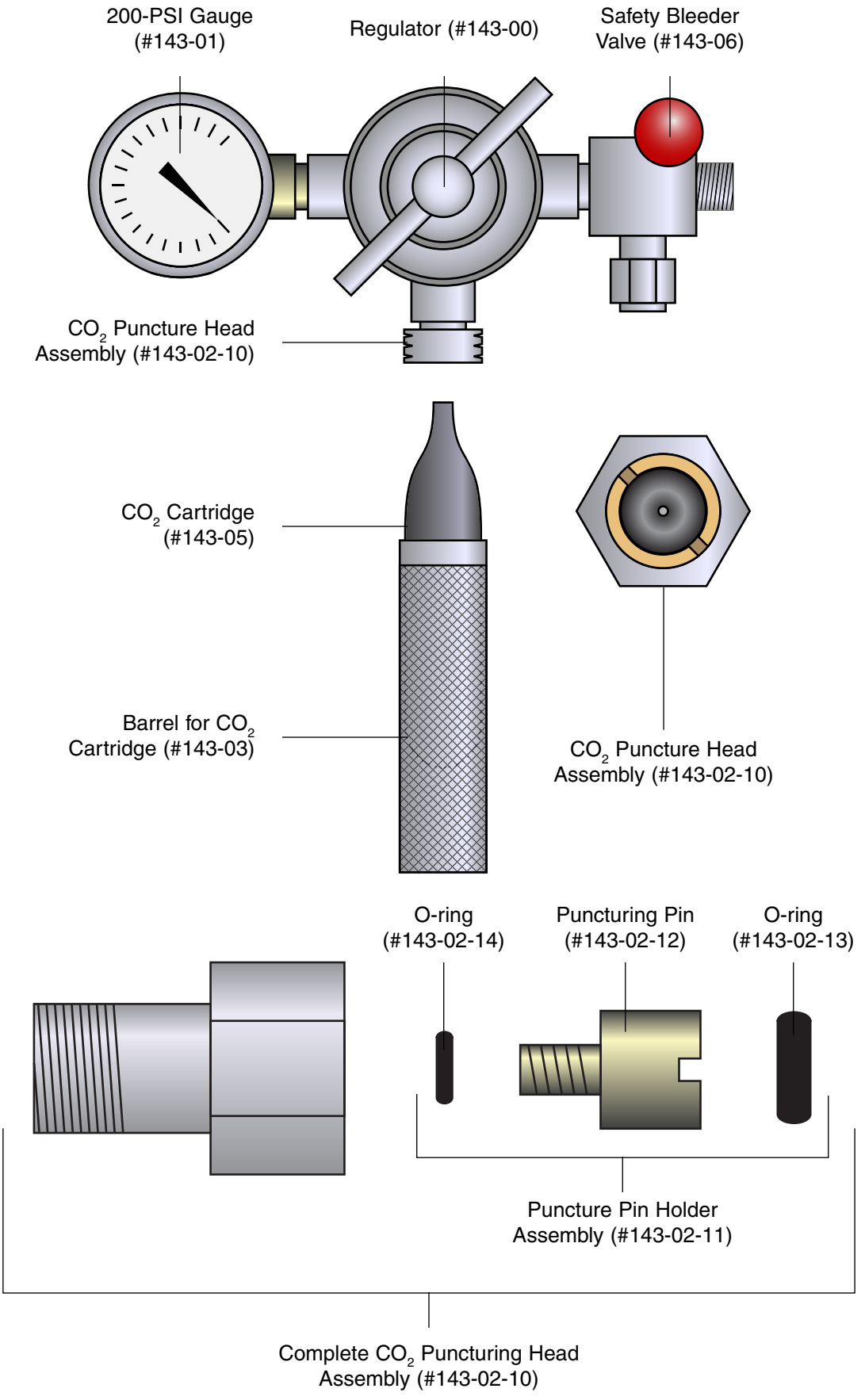
LOW-PRESSURE NITROGEN PRESSURING ASSEMBLY WITH TOP CAP AND TANK #171-31-1

Components:

#141-02	Top Cap for API Filter Press
#141-14	Air Hose, Low Pressure, 3'
#141-19	Air Hose Adapter
#143-06	Safety Bleeder Valve
#170-36	Regulator Assembly for Nitrogen, Victor, 200 and 3,000 PSI Gauges
#170-37	Nitrogen Cylinder, Right-Hand Thread, 21" × 7"

#171-31-1 Low-Pressuring Nitrogen Assembly

#142-10 - CO_2 Pressuring Assembly



PARTS AND ACCESSORIES FOR STANDARD FILTER PRESS

#141-19	Adapter, Air Hose/Top Cap
#143-03	Barrel for CO_2 Bulb
#143-18	Bushing for T-Handle for Half-Area Filter Press
#140-60-03	C-ring for Bleeder Valve for Half-Area Filter Press
#141-01	Cap and Base for API Filter Press
#141-02	Cap/Lid for API Filter Press
#142-53-2	Cap/Lid for Cell Body for Model MB Filter Press
#141-00-1	Cell Body, Acrylic, Full Size
#142-70	Cell Body, Acrylic, MES Design (½ Size)
#141-00	Cell Body for API Filter Press
#141-17	Clip for Graduated Cylinder
#143-05	*CO_2 Bulbs, Package of 10 **UN1013**
#143-02-10	CO_2 Puncture Head Assembly
#143-00-1	Diaphragm for CONCOA/AIRCO Regulator
#142-42	Diaphragm for Victor Regulator
#143-00-4	Diaphragm Plate for CONCOA/AIRCO Regulator
#140-60-04	E-ring for Base Cap for Half-Area Filter Press
#170-19	Filter Paper, 2½" (6.4 cm), Package of 100
#140-55	Filter Paper, 3½" (8.9 cm), Package of 100
#141-03	Filtrate Tube for Base Cap for API Filter Press
#141-20	Frog Bracket for Wall-Mount and Half-Area Filter Presses
#141-05-1	Gasket, Neoprene, 1/16" Thin for API Filter Press
#141-05	Gasket, Neoprene, 3/32" Thick, API Filter Press
#143-01-1	Gauge, 200 PSI, ⅛" Back Connection
#143-01	Gauge, 200 PSI, ⅛" Bottom Connection
#142-53-10	Graduated Cylinder Holder for Model MB Filter Press
#141-13	Hose, Low-Pressure, ¼" Flare, Female, 15"
#141-14	Hose, Low-Pressure, ¼" Flare, Female, 3'
#141-15	Hose, Low-Pressure, ¼" Flare, Female, 6'
#141-09	Insert with Set Screw for API Filter Press, Threaded
#140-60-01	O-ring for Bleeder Valve for Half-Area Filter Press
#142-60	O-ring for Cell Body for 12B/MB Filter Press
#142-56	O-ring for Male Coupling for 12B/MB Filter Press
#143-02-13	O-ring for Puncture Pin
#143-02-14	O-ring for Puncture Pin Holder Assembly
#141-06	Pin for Cell Body for API Filter Press
#143-02-12	Puncturing Pin
#143-07	Repair Kit, CONCOA/AIRCO Regulator
#143-19	Repair Kit, Victor Regulator
#135-04	Retainer Ring for 143-06 Bleeder Valve
#140-60-05	Sample Boot for Half-Area Filter Press, Rubber
#141-04	Screen for API Filter Press, 60-Mesh
#142-23	Screen for Model MB Filter Press, 3⅛", 60-Mesh
#140-60-12	Screen Retainer with Filtrate Tube for Half-Area Filter Press
#143-00-8	Seat for CONCOA/AIRCO Regulator, Teflon®
#141-16	Support Arm with Clip for Graduated Cylinder for Wall-Mount Filter Press
#141-11	Support for Graduated Cylinder
#141-12	Support Rod for Graduated Cylinder Support
#141-10	T-Screw for API Filter Press
#143-00-7	Thrust Plate, CONCOA/AIRCO Regulator
#141-18	Thumb Screw for Graduated Support for API Filter Press
#170-34	Valve, Needle, Male, ¼" × ¼" NPT
#143-06	Valve, Safety Bleeder, ¼" NPT
#142-53-6	Valve Stem (Bleed-Off Screw), Model MB Filter Press
#141-21	Wall Bracket for Wall-Mount and Half-Area Filter Presses

*May require special handling for shipping.

The OFITE standard filter press is an excellent instrument for determining static filtration control properties of drilling fluid. Often the filtration characteristics of the fluid require evaluation at conditions more indicative of the bottom-hole environment. When high-pressure and high-temperature filtration measurements are required, HTHP filter presses designed specifically for simulating down-hole conditions are recommended. Test temperatures for all models may exceed 200°F (93°C), provided a back-pressure receiver is used to collect the filtrate. The components of the OFITE HTHP filter presses are fully interchangeable with those marketed by other manufacturers. Three different sizes are available to accommodate different requirements and preferences. The #170-00 series is a field portable unit with a 175 mL sample cell and a small power consumption consisting of two 200-watt heaters. The test cell is encased in the heating jacket to ensure complete and uniform sample heating. Normally CO_2 bulbs are used to pressurize both the cell and back pressure receiver, however other pressurization options are available. The Model MB HTHP filter press (#171-50) features quick connect couplings for pressurization. It is also portable and may be ordered with a stainless steel case (#171-81). The 175 mL and the Model MB filter presses are designed for test temperatures up to 350°F (176°C). The #171-00 series is equipped with a 500 mL sample cell and four 200-watt heaters for temperatures above 350°F (176°C) making it ideal for laboratory use. Also included is a regulator manifold system for connecting to bottled nitrogen for higher pressures. All HTHP units may be ordered with 115-Volt or 230-Volt power requirements. A multi-unit laboratory model is available and may be custom designed to your specifications. A wide variety of accessories and replacement parts are also available.

Nitrous oxide cartridges should not be used as pressure sources for high-temperature, high-pressure (HTHP) filtration. Under temperature and pressure, nitrous oxide can detonate in the presence of grease, oil, or carbonaceous materials. Nitrous oxide cartridges are to be used only for Garrett Gas Train carbonate analysis. Carbon dioxide and nitrous oxide cartridges are pressurized to approximately 900 PSI at 1 atmosphere (sea level). Therefore, they should never be placed on airplanes without proper packaging due to the possibility of cabin depressurizing, which may result in an explosion.

HTHP FILTER PRESS WITH SINGLE-END CELL, 175 ML, 1,500 PSI, CO_2 PRESSURIZATION

#170-00 115-VOLT
#170-01 230-VOLT

Size: **7.5" × 11" × 23.5" (19 × 28 × 60 cm)**
Weight: **27 lb (12.3 kg)**

Components:

#153-14 Graduated Cylinder, 50 mL × 1 mL, Glass
#154-10 Thermometer with Metal Dial, 5" Stem, Dual-Scale: 50 - 500°F (0° - 250°C)
#170-00-1 Heating Jacket, 115-Volt -OR-
#170-01-1 Heating Jacket, 230-Volt
- #130-10-52 Jam Nut, ⅜ - 24
- #164-32 Male Connector for Power Cable (230-Volt Only)
- #170-05 Thermostat, 50 - 500°F
- #170-09 Insulation Board
- #170-10 Pilot Light for Thermostat
- #170-11 Heating Element, 200-Watt, 115-Volt
- #170-15 Base
- #170-21 Support Rod for Heating Jacket
- #170-25 Heating Jacket Well, Aluminum
- #170-30 Thermostat Cover, Stainless Steel
- #170-44 Rubber Foot, ½"
- #171-32 Midget Knob
- #171-43-2 Fiberglass Sleeving, Wire Insulation
- #171-82 Power Cord with Male Plug, 16/3 SJ, Round, 8' (115-Volt Only)

#170-04 CO_2 Pressurization Unit
- #143-02-10 CO_2 Puncture Head Assembly
- #143-03 Barrel for CO_2 Bulb
- #170-08 Regulator, High-Pressure, CONCOA/AIRCO
- #170-20 Manifold Block
- #170-32 Needle Valve, Male, ⅛" × ⅛" NPT
- #171-22 Retainer Pin
- #171-34 Gauge, 1,500 PSI, 2" Face, ¼" NPT

#170-06 Back Pressure Receiver, 15 mL, Stainless Steel Tube, For CO_2
- #143-00 Regulator, CONCOA/AIRCO
- #143-01 Gauge, 200 PSI, ⅛" Bottom Connection
- #143-02-10 CO_2 Puncture Head Assembly
- #143-03 Barrel for CO_2 Bulb
- #143-06 Safety Bleeder Valve, ¼" NPT
- #144-11 Street Ell, ⅛"
- #170-07 O-ring for Receiver
- #170-28 Receiver Body, 15 mL, Stainless Steel
- #170-32 Needle Valve, Male, ⅛" × ⅛" NPT
- #171-22 Retainer Pin

#170-12-1 HTHP Single-End Cell Assembly, 1,500 PSI
- #170-12 Cell Body, 1,500 PSI, 316 Stainless Steel
- #170-13 O-ring for Cell, Buna N
- #170-14 Cell Cap with Screen, 1,500 PSI
- #170-16 Valve Stem
- #170-17 O-ring for Valve Stem, Viton®
- #170-26 Cap Locking Screw, Stainless Steel
- #170-27 Allen Wrench for Cap Locking Screw, 5/32"

#170-19 Filter Paper, 2½", Package of 100
#170-35 Adjustable Wrench, 6"

Optional:
#143-07 CONCOA/AIRCO Repair Kit
#170-03 Case, Stainless Steel

Note: **CO_2 bulbs must be ordered separately.**

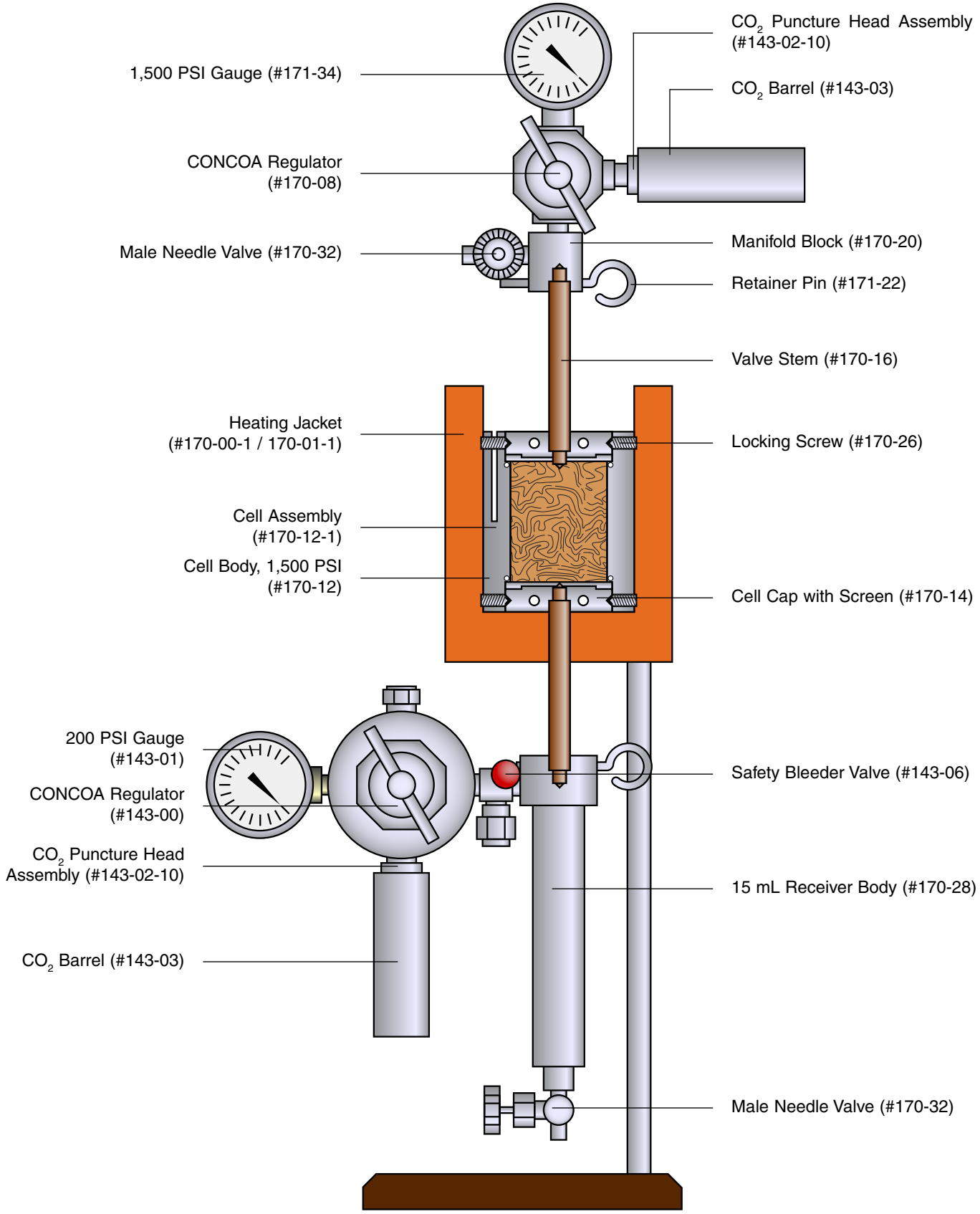
*May require special handling for shipping.

#170-00 Series HTHP Filter Press, 175 mL

#170-00 Series Filter Press with Optional Carry Case

Optional:
#143-05 *CO_2 Bulbs, Package of 10 **UN1013**
#170-00-SP Spare Parts for One Year for #170-00

#170-00 / 170-01 HTHP Filter Press, 175 mL, 1,500 PSI



HTHP FILTER PRESS WITH SINGLE-END CELL, 175 ML, 1,500 PSI, N_2 PRESSURIZATION

#170-00-3 115-VOLT
#170-01-3 230-VOLT

Size: 7.5" × 11" × 23.5" (19 × 28 × 60 cm)
Weight: 38 lb (17.2 kg)

Assemblies:

#170-00-1 Heating Jacket, 115-Volt - or-
#170-01-1 Heating Jacket, 230-Volt
- #130-10-52 Jam Nut, ⅜ - 24
- #164-32 Male Connector for Power Cable (230-Volt Only)
- #165-40-2 Cable, 3-Conductor, SJ00W, 18 Gauge (230-Volt Only)
- #170-05 Thermostat, 50 - 500°F
- #170-09 Insulation Board
- #170-10 Pilot Light for Thermostat
- #170-11 Heating Element, 115-Volt, 200-Watt (2 each)
- #170-15 Base
- #170-21 Support Rod for Heating Jacket (2 each)
- #170-25 Aluminum Well for Heating Jacket
- #170-30 Thermostat Cover, Stainless Steel
- #170-44 Rubber Foot, ½"
- #171-32 Midget Knob
- #171-43-2 Fiberglass Sleeving, Wire Insulation
- #171-82 Power Cord with Male Plug, 8' (115-Volt Only)

#170-06-1 Back Pressure Receiver, 15 mL Stainless Steel Tube
- #144-11 ⅛" Street Ell
- #144-15 Bushing, ¼" NPT Male to ⅛" NPT Female, Plated Brass
- #170-07 O-ring
- #170-28 Receiver Body
- #170-32 Needle Valve, Male, ⅛" × ⅛" NPT
- #171-22 Retainer Pin

#170-12-1 HTHP Single-End Cell Assembly, 1,500 PSI
- #170-12 Cell Body, 1,500 PSI, 316 Stainless Steel
- #170-13 O-ring for Cell, Buna N
- #170-14 Cell Cap with Screen, 1,500 PSI
- #170-16 Valve Stem
- #170-17 O-ring for Valve Stem, Viton®
- #170-26 Cap Locking Screw, Stainless Steel
- #170-27 Allen Wrench for Cap Locking Screw, 5/32"

#171-24 Dual Nitrogen Manifold, 1,350 and 750 PSI
- #170-20 Manifold Block
- #170-32 Needle Valve, Male, ⅛" × ⅛" NPT
- #171-22 Retainer Pin
- #171-24-001 Modified Regulator, Low-Pressure Side
- #171-24-002 Modified Regulator, High-Pressure Side
- #171-24-1 Nut, L.H., Regulator Inlet CGA-580
- #171-24-2 Nipple with Filter for Regulator Inlet 15-3SF
- #171-24-3 Union Elbow, Female, ¼" Flare × ⅛" FNPT
- #171-24-4 Pipe Plug, ¼" NPT, 316 Stainless Steel
- #171-24-5 Street Tee, ¼" NPT, 316 Stainless Steel
- #171-25-1 Relief Valve, Set at 750 PSI
- #171-25-2 Relief Valve, Set at 1,350 PSI
- #171-26 Hose, 3,000 PSI, 3/16" × 3'
- #171-28 Dual Manifold Body
- #171-38 Gauge, 1,000 PSI, 2½" Face, ¼" Bottom Connection
- #171-40 Gauge, 1,500 PSI, 2½" Face, ¼" Bottom Connection
- #171-42 Gauge, 3,000 PSI, 2½" Face, ¼" Bottom Connection
- #171-90-06 Reducing Bushing, 316 Stainless Steel
- #171-90-07 Hex Nipple, 316 Stainless Steel, ¼" NPT
- #171-90-13 Adapter, ¼" Flare × ¼" Male NPT

Components:
- #153-14 Graduated Cylinder, 50 mL × 1 mL, Glass
- #154-10 Thermometer with Metal Dial, 5" Stem, Dual-Scale: 50 - 500°F (0° - 250°C)
- #170-19 Filter Paper, 2½", Package of 100
- #170-35 Adjustable Wrench, 6"

Optional:
- #143-07 CONCOA/AIRCO Repair Kit
- #170-03 Case, Stainless Steel
- #171-31 Nitrogen Pressurization Assembly

HTHP Filter Press, Single Cap, N_2, 175 mL

Did you know?

OFITE offers a variety of payment options, including most major credit cards. If you are interested in a Net-30 day account, a credit application is available in the index.

HTHP FILTER PRESS WITH SINGLE-END CELL, 500 ML, 2,000 PSI, N_2 PRESSURIZATION

#171-00-C 115-VOLT
#171-01-C 230-VOLT

Size: 10" × 18" × 42" (25 × 46 × 107 cm)
Weight: 53 lb (24.1 kg)

Components:

#153-12 Graduated Cylinder, 100 mL × 1 mL, Glass
#154-20 Thermometer, Metal, 8", 50 - 500°F
#170-19 Filter Paper, 2½", Package of 100
#170-35 Adjustable Wrench for Valve Stem, 6"
#171-00 Heating Jacket, 115-Volt - or -
#171-01 Heating Jacket, 230-Volt
- #164-32 Male Connector for Power Cable (230-Volt Only)
- #165-40-2 Cable, 3-Conductor, SJ00W, 18 Gauge (230-Volt Only)
- #170-10 Pilot Light for Thermostat
- #170-11 Heating Element, 200-Watt, 115-Volt
- #171-00-1 Case, Stainless Steel
- #171-05 Location Pin for Cells
- #171-07 Heat Jacket
- #171-08 Base
- #171-09 Leg
- #171-32 Midget Knob
- #171-36 Thermostat Cover
- #171-44 Rubber Foot, ¾"
- #171-71 Thermostat
- #171-82 Power Cord with Male Plug, 8' (115-Volt Only)
- #171-94 Cell Rest Plunger Assembly

#171-10 Back Pressure Receiver, 100 mL
- #170-32 Needle Valve, Male, ⅛" × ⅛" NPT
- #171-11 O-ring for Receiver Body
- #171-12 Receiver Body
- #171-22 Retainer Pin

#171-20 Single-End Cell Assembly, 500 mL, 2,000 PSI
- #170-13 O-ring for Cell, Buna N
- #170-16 Valve Stem
- #170-17 O-ring for Valve Stem, Viton®
- #170-26 Cap Locking Screw, Stainless Steel
- #170-27 Allen Wrench for Cap Locking Screw, 5/32"
- #171-17 Cell Body, 10", 500 mL
- #171-21 Cell Cap with 60-Mesh Screen, 2,000 PSI

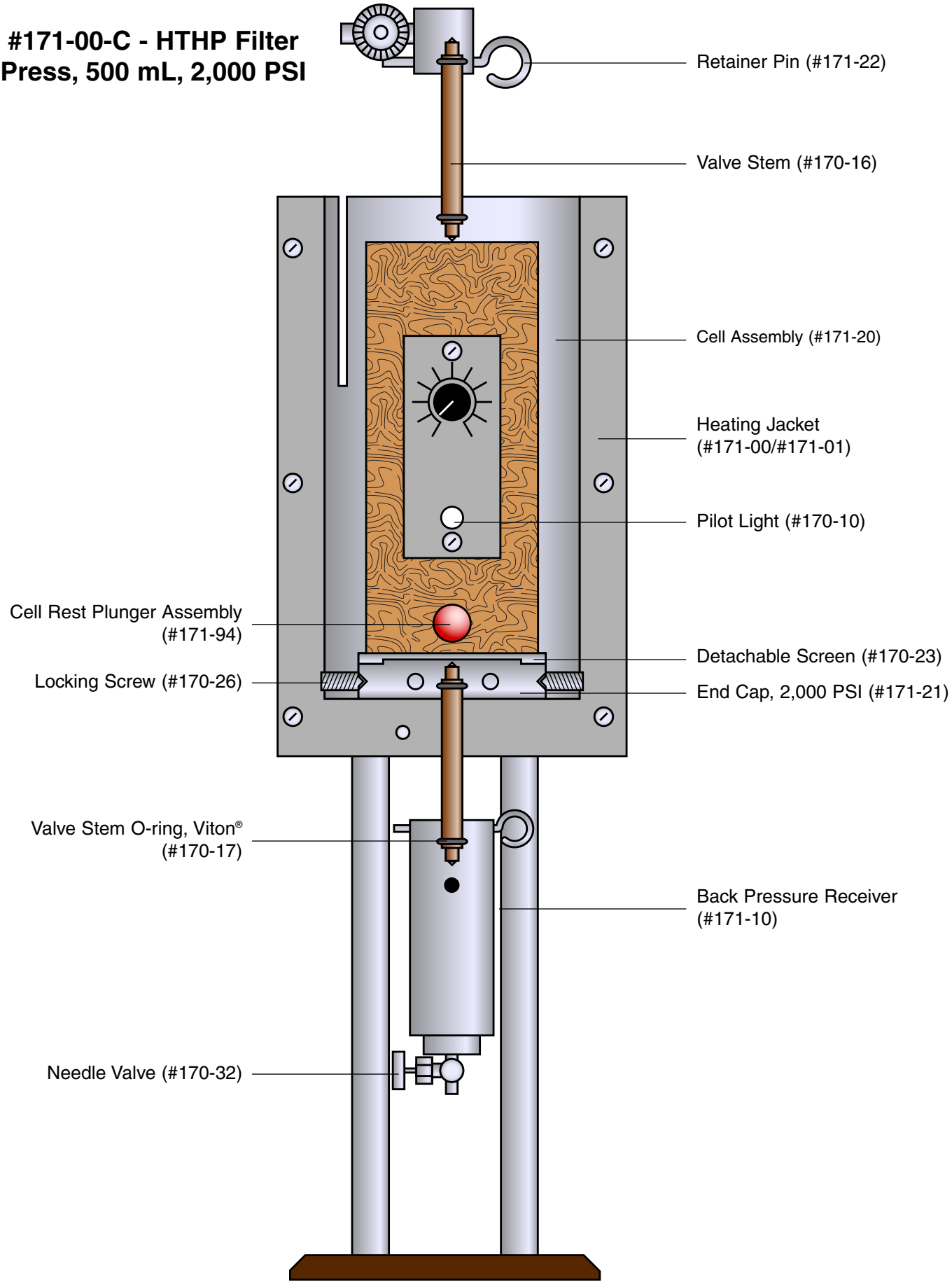
#171-24 Dual Nitrogen Manifold, 1,350 and 750 PSI
- #170-20 Manifold Block
- #170-32 Needle Valve, Male, ⅛" × ⅛" NPT
- #171-22 Retainer Pin
- #171-24-001 Modified Regulator, Low-Pressure Side
- #171-24-002 Modified Regulator, High-Pressure Side
- #171-24-1 Nut, L.H., Regulator Inlet CGA-580
- #171-24-2 Nipple with Filter for Regulator Inlet 15-3SF
- #171-24-3 Union Elbow, Female, ¼" Flare × ⅛" FNPT
- #171-24-4 Pipe Plug, ¼" NPT, 316 Stainless Steel
- #171-24-5 Street Tee, ¼" NPT, 316 Stainless Steel
- #171-25-1 Relief Valve, Set at 750 PSI
- #171-25-2 Relief Valve, Set at 1,350 PSI
- #171-26 Hose, 3,000 PSI, 3/16" × 3'
- #171-28 Dual Manifold Body
- #171-38 Gauge, 1,000 PSI, 2½" Face, ¼" Bottom Connection
- #171-40 Gauge, 1,500 PSI, 2½" Face, ¼" Bottom Connection
- #171-42 Gauge, 3,000 PSI, 2½" Face, ¼" Bottom Connection
- #171-90-06 Reducing Bushing, 316 Stainless Steel
- #171-90-07 Hex Nipple, 316 Stainless Steel, ¼" NPT
- #171-90-13 Adapter, ¼" Flare × ¼" Male NPT

Note: Cementing Filtration also available on page 145 - 149.

Optional:
#143-07 CONCOA/AIRCO Repair Kit
#171-00-C-SP Spare Parts for One Year for #171-00-C
#171-01-C-SP Spare Parts for One Year for #171-01-C
#171-06 Safety Shield
#170-37 Nitrogen Cylinder, Right-Hand Thread, 21" × 7"

171 Series HTHP Filter Press with Nitrogen Manifold, 500 mL
Ceramic Filter Disks and Extra Thick Cell Caps Optional

#171-00-C - HTHP Filter Press, 500 mL, 2,000 PSI



4-UNIT HTHP FILTER PRESS WITH SINGLE-END CELLS, 175 ML, 1,500 PSI, N_2 PRESSURIZATION

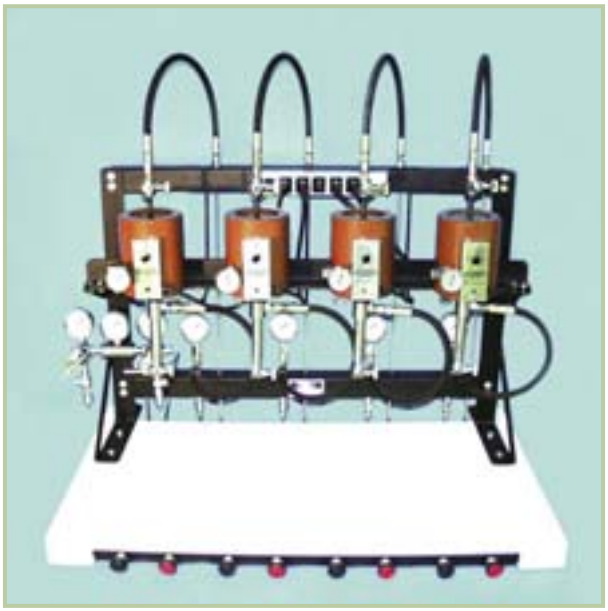
#170-00-4 115-VOLT
#170-00-4-230 230-VOLT

Size: **39.25" × 25.75" × 37.5" (100 × 65 × 95 cm)**
Weight: **175 lb (79.5 kg)**

Components:

#130-76-10-4 Power Cord for Heat Cup
#144-11 Ell, 90 Street, ⅛"
#152-37 AC Power Cord, 3-Conductor (115-Volt Only)
#152-38 AC Power Cord, 3-Conductor (230-Volt Only)
#153-14 Graduated Cylinder, 50 mL × 1 mL, Glass
#154-10 Thermometer with Metal Dial, 5" Stem, Dual-Scale: 50 - 500°F (0° - 250°C)
#170-00-4-1 Frame Manifold Set
#170-05 Thermostat, 50 - 500°F (10° - 260°C)
#170-07 O-ring for Receiver
#170-09 Insulation Board
#170-09-1 Insulation Board for Heat Jacket
#170-10 Pilot Light for Thermostat
#170-11 Heating Element, 115-Volt, 200-Watt
#170-12 Cell Body, Single-End, 1,500 PSI
#170-13 O-ring for Cell
#170-14 Cell Cap, 1,500 PSI
#170-16 Valve Stem
#170-17 O-ring for Valve Stem, Viton®
#170-19 Filter Paper, 2½", Package of 100
#170-20 Manifold Block
#170-25 Aluminum Well
#170-26 Locking Screw, Stainless Steel
#170-27 Allen Wrench for Cap Locking Screw, 5/32"
#170-28 Body for Back Pressure Receiver, 15 mL
#170-30 Thermostat Cover, Stainless Steel
#170-32 Needle Valve, Male, ⅛" × ⅛" NPT
#170-35 Adjustable Wrench for Valve Stem, 6"
#171-22 Retainer Pin
#171-24 Dual Nitrogen Manifold, 1,350 and 750 PSI
- #170-20 Manifold Block
- #170-32 Needle Valve, Male, ⅛" × ⅛" NPT
- #171-22 Retainer Pin
- #171-24-001 Modified Regulator, Low-Pressure Side
- #171-24-002 Modified Regulator, High-Pressure Side
- #171-24-1 Nut, L.H., Regulator Inlet CGA-580
- #171-24-2 Nipple with Filter for Regulator Inlet 15-3SF
- #171-24-3 Union Elbow, Female, ¼" Flare × ⅛" FNPT
- #171-24-4 Pipe Plug, ¼" NPT, 316 Stainless Steel
- #171-24-5 Street Tee, ¼" NPT, 316 Stainless Steel
- #171-25-1 Relief Valve, Set at 750 PSI
- #171-25-2 Relief Valve, Set at 1,350 PSI
- #171-26 Hose, 3,000 PSI, 3/16" × 3'
- #171-28 Dual Manifold Body
- #171-38 Gauge, 1,000 PSI, 2½" Face, ¼" Bottom Connection
- #171-40 Gauge, 1,500 PSI, 2½" Face, ¼" Bottom Connection
- #171-42 Gauge, 3,000 PSI, 2½" Face, ¼" Bottom Connection
- #171-90-06 Reducing Bushing, 316 Stainless Steel
- #171-90-07 Hex Nipple, 316 Stainless Steel, ¼" NPT
- #171-90-13 Adapter, ¼" Flare × ¼" Male NPT
- #171-24-3 Union Elbow, Female, ¼" Flare × ⅛" FNPT
- #171-26 Hose, 5000#, 3/16" × 3'
- #171-26-1 Hose, 5000#, 3/16" × 2'
- #171-32 Midget Knob
- #171-38 Gauge, 1,000 PSI, 2½", ¼" NPT Bottom
- #171-44 Rubber Foot, ¾"
- #171-90-13 Adapter, ¼" Flare × ¼" Male NPT

Optional:
#143-07 CONCOA/AIRCO Repair Kit
#170-00-4-SP Spare Parts for One Year for #170-00-4

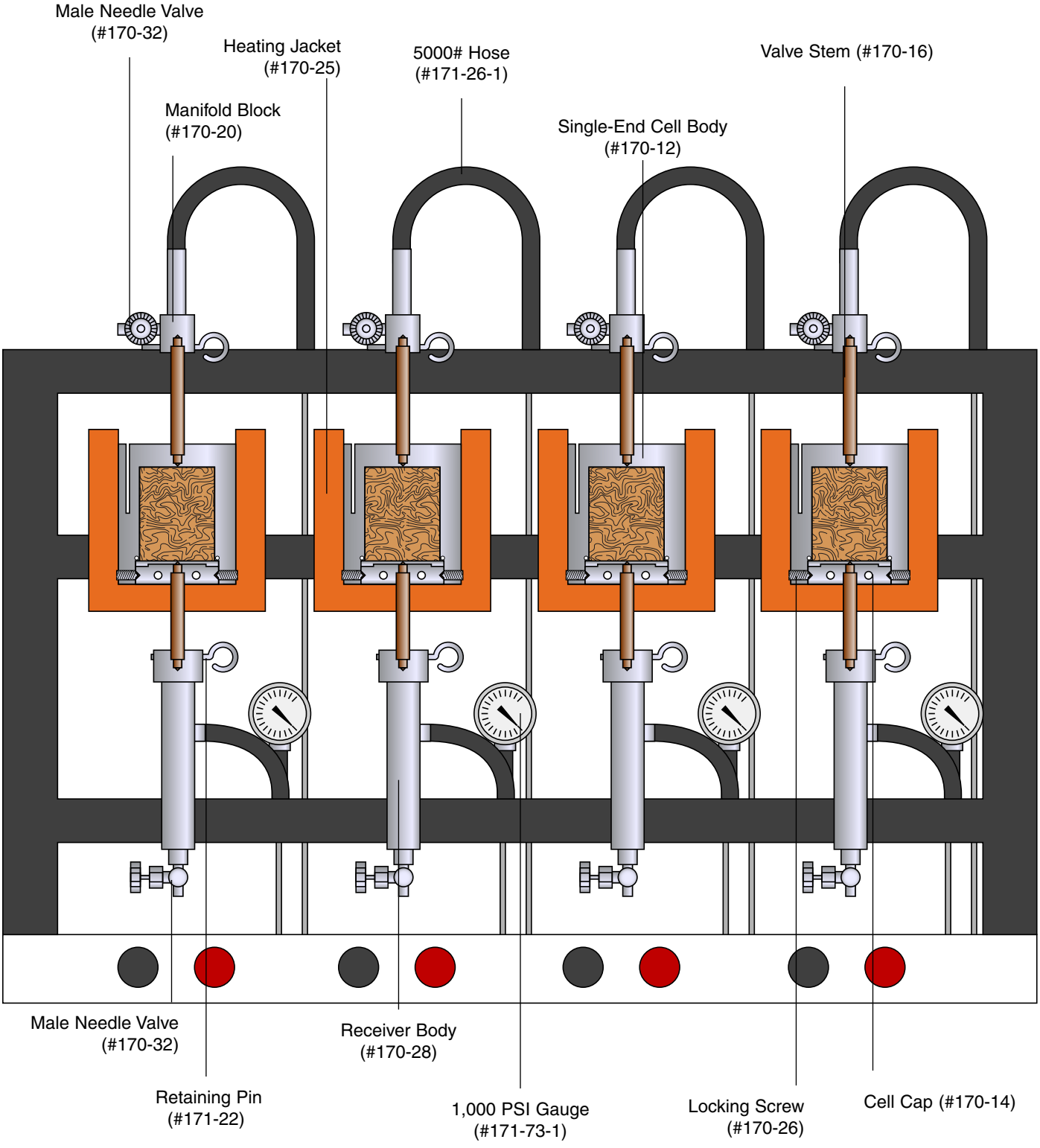


#170-00-4 4-Unit HTHP Filter Press, 175 mL

Did you know?

All OFITE reconditioned equipment carries the same warranty as new equipment manufactured by OFI Testing Equipment!

#170-00-4 - 4-Unit HTHP Filter Press



MODEL MB HTHP FILTER PRESS, 1,500 PSI
#171-50 115-VOLT
#171-51 230-VOLT

Size: 19" × 21" × 28" (48 × 53 × 71 cm)
Weight: 60 lb (27.2 kg)

Assemblies:

#171-55 Heating Jacket and Stand, 115-Volt - or -
#171-55-1 Heating Jacket and Stand, 230-Volt

- #142-58 O-ring for HTHP Coupling
- #164-32 Male Connector for Power Cable, (230-Volt Only)
- #165-40-2 Cable, 3-Conductor, SJ00W, 18 Gauge (230-Volt Only)
- #170-07 O-ring for Receiver
- #170-11 Heating Element, 115-Volt, 200-Watt
- #171-54 Thermal Fuse, 464°F (240°C)
- #171-59 Base and Leg for Stand
- #171-59-1 Insulator Strip, Micarta
- #171-61 Heating Jacket
- #171-63 Dial Plate for Thermostat
- #171-65 Fuse Block
- #171-67 Knob for Thermostat
- #171-68 Pilot Light, Red
- #171-69 Pilot Light, White
- #171-70-1 Cover for Thermostat, Waterproof
- #171-71 Thermostat
- #171-71-1 Thermostat Spacer Plate
- #171-71-2 Sleeve and Nut For Thermostat
- #171-82 Power Cord with Male Plug, 8' (115-Volt Only)

#171-56 Cell Assembly

- #171-52 O-ring for Cell Lid, 2 5/16" × 2½" × 3/32"
- #171-60 Cell Body
- #171-62 Lid with Screen for Cell
- #171-64 Male Coupling
- #171-78 Screw for Cell
- #171-80 Needle Valve with Modified Handle, Male, ¼"

#171-57 High-Pressure Regulator Assembly

- #142-58 O-ring for Cell Coupling
- #143-02-10 CO_2 Puncture Head Assembly
- #143-03 Barrel for CO_2 Bulb
- #144-15 Bushing for Gauges, ¼" NPT to ⅛" NPT
- #170-34 Needle Valve, Male, ¼" × ¼" NPT
- #171-53 Regulator, High-Pressure, Victor
- #171-73-1 Gauge, 1,000 PSI, ⅛" Bottom Connection, 2" Face
- #171-74-1 Gauge, 2,000 PSI, ⅛" Bottom Connection, 2" Face
- #171-76 Female Coupling for Top Valve
- #171-77 Coupling Ring for Top Valve

#171-58 Back Pressure Receiver, Complete

- #142-37 Regulator, Victor
- #142-58 O-ring for Cell Coupling
- #142-61 Gauge, 200 PSI, ¼" Bottom, 2" Face
- #143-02-10 CO_2 Puncture Head Assembly
- #143-03 Barrel for CO_2 Cartridge
- #143-06 Safety Bleeder Valve, ¼" NPT
- #143-09 Relief Valve, 200 PSI (1,379 kPa)
- #170-07 O-ring for Receiver
- #170-32 Needle Valve, Male, Outlet, ⅛" × ⅛" NPT
- #171-66 Receiver Tube, Stainless Steel
- #171-75 Receiver Body

*May require special handling for shipping.

Components:

- #153-16 Graduated Cylinder, 25 mL × .2 mL, Glass
- #153-55 Stopcock Grease, 5.3 oz Tube
- #154-10 Thermometer with Metal Dial, 5" Stem, Dual-Scale: 50 - 500°F (0° - 250°C)
- #170-19 Filter Paper, 2½", Package of 100
- #171-79 Hex Wrench, ¼"

Optional:

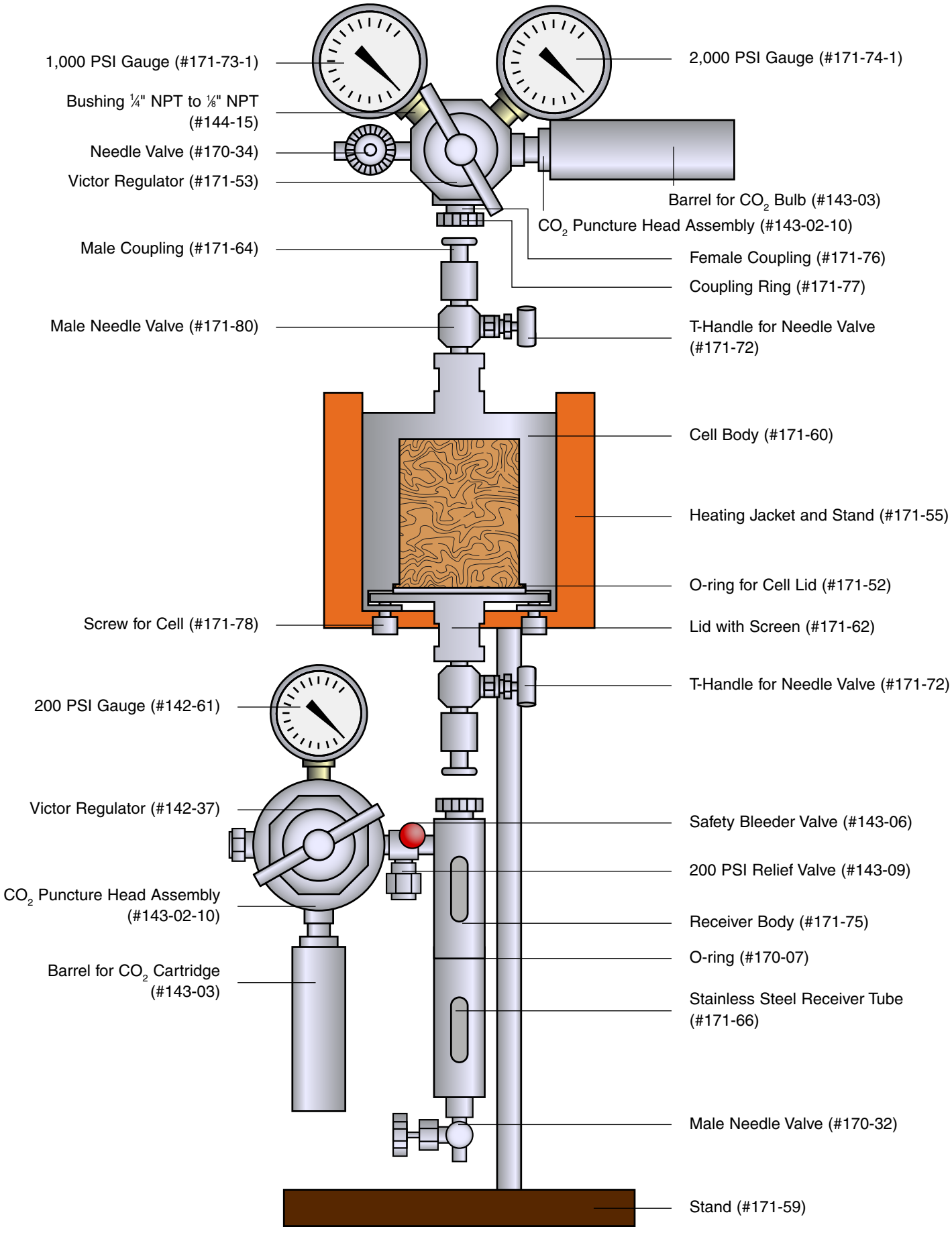
- #143-05 *CO_2 Bulbs, Package of 10 **UN1013**
- #143-19 Repair Kit for Victor Regulator, Low-Pressure
- #143-20 Repair Kit for Victor Regulator, High-Pressure
- #171-81 Carrying Case, Stainless Steel
- #171-50-SP Spare Parts for One Year for #171-50

Note: CO_2 bulbs must be ordered separately.

#171-50 Series, Model MB HTHP Filter Press

#171-50 Model MB HTHP Filter Press with Optional Carry Case

#171-50 - Model MB HTHP Filter Press, 1,500 PSI



4-UNIT MODEL MB HTHP FILTER PRESS, 115-VOLT #171-50-4

Components:

#142-58 O-ring for HTHP Coupling
#152-37 AC Power Cord, 3-Conductor
#153-16 Graduated Cylinder, 25 mL × .2 mL, Glass
#154-10 Thermometer with Metal Dial, 5" Stem, Dual-Scale: 50 - 500°F (0° - 250°C)
#164-32 Male Connector for Power Cable, 230-Volt
#170-07 O-ring for Receiver
#170-11 Heating Element, 115-Volt
#170-19 Filter Paper, Specially Hardened for Filter Presses, 2½" (6.35 cm)
#170-32 Needle Valve, Male, ⅛" × ⅛" NPT
#170-34 Needle Valve, Male, ¼" × ¼" NPT
#171-24 1,350 PSI and 750 PSI Nitrogen Manifold
- #170-20 Manifold Block
- #170-32 Needle Valve, Male, ⅛" × ⅛" NPT
- #171-22 Retainer Pin
- #171-24-001 Modified Regulator, Low-Pressure Side
- #171-24-002 Modified Regulator, High-Pressure Side
- #171-24-1 Nut, L.H., Regulator Inlet CGA-580
- #171-24-2 Nipple with Filter for Regulator Inlet 15-3SF
- #171-24-3 Union Elbow, Female, ¼" Flare × ⅛" FNPT
- #171-24-4 Pipe Plug, ¼" NPT, 316 Stainless Steel
- #171-24-5 Street Tee, ¼" NPT, 316 Stainless Steel
- #171-25-1 Relief Valve, 750 PSI (5,171 kPa)
- #171-25-2 Relief Valve, 1,350 PSI (9,308 kPa)
- #171-26 Hose, 3,000 PSI, 3⁄16" × 3'
- #171-28 Dual Manifold Body
- #171-38 Gauge, 1,000 PSI, 2½" Face, ¼" Bottom Connection
- #171-40 Gauge, 1,500 PSI, 2½" Face, ¼" Bottom Connection
- #171-42 Gauge, 3,000 PSI, 2½" Face, ¼" Bottom Connection
- #171-90-06 Reducing Bushing, 316 Stainless Steel
- #171-90-07 Hex Nipple, 316 Stainless Steel, ¼" NPT
- #171-90-13 Adapter, ¼" Flare × ¼" Male NPT

#171-26-1 Hose, 5000#, 3⁄16" × 2'
#171-38 Gauge, 1,000 PSI, 2½", ¼" NPT Bottom
#171-44 Rubber Foot, ¾"
#171-52 O-ring for Cell Lid, 2 5⁄16" × 2½" × 3⁄32"
#171-54 Thermal Fuse, 464°F (240°C)
#171-60 Test Cell
#171-61 Heating Block
#171-62 Lid for Test Cell
#171-63 Dial Plate for Thermostat
#171-64 Male Coupling
#171-65 Fuse Block
#171-66 Receiver Tube, Stainless Steel
#171-67 Knob for Thermostat
#171-68 Pilot Light, Red
#171-69 Pilot Light, White
#171-70-1 Thermostat Cover, Waterproof
#171-71 Thermostat
#171-71-1 Thermostat Spacer Plate
#171-71-2 Sleeve and Nut for Thermostat
#171-75 Receiver Body, Polished Chrome
#171-76 Female Coupling for Top Valve
#171-77 Coupling Ring for Top Valve
#171-78 Screw for Cell
#171-79 Hex Wrench, ¼"
#171-80 Needle Valve with Modified Handle, Male, ¼"
#171-82 Power Cord with Male Plug, 16/3 SJ, Round, 8'

Optional:

#143-07	Repair Kit for CONCOA Regulator
#171-50-4-SP	Spare Parts for One Year for #171-50-4

#171-50-4 Model MB 4-Unit HTHP Filter Press

Did you know?

We want to make ordering easy for you! You can email us at sales@ofite.com, call us at 1-877-TEST-MUD (1-877-837-8683) or 713-880-9885, fax us at 713-880-9886, or shop online at www.ofite.com.

DYNAMIC HTHP FILTER PRESS
#170-50 115-VOLT
#170-50-1 230-VOLT

The OFITE Dynamic High-Temperature High-Pressure (HTHP) filter press measures filtration properties under varying dynamic downhole conditions. A motor-driven shaft fitted with propellers turns at varying speeds inside a standard 500 mL HTHP cell. RPM settings from 1 to 1600 RPM impart laminar or turbulent flow to the fluid inside the cell. By varying the shaft length, the shear stress may be increased or decreased. Power is driven to the stirring shaft by a timing belt that is easily accessible for quick adjustment and removal. Other features include a variable-speed motor controlled through an SCR controller. RPM is indicated on a digital tachometer. The test procedure is exactly the same as that in the standard HTHP filtration test. The only difference is the fluid circulates inside the cell while filtrate is being collected. Since the filter medium is conventional disk material, the results are comparable with those of other laboratories or for comparing historical trends.

Features Include:
- Variable-speed electric motor, ½ HP permanent magnet DC
- Auxiliary pipe connection for the cell top cap. Plug may be removed to add additional fluid additives.
- Safety-calibrated rupture disk guards against overpressure
- Motor and stirring shaft RPM operate at a one-to-one ratio
- Adjustable thermostat from 100° to 500°F
- Optional filter permeabilities available

Size: **12" × 15.5" × 36" (31 × 39 × 91 cm)**
Weight: **95 lb (43.1 kg)**

Crated Size: **31" × 21" × 40" (79 × 53 × 102 cm)**
Crated Weight: **184 lb (83.5 kg)**

#170-50 Dynamic HTHP Filter Press

Components:
#135-18 Set Screw Socket for Clamp
#153-12 Graduated Cylinder, 100 mL × 1 mL, Glass
#154-06 Thermometer, Traceable, Full-Scale: -58° - 500°F (-50° - 250°C)
#165-44 Thread Lubricant, High-Temperature, 1 oz
#170-50-033 Base
#170-78 Retaining Ring Pliers, Internal
#170-79 Retaining Ring Pliers, External
#170-80 Mini-Jet Pump, 115-Volt 60 Hz, 79-153 GPH
#170-81 Hex Adapter for Pump
#170-82 Quick Connect, Male
#170-83 Quick Connect, Female
#170-84 Tubing, ⅛", Polyurethane
#170-85 T-Clip for Hoses
#170-86 Grease Fitting, NPT Straight, ⅛"
#291-06 Cylinder, 1 Liter, Acrylic

Cell Assembly Components:
#170-13-2 O-ring for Cell, Buna 90
#170-16 Valve Stem for Cell
#170-17 O-ring for Valve Stem, Viton®
#170-19 Filter Paper, 2½", Package of 100
#170-23 Screen, 60-Mesh
#170-26 Cap Locking Screw, Stainless Steel
#170-27 Allen Wrench for Cap Locking Screw, 5/32"
#170-35 Adjustable Wrench, 6"
#170-53 Ceramic Filter, 10 Darcy, 35 µm, 2.5" × ¼"
#170-67 Propeller, 1½"
#170-68 Propeller, 2"
#170-69 Cell Cap, Scribed for Ceramic Disks, 2,500 PSI, 316 Stainless Steel
#170-71 Pipe Plug, ⅛" NPT, 316 Stainless Steel
#170-77 O-ring for Stainless Steel Spacer
#171-02 Cell Body for Ceramic Disks, Double-End, 10", 500 mL, 316 Stainless Steel
#171-21 Cell Cap with 60-Mesh Screen, 2,000 PSI, 316 Stainless Steel

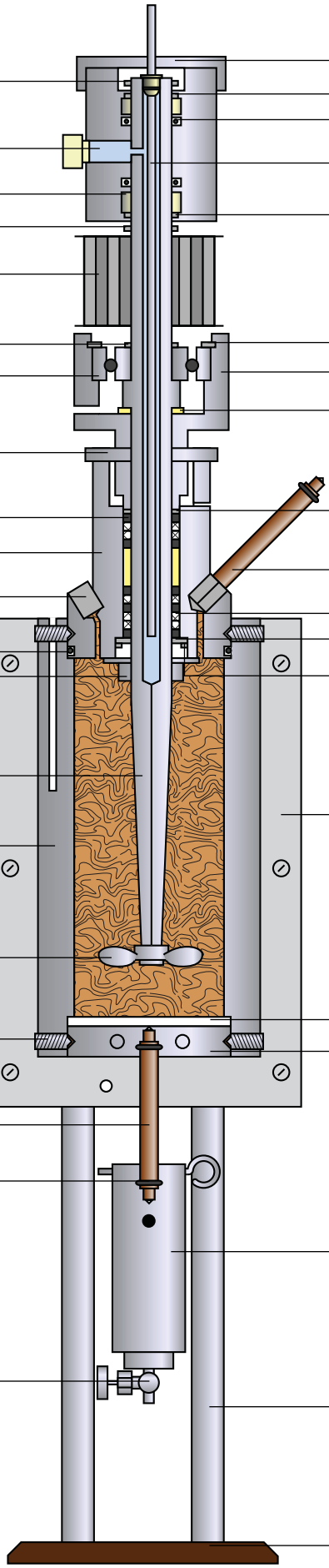
Drive Assembly Components:
#140-60-01 O-ring for Water Swivel Feed Tube
#170-50-01 Splash Guard
#170-54 Packing Ring, ⅝" × ⅛", Carbon
#170-54-1 Packing Ring, ⅝" × ⅛", Teflon®
#170-56 Retainer Ring for Water Swivel, External, ⅝"
#170-57 Retainer Ring for Lower Seal Ring, Internal, 1⅛"
#170-61-1 Thrust Bearing and Spacer, 1/16", Bronze
#170-63 ⅝", Drive Belt
#170-64 O-ring for Water Swivel
#170-66 Adapter, ⅛" Tube × ⅛" Female Elbow
#170-74 Retainer Ring for Bearing Housing, Internal
#170-75 Ball Bearing for Bearing Housing

Heating Jacket, Motor, and Stand Components:
#170-10 Pilot Light for Thermostat
#170-11 Heating Element, 115-Volt, 200-Watt
#171-07 Heat Jacket
#171-09 Leg
#171-32 Midget Knob
#171-36 Thermostat Cover
#171-44 Rubber Foot, ¾"
#171-71 Thermostat
#171-87 Location Pin
#171-94 Cell Rest Plunger Assembly
#174-23 Terminal Strip, 10 Place

Pressurization Assembly Components:
#171-10 Back Pressure Receiver, 100 mL
#171-24 Dual Nitrogen Manifold, 1,350 and 750 PSI

Optional:
#143-07 CONCOA/AIRCO Repair Kit
#170-50-SP Spare Parts for One Year for #170-50
#170-52 Carrying Case
#170-58 Shaft Extension, ½"
#170-59 Shaft Extension, 1"
#170-60 Shaft Extension, 1½"
#170-73 Cell Cap, Extra Long for Filter Paper, 316 Stainless Steel, 2,500 PSI

#170-50 - Dynamic HTHP Filter Press



External Retaining Ring (#170-56)
Water Feed (#170-50-008)
Bronze Bearing(#170-50-005)
External Retaining Ring (#170-56)
Timing Belt Pulley (#170-50-028)
External Retaining Ring (#170-56)
Bearing (170-75)
#9 Lock Nut (#170-50-003)
Carbon Packing Ring (#170-54)
Packing Gland (#170-50-020)
Pipe Plug (#170-71)
O-ring (#170-13-2)
Splash Guard (#170-50-01)
Mixer Shaft (#170-50-025)
10" Cell Body (#171-02)
Propeller (#170-67 / #170-68)
Cap Locking Screw (#170-26)
Valve Stem (#170-16)
Valve Stem O-ring (#170-17)
Needle Valve (#170-32)

Water Feed Cap (#170-50-007)
Aluminum Washer (#170-61)
O-ring (#170-64)
Water Feed Swivel (#170-50-006)
Aluminum Washer (#170-61)
Internal Retaining Ring (#170-74)
Bearing Housing (#170-50-004)
Bronze Spacer (#170-61-1)
Aluminum Washer (#170-61)
Valve Stem O-ring (#170-17)
Teflon® Packing Ring (#170-54-1)
Retaining Washer(#170-57-1)
Internal Retaining Ring (#170-57)
Heat Jacket (#171-07)
Ceramic Filter (#170-53)
End Cap (#170-69)
Back Pressure Receiver (#171-10)
Leg (#171-09)
Base (#170-50-033)

PERMEABILITY PLUGGING TESTER, 4,000 PSI

#171-90 2000 PSI, 115-VOLT
#171-90-01 2000 PSI, 230-VOLT
#171-84 4000 PSI, 115-VOLT
#171-84-01 4000 PSI, 230-VOLT

The Permeability Plugging Tester (PPT), is a modification of the 500 mL HTHP Filter Press. The instrument is used for running filtration tests on plugging materials without the interference of particles settling on the filter medium. Typical differential pressures are much higher than those seen in standard HTHP filtration testing. The pressure cell is the same as that used on the HTHP Filter Press, but it is inverted with the filter and receiver on top. Several filter media may be used, such as ¼" thick fused aluminum oxide disks, conventional filter paper, or sintered metal filters. The cell is pressurized with hydraulic oil (#171-96-1). A floating piston separates the oil from the test fluid within the pressurized cell. The conventional cell may be operated to 2,000 PSI by using hardened steel set screws to secure the end caps. For elevated pressures, OFITE has designed a special cell with a working pressure of up to 4,000 PSI, pressurized with the conventional hydraulic pump.

Common Components:

#153-14 Graduated Cylinder, 50 mL × 1 mL, Glass
#154-20 Thermometer with Metal Dial, 8" Stem, Dual-Scale: 50° - 500°F (0° - 250°C)
#170-04 CO_2 Pressuring Assembly
#170-13-2 O-ring for Test Cell, Buna N
#170-17 O-ring for Valve Stem
#170-19 Filter Paper, Specially Hardened for Filter Presses, 2½" (6.35 cm) Diameter, Box of 100
#170-53 Filter Disk, 10 Darcies, 35 µm, 2.5" × 0.25", Ceramic
#170-72 Spacer for Filter Paper, ¼", 316 Stainless Steel
#170-77 O-ring for Spacer
#171-00 Heating Jacket, 800-Watt (115-Volt Only)
#171-01 Heating Jacket, 800-Watt (230-Volt Only)
For sub-components, refer to page 36.
#171-10 Back Pressure Receiver, 100 mL
#171-22 Retainer Pin
#171-26 Hose, 5000#, 3/16" × 3'
#171-84-02 Reducing Bushing, ⅜" MNPT × ⅛" FNPT, 316 Stainless Steel
#171-90-02 Quick Coupler, Female, ¼" NPT
#171-90-03 Quick Coupler, Male, ¼" NPT,
#171-90-04 Cross, ¼" NPT, 316 Stainless Steel
#171-90-06 Reducing Bushing, ¼" MNPT × ⅛" FNPT, 316 Stainless Steel
#171-90-07 Hex Nipple, ¼" NPT, 316 Stainless Steel
#171-90-08 Valve Stem, Hydraulic Entry
#171-90-09 Valve Stem, Filtrate Outlet
#171-90-10 Valve Stem, Receiver Entry
#171-90-11 Elbow, Female, ⅛" NPT, 316 Stainless Steel
#171-90-12 Elbow, Male, ¼" NPT, 316 Stainless Steel
#171-90-13 Adapter, ¼" Flare × ¼" Male NPT, Chrome
#171-90-14 Hose Barb, ⅛" NPT × ¼"
#171-90-15 Adjustable Crescent Wrench, 6"
#171-96 Handpump, Single-Speed
#171-96-1 Hydraulic Oil, 32 oz
#171-97 Valve for Cell Outlet, ⅛"
#171-98 Ball Valve for Inlet Pressure, ¼"

#171-90 2000 PSI Permeability Plugging Tester, 115-Volt
#171-90-01 2000 PSI Permeability Plugging Tester, 230-Volt

#170-16 Valve Stem, 3.25" (8.3 cm)
#170-26-1 Hardened Locking Screw
#170-27 Allen Wrench, 5/32"
#170-69 End Cap for Ceramic Disks, Scribed, 2500 PSI, 316 Stainless Steel
#171-02 Cell Body, Double-End, 10", 500 mL, 316 Stainless Steel
#171-21 Cell Cap with 60 µm Screen, 2000 PSI, 316 Stainless Steel
#171-42 Gauge, 3000 PSI, 2½" Face, ¼" Bottom Connection
#171-92 Relief Valve, 2200 PSI (15.2 MPa)
#171-93 Piston
#171-95 T-handle for Piston
#171-99 O-ring for Piston

#171-84 4000 PSI Permeability Plugging Tester, 115-Volt
#171-84-01 4000 PSI Permeability Plugging Tester, 230-Volt

#153-55 Stopcock Grease, 150 g Tube, Silicone
#171-41 Gauge, 5000 PSI, 2½" Face, ¼" Bottom Connection
#171-84-03 Strap Wrench
#171-85 Double-End Cell Assembly with Floating Piston, 500 mL, 4000 PSI, 10"
For sub-components, see page 55.
#171-87 Location Pin
#171-92-1 Relief Valve, 4000 PSI (27.6 MPa)

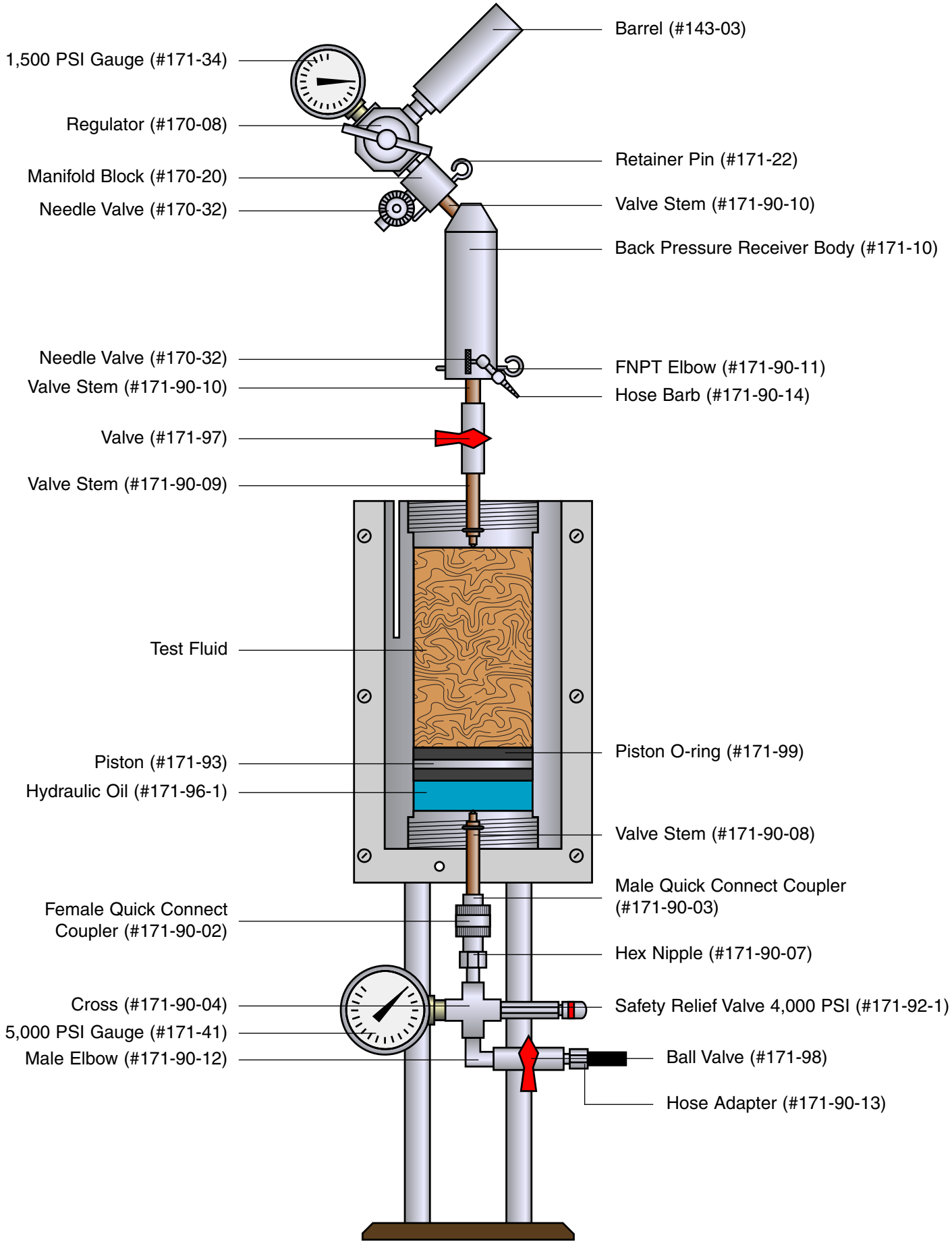
Note: Full Range of Ceramic Disks available-see page 59. CO_2 bulbs must be ordered separately.

Optional:
#143-05 *CO_2 Bulbs, Package of 10 **UN1013**
#171-84-SP Spare Parts for One Year for #171-84

#171-90 Permeability Plugging Tester

*May require special handling for shipping.

#171-84 / 171-84-01 Permeability Plugging Tester, 4,000 PSI



AUTOMATIC PRESSURE CONTROL SYSTEM FOR PPT
#171-89

The OFITE Pressure Control System can provide and maintain a constant pressure on up to four Permeability Plugging Testers. It consists of two air-driven pumps and four hydraulic, self-venting regulators. Replacing the manual hand pump, the air-driven pump automatically engages when you start the test and maintains a constant pressure for the duration.

#171-89 Automatic Pressure Control System for PPT

CO_2 PRESSURE ASSEMBLY
#170-04

Components:

#143-02-10	CO_2 Puncture Head Assembly
#143-03	Barrel for CO_2 Bulb
#170-08	Regulator, High-Pressure, CONCOA/AIRCO
#170-20	Manifold Block
#170-32	Needle Valve, Male, ⅛" × ⅛" NPT
#171-22	Retainer Pin
#171-34	Gauge, 1,500 PSI, 2" face, ¼" NPT

#170-04 CO_2 Pressuring Assembly

HIGH-PRESSURE REGULATOR ASSEMBLY FOR MODEL MB FILTER PRESSES
#171-57

Components:

#142-58	O-ring for Cell Coupling
#143-02-10	CO_2 Puncture Head Assembly
#143-03	Barrel for CO_2 Bulb
#144-15	Bushing for Gauges, ¼" NPT to ⅛" NPT
#170-34	Needle Valve, Male, ¼" × ¼" NPT
#171-53	Regulator, High-Pressure, Victor
#171-73-1	Gauge, 1,000 PSI, ⅛" Bottom Connection, 2" Face
#171-74-1	Gauge, 2,000 PSI, ⅛" Bottom Connection, 2" Face
#171-76	Coupling for Top Valve, Female
#171-77	Coupling Ring for Top Valve

#171-57 Regulator Assembly

Did you know?

OFITE offers the most competitive labor rates in the industry!

BACK PRESSURE RECEIVER FOR CO_2, 15 ML, STAINLESS STEEL TUBE #170-06

Components:

#143-00	Regulator, CONCOA/AIRCO
#143-01	Gauge, 200 PSI, ⅛" Bottom Connection
#143-02-10	CO_2 Puncture Head Assembly
#143-03	Barrel for CO_2 Bulb
#143-06	Safety Bleeder Valve, ¼" NPT
#144-11	Street Ell, ⅛"
#170-07	O-ring for Receiver
#170-28	Receiver Body, 15 mL, Stainless Steel
#170-32	Needle Valve, Male, ⅛" × ⅛" NPT
#171-22	Retainer Pin

#170-06 Back Pressure Receiver

BACK PRESSURE RECEIVER FOR N_2, 15 ML, STAINLESS STEEL TUBE #170-06-1

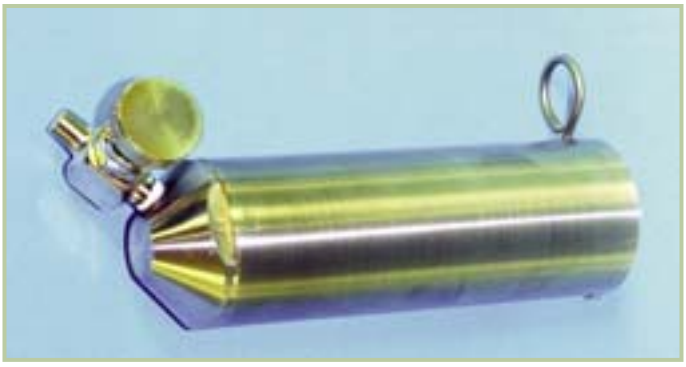
Components:

#144-11	Street Ell, ⅛"
#144-15	Bushing, ¼" NPT Male to ⅛" NPT Female, Plated Brass
#170-07	O-ring
#170-28	Receiver Body
#170-32	Needle Valve, Male, ⅛" × ⅛" NPT
#171-22	Retainer Pin

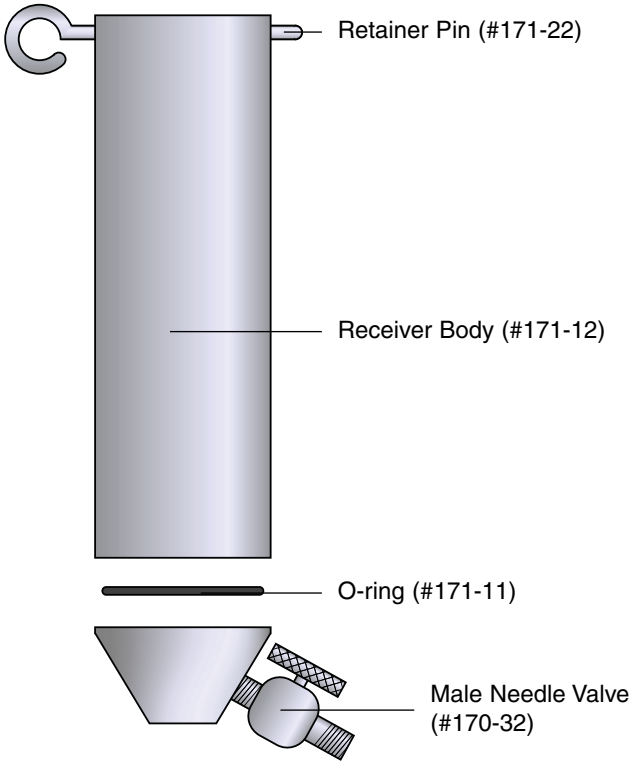
BACK PRESSURE RECEIVER, 100 ML #171-10

Components:

#170-32	Needle Valve, Male, ⅛" × ⅛" NPT
#171-11	O-ring for Receiver Body
#171-12	Receiver Body
#171-22	Retainer Pin



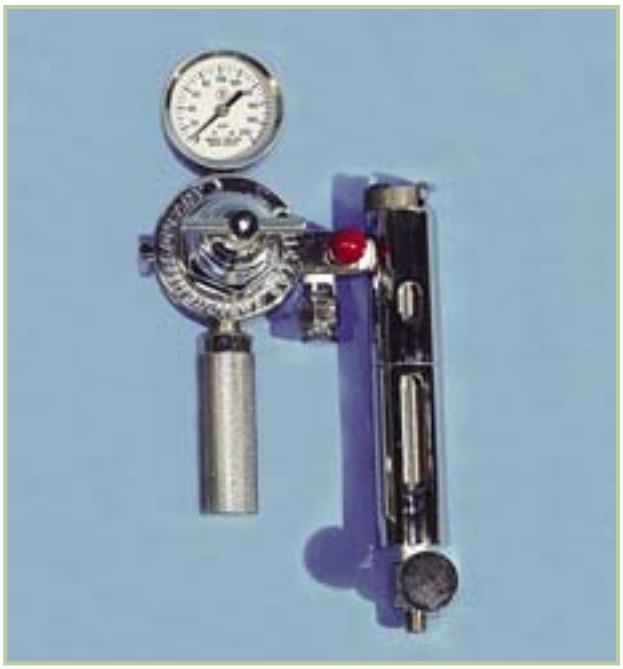
#171-10 Back Pressure Receiver, 100 mL



BACK PRESSURE RECEIVER FOR MODEL MB FILTER PRESSES
#171-58

Components:

#142-37	Regulator, Victor
#142-58	O-ring for Cell Coupling
#142-61	Gauge, 200 PSI, ¼" Bottom, 2" Face
#143-02-10	CO_2 Puncture Head Assembly
#143-03	Barrel for CO_2 Cartridge
#143-06	Safety Bleeder Valve, ¼" NPT
#143-09	Relief Valve, 200 PSI (1,379 kPa), ¼" NPT
#170-07	O-ring for Receiver
#170-32	Needle Valve, Male, Outlet, ⅛" × ⅛" NPT
#171-66	Receiver Tube, Stainless Steel
#171-75	Receiver Body



#171-58 Back Pressure Receiver

HIGH-PRESSURE NITROGEN PRESSURING ASSEMBLY WITH TANK
#171-31

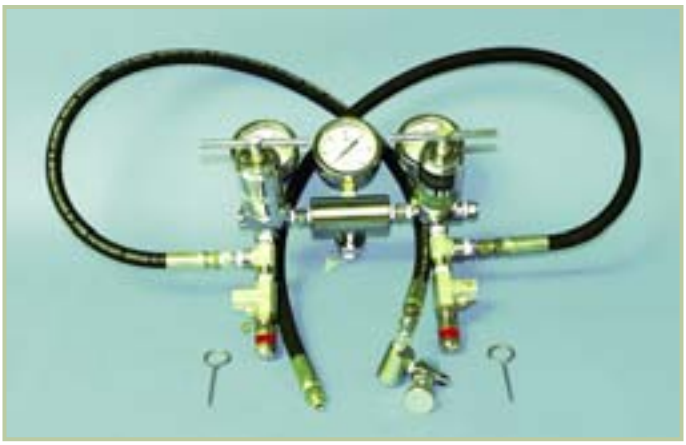
Components:

#143-06	Safety Bleeder Valve
#144-17	Adapter, ¼" FNPT × ¼" MNPT, 316 Stainless Steel
#170-20	Manifold Block
#170-32	Needle Valve, Male, ⅛" × ⅛" NPT
#170-37	Nitrogen Cylinder, Right-Hand Thread, 21" × 7"
#171-22	Retainer Pin
#171-24-1	Nut for Inlet, Right-Hand Thread, CGA-580, Chrome
#171-24-2	Nipple with Filter for Regulator Inlet
#171-24-3	Union Elbow, Female, ¼" Flare × ⅛" FNPT, Chrome Plated
#171-26-1	Hose, 5000#, 3⁄16" × 2'
#171-38	Gauge, 1000 PSI, 2½", ¼" NPT Bottom
#171-42	Gauge, 3000 PSI, 2½", ¼" NPT Bottom
#171-53	Regulator, High-Pressure, Victor,
#171-90-06	Reducing Bushing, ¼" MNPT × ⅛" FNPT, 316 Stainless Steel

DUAL NITROGEN MANIFOLD, 1,350 PSI AND 750 PSI
#171-24

Components:

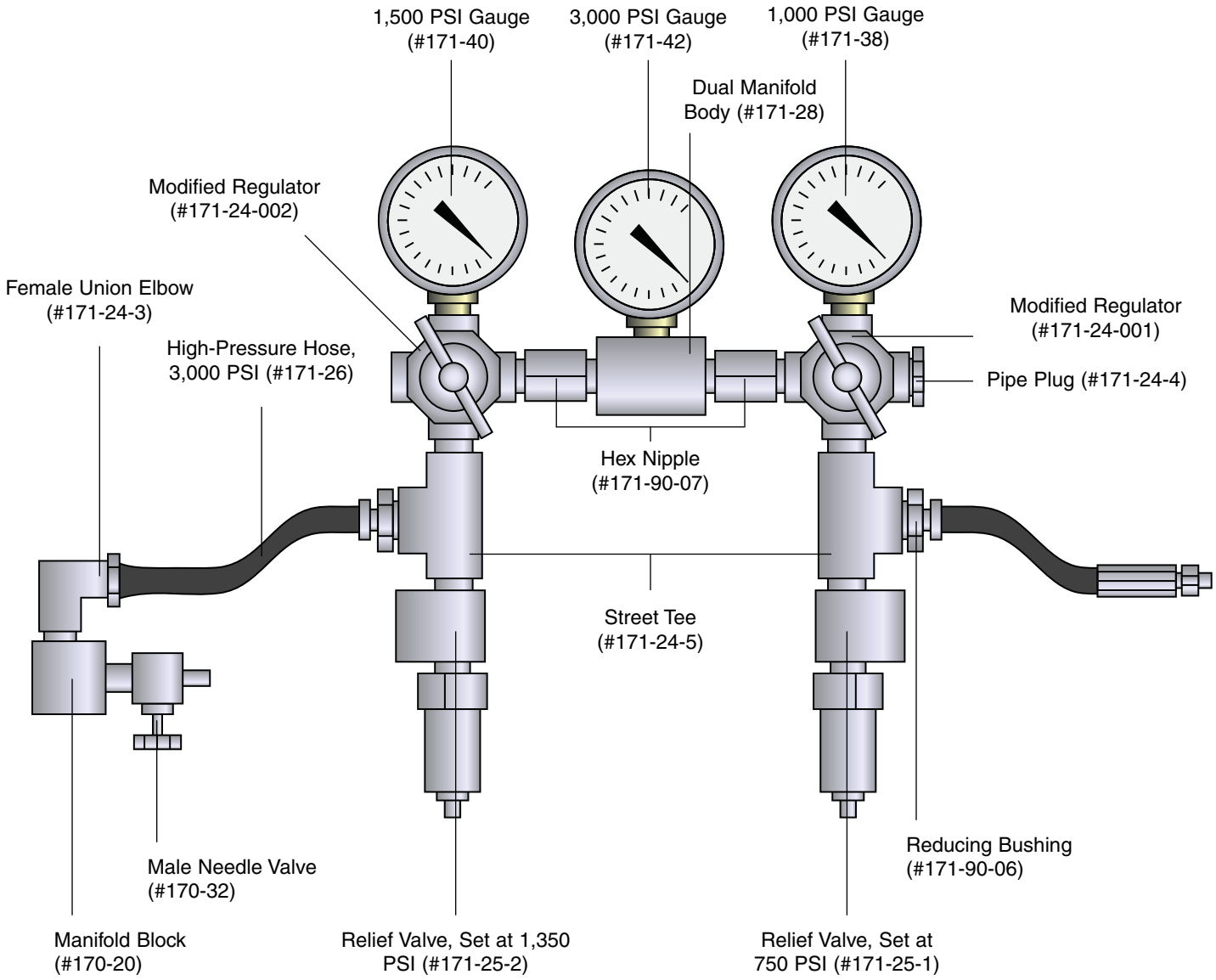
#170-20	Manifold Block
#170-32	Needle Valve, Male, ⅛" × ⅛" NPT
#171-22	Retainer Pin
#171-24-001	Modified Regulator, Low-Pressure Side
#171-24-002	Modified Regulator, High-Pressure Side
#171-24-1	Nut, L.H., Regulator Inlet CGA-580
#171-24-2	Nipple with Filter for Regulator Inlet 15-3SF
#171-24-3	Union Elbow, Female, ¼" Flare × ⅛" FNPT
#171-24-4	Pipe Plug, ¼" NPT, 316 Stainless Steel
#171-24-5	Street Tee, ¼" NPT, 316 Stainless Steel
#171-25-1	Relief Valve, 750 PSI (5,171 kPa)
#171-25-2	Relief Valve, 1,350 PSI (9,308 kPa)
#171-26	Hose, 3,000 PSI, 3⁄16" × 3'
#171-28	Dual Manifold Body
#171-38	Gauge, 1,000 PSI, 2½" Face, ¼" Bottom Connection
#171-40	Gauge, 1,500 PSI, 2½" Face, ¼" Bottom Connection
#171-42	Gauge, 3,000 PSI, 2½" Face, ¼" Bottom Connection
#171-90-06	Reducing Bushing, 316 Stainless Steel
#171-90-07	Hex Nipple, ¼" NPT, 316 Stainless Steel
#171-90-13	Adapter, ¼" Flare × ¼" Male NPT



#171-24 Dual Nitrogen Manifold

#171-31 High-Pressure Nitrogen Assembly

#171-24 Dual Nitrogen Manifold, 1,350 and 750 PSI



Regulators are designed to control and reduce high gas pressure from a cylinder, in one or two stages, to the working pressure of the equipment using it. As with all high-pressure equipment, regulators are intended to be used only in accordance with the instructions provided. The equipment must be checked periodically and any defective parts that are broken, missing, worn, distorted, or contaminated must be replaced immediately. The regulator should never be subjected to an inlet pressure greater than its rated inlet pressure as shown on the regulator body. These regulators are not intended to be used with oxygen gas, as any oil-bearing materials or other combustibles may ignite readily in the presence of oxygen. A regulator that has loose or damaged parts or is in questionable condition should never be pressurized. Never loosen a connection or attempt to remove a part until gas pressure has been completely removed. Under pressure, gas can dangerously propel a loose part. A regulator relief valve, if present, is designed to protect the regulator only, and nothing else. Always ensure that any equipment connected to the regulator outlet is provided with separate relief devices to protect downstream equipment against any possible overpressure. After installation, periodically check the regulator and all connections for leaks by brushing on an approved leak detection solution. Bubbles indicate leakage.

No repair should ever be undertaken by anyone other than a qualified technician. Below is a listing of symptoms that indicate regulator malfunctions requiring repair:

1. Gas leakage at the regulator outlet when the adjusting screw is completely released.
2. With no flow through the system (all valves closed and the adjusting screw in), the working pressure increases steadily above the set pressure.
3. Gas leakage from spring case near the adjusting screw.
4. Gas leakage from any joint or relief valve.
5. Excessive drop in working pressure with regulator flow open.
6. Gauge(s) will not return to zero or gives inconsistent repeat readings.

With proper use and regular maintenance, these regulators should provide years of safe and dependable usage.

LOW-PRESSURE CONCOA/AIRCO REGULATOR (805-1179), ¼" NPT, ⅛" GAUGE #143-00

#143-00 Low-Pressure CONCOA Regulator

HIGH-PRESSURE CONCOA/AIRCO REGULATOR (805-1140), ¼" NPT, ⅛" GAUGE #170-08

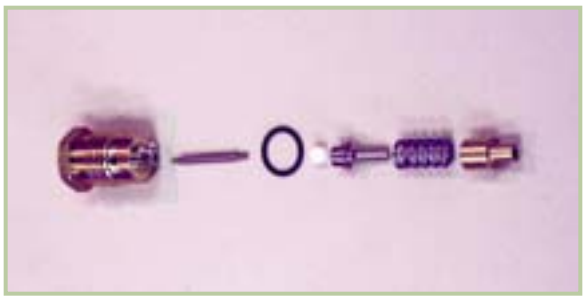
Components (both low and high-pressure regulators):

#143-00-1	Diaphragm (830-0342)
#143-00-2	Adjusting Screw for 143-00 Regulator (830-1197)
#143-00-3	Spring Button
#143-00-4	Diaphragm Plate (830-0340)
#143-00-5	Slip Ring (830-0341)
#143-00-6	Ball, ¼", Stainless Steel
#143-00-7	Thrust Plate (830-0344)
#143-00-8	Teflon® Seat (830-3904)
#143-00-9	O-ring for Seat Assembly (830-2627)
#143-00-10	Screen (830-4052)
#143-00-11	Glasswool Filter (830-4060)
#143-00-12	Spring
#170-08-1	Adjusting Screw for 170-08 Regulator

#170-08 High-Pressure CONCOA Regulator

CONCOA/AIRCO REGULATOR REPAIR KIT #143-07

For #143-00 and 170-08 regulators.

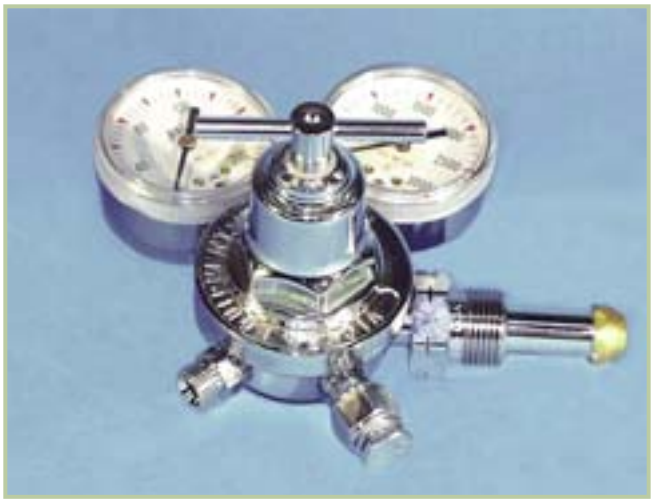


#143-07 CONCOA Repair Kit

MODEL 1225 LOW-PRESSURE VICTOR REGULATOR, 3,000 PSI (0799-1225), ¼" NPT FITTINGS
#142-37

#142-37 Victor Regulator

NITROGEN REGULATOR, VICTOR, 200 AND 3,000 PSI GAUGES, N_2 FITTING (0799-1220), ¼" NPT FITTINGS
#170-36



#170-36 Nitrogen Regulator

MODEL 7-0106 HIGH-PRESSURE VICTOR REGULATOR, 6,000 PSI (0797-0106), ¼" NPT FITTINGS
#171-53

#171-53 Victor Regulator

Components (both low and high-pressure regulators):

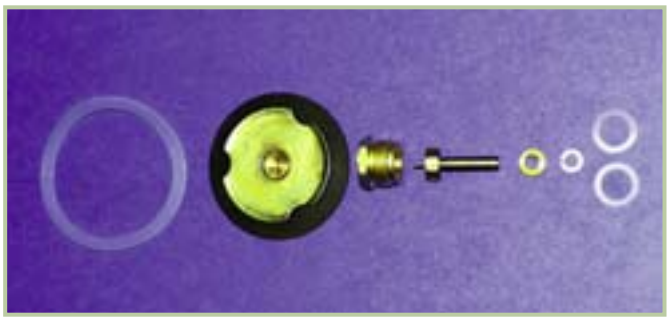
#142-38	Nozzle (0702-0005)
#142-39	Pipe Plug (0704-0009)
#142-40	Spring Button (0706-0015)
#142-41	Gland (0708-0003)
#142-42	Diaphragm (0731-0015)
#142-44	T-Screw (0750-0016)
#142-45	Adjusting Spring (0761-0025)
#142-46	Valve Spring (0762-0003)
#142-47	Seat Assembly (0740-0010)
#142-48	Diaphragm Assembly (0730-0024)
#142-49	Slip Ring (0705-0004)

Did you know?

We want to make ordering easy for you! You can email us at sales@ofite.com, call us at 1-877-TEST-MUD (1-877-837-8683) or 713-880-9885, fax us at 713-880-9886, or shop online at www.ofite.com.

VICTOR REGULATOR REPAIR KIT #143-19

For low-pressure regulators and Half-Area FIlter Press.



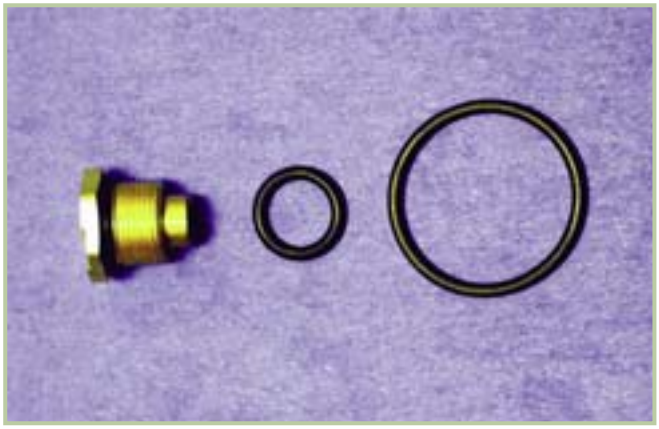
#143-19 Victor Repair Kit for Low-Pressure Regulators and Half Area-Filter Press

Components:

#140-60-09	Gasket (1408-0086)
#140-60-10	Friction Washer (1408-0033)
#142-38	Nozzle (0702-0005)
#142-41	Gland (0708-0003)
#142-47	Seat Assembly (0740-0010)
#142-48	Diaphragm Assembly (0730-0024)
#142-49	Slip Ring (0705-0004)

VICTOR REGULATOR REPAIR KIT #143-20

For High-Pressure Regulator, #171-53.



#143-20 Victor Repair Kit for High-Pressure Regulator

Components:

#143-20-1	Cartridge Assembly
#143-20-2	O-ring (Large)
#140-71	O-ring (Small)

PALM-SIZED DUAL N_2 REGULATOR WITH STAINLESS STEEL BRAIDED HOSES #170-41

The Palm-Sized Dual N_2 Regulator weighs only 2.4 pounds (1.09 kg) and is no bigger than a 175 mL HTHP Cell! The regulator can be used on small cylinder applications (refer to picture below) for field use or larger cylinders used in laboratory applications. Stainless steel braided hose with quick connect fittings allow the user greater flexibility and distance from N_2 source.

#170-41 Palm-Sized Dual N_2 Regulator with Stainless Steel Braided Hoses and Quick Disconnect Fittings

Did you know?

Because OFITE is an independent manufacturer, you never have to worry about how your orders are prioritized. When we receive your order, we move fast.

HTHP SINGLE-END CELL ASSEMBLY FOR CEMENT TESTING, 500 ML, 10" (25.4 CM), 316 STAINLESS STEEL, 2,000 PSI #171-18

Size: 12" × 10" × 5" (31 × 25 × 13 cm)
Weight: 16 lb 8 oz (7.5 kg)

Components:

#170-13	O-ring for Cell, Buna N
#170-16	Valve Stem
#170-17	O-ring for Valve Stem, Viton®
#170-18	Screen, 325-Mesh with 60-Mesh Backup, Detachable
#170-24	End Cap with Removable Screens, 2,000 PSI
#170-26	Cap Locking Screw, Stainless Steel
#170-27	Allen Wrench for Cap Locking Screw, 5/32"
#171-17	Cell Body, 10", 500 mL

HTHP SINGLE-END CELL ASSEMBLY FOR FILTER PAPER, 500 ML, 10" (25.4 CM), 303 STAINLESS STEEL, 2,000 PSI #171-20

Size: 12" × 10" × 5" (31 × 25 × 13 cm)
Weight: 16 lb 8 oz (7.5 kg)

Components:

#170-13	O-ring for Cell, Buna N
#170-16	Valve Stem
#170-17	O-ring for Valve Stem, Viton®
#170-26	Cap Locking Screw, Stainless Steel
#170-27	Allen Wrench for Cap Locking Screw, 5/32"
#171-17	Cell Body, 10", 500 mL
#171-21	Cell Cap with 60-Mesh Screen, 2,000 PSI

#171-20 Single-End Cell Assembly, 500 mL

HTHP DOUBLE-END CELL ASSEMBLY FOR CERAMIC DISKS, 500 ML, 10" (25.4 CM), 316 STAINLESS STEEL, 2,000 PSI #171-29

Size: 12" × 10" × 5" (31 × 25 × 13 cm)
Weight: 16 lb 8 oz (7.5 kg)

Components:

#170-13	O-ring for Cell, Buna N
#170-16	Valve Stem
#170-17	O-ring for Valve Stem, Viton®
#170-26	Cap Locking Screw, Stainless Steel
#170-27	Allen Wrench for Cap Locking Screw, 5/32"
#170-69	Scribed Cell Cap for Ceramic Disk
#170-72	Spacer for Filter Paper, 1/4", Stainless Steel
#170-77	O-ring for Stainless Steel Spacer
#171-02	Cell Body for Ceramic Disks, Double-End, 2,000 PSI, 500 mL
#171-21	Cell Cap with 60-Mesh Screen, Inlet, 2,000 PSI

#171-29 Cell Assembly for Ceramic Disks, 500 mL

HTHP DOUBLE-END CELL ASSEMBLY FOR CEMENT TESTING, 500 ML, 10" (25.4 CM), 303 STAINLESS STEEL, 2,000 PSI #171-19

Size: 12" × 10" × 5" (31 × 25 × 13 cm)
Weight: 16 lb 8 oz (7.5 kg)

Components:

#170-13	O-ring for Cell, Buna N
#170-16	Valve Stem
#170-17	O-ring for Valve Stem, Viton®
#170-18	Screen, 325-Mesh with 60-Mesh Backup, Detachable
#170-24	End Cap for Detachable Screen, 2,000 PSI
#170-26	Cap Locking Screw, Stainless Steel
#170-27	Allen Wrench for Cap Locking Screw, 5/32"

#171-19 Double-End Cell Assembly, 500 mL

HTHP PPT DOUBLE-END CELL ASSEMBLY FOR CERAMIC DISKS, 500 ML, 11" (28 CM), 4,000 PSI #171-85

Size: 10.25" × 10.25" × 5.5" (26 × 26 × 14 cm)
Weight: 22 lb 4 oz (10 kg)

Components:

#170-13-2	O-ring for Cell, Buna 90
#170-16	Valve Stem, 3.25" (8.3 cm)
#170-17	O-ring for Valve Stem, Viton®
#170-23	Screen for Cell Cap, 60-Mesh
#170-72	Spacer for Filter Paper, ¼", 316 Stainless Steel
#171-85-002	Inlet Cap
#171-85-003	Piston
#171-85-004	T-screw Handle
#171-85-05	Spanner Wrench
#171-86-1	Cell Body
#171-88-1	Cell Cap, Scribed
#171-88-2	Cell Cap with Screen
#171-90-08	Valve Stem for Hydraulic Entry
#171-99	O-ring for Piston

#171-85 PPT Cell Assembly, 4,000 PSI

MODEL MB HTHP CELL ASSEMBLY #171-56

Size: 4" × 4" × 11" (10 × 10 × 28 cm)
Weight: 11 lb 3 oz (5.1 kg)

Components:

#171-52	O-ring for Cell Lid, 2 5/16" × 2½" × 3/32"
#171-60	Cell Body
#171-62	Lid with Screen for Cell
#171-64	Coupling, Male
#171-78	Screw for Cell
#171-80	Needle Valve with Modified Handle, Male, ¼"

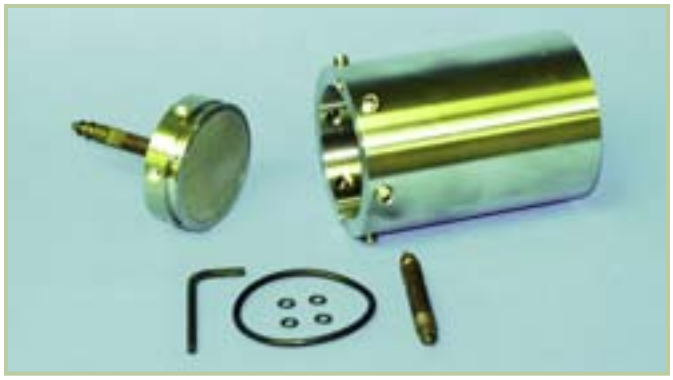
#171-56 HTHP Model MB Cell Assembly

HTHP SINGLE-END CELL ASSEMBLY, 175 ML, 1,500 PSI #170-12-1

Size: 4.5" × 4" × 3.25" (11 × 10 × 8 cm)
Weight: 7 lb 11 oz (3.5 kg)

Components:

#170-12	Cell Body, 1,500 PSI, 316 Stainless Steel
#170-13	O-ring for Cell, Buna N
#170-14	Cell Cap with Screen, 1,500 PSI
#170-16	Valve Stem
#170-17	O-ring for Valve Stem, Viton®
#170-26	Cap Locking Screw, Stainless Steel
#170-27	Allen Wrench for Cap Locking Screw, 5/32"



#170-12-1 Single-End Cell Assembly, 175 mL

HTHP DOUBLE-END CELL ASSEMBLY FOR CEMENT TESTING, 175 ML, 316 STAINLESS STEEL, 2,000 PSI #170-45

Size: 8" × 5" × 4" (20 × 13 × 10 cm)
Weight: 8 lb (3.6 kg)

Components:

#170-13	O-ring for Cell, Buna N
#170-16	Valve Stem
#170-17	O-ring for Valve Stem, Viton®
#170-18	Screen, 325-Mesh with 60-Mesh Backup, Detachable
#170-24	End Cap for Detachable Screen, 2,000 PSI
#170-26	Cap Locking Screw, Stainless Steel
#170-27	Allen Wrench for Cap Locking Screw, 5/32"
#170-45-3	Cell Body, Double-End, 2,000 PSI

#170-45 Cell Assembly for Cement Testing, 175 mL

HTHP SINGLE-END CELL ASSEMBLY FOR CEMENT TESTING, 175 ML, 2,000 PSI #170-45-1

Size: 3.25" × 3.25" × 4.5" (8 × 8 × 11 cm)
Weight: 7 lb 14 oz (3.6 kg)

Components:

#170-13	O-ring for Cell, Buna N
#170-16	Valve Stem
#170-17	O-ring for Valve Stem, Viton®
#170-18	Screen, 325-Mesh with 60-Mesh Backup, Detachable
#170-24	End Cap for Detachable Screen, 2,000 PSI
#170-26	Cap Locking Screw, Stainless Steel
#170-27	Allen Wrench for Cap Locking Screw, 5/32"
#170-45-2	Cell Body, Single-End, 2,000 PSI, 316 Stainless Steel

#170-45-1 Cell Assembly for Cement Testing

HTHP SINGLE-END CELL ASSEMBLY FOR CERAMIC DISKS, 175 ML, 2,000 PSI #170-48

Size: 3.25" × 3.25" × 4.5" (8 × 8 × 11 cm)
Weight: 7 lb 14 oz (3.6 kg)

Components:

#170-13	O-ring for Cell, Buna N
#170-16	Valve Stem
#170-17	O-ring for Valve Stem, Viton®
#170-26-1	Hardened Cap Locking Screw
#170-27	Allen Wrench for Cap Locking Screw, 5/32"
#170-49	Cell Body, 175 mL
#170-69	Scribed Cell Cap for Ceramic Disk, 2,000 PSI

#170-48 Cell Assembly for Ceramic Disks, 175 mL

HTHP DOUBLE-END CELL ASSEMBLY FOR CERAMIC DISKS, 175 ML, 303 STAINLESS STEEL, 2,000 PSI #170-46

Size: 3.25" × 3.25" × 4.5" (8 × 8 × 11 cm)
Weight: 7 lb 14 oz (3.6 kg)

Components:

#170-13	O-ring for Cell, Buna N
#170-16	Valve Stem
#170-17	O-ring for Valve Stem, Viton®
#170-26-1	Hardened Cap Locking Screw
#170-27	Allen Wrench for Cap Locking Screw, 5/32"
#170-47	Cell Body for Ceramic Disk, 175 mL
#170-69	Cell Cap for Ceramic Disk, Scribed, 2,000 PSI
#170-72	Spacer for Filter Paper, ¼", Stainless Steel
#170-77	O-ring for Stainless Steel Spacer
#171-21	Cell Cap with Screen, 2,000 PSI

#170-46 Cell Assembly for Ceramic Disks, 175 mL

#171-45-1 **Thermocouple Assembly for 175 mL HTHP Filter Press**

#171-45-2 **Thermocouple Assembly for Model MB HTHP Press**

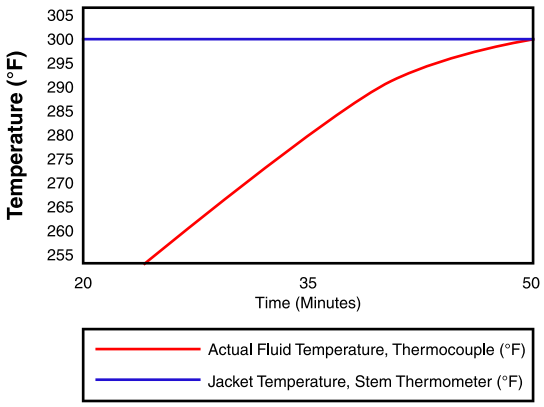
#171-45 **Thermocouple Assembly for 500 mL HTHP Filter Press**

In the past, temperature measurements for HTHP filtration testing have been monitored with a metal dial stem thermometer placed in the cell wall or the heating jacket. Therefore, the temperature of the metal was measured and not the temperature of the fluid inside the cell, which was rarely, if ever, at the proper test temperature when filtrate was collected. Due to the degradation of many fluid additives at certain temperatures, costly discrepancies frequently occurred between the laboratory results and actual downhole drilling conditions. One independent study indicated that variances in fluid temperature resulted in differences of filtrate volume by as much as 30%. More accurate and repeatable results may be obtained if the fluid temperature is monitored inside the cell rather than measuring the temperature of the insulating cell wall only.

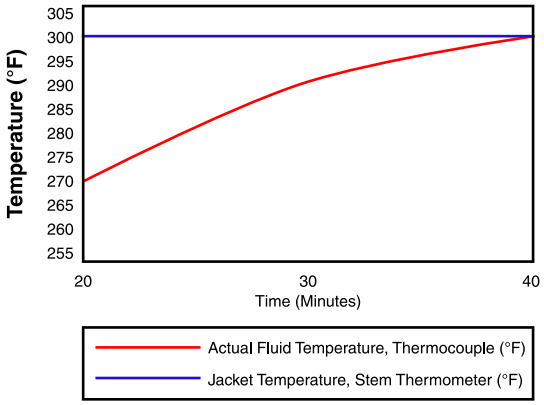
The OFITE thermocouple assembly represents a significant improvement in high-temperature filtration testing. With an accuracy of 2 degrees variance, the operator no longer has to guess at what the fluid temperature is inside the cell or how long to heat the cell before initiating the test. The LED is easily read and the assembly quickly retrofits to all existing models of HTHP cells and requires no modifications to existing equipment. It operates on 115/230-Volts, 50/60 Hz.

#171-45-1 - Thermocouple Assembly for 175 mL HTHP Filter Press

Oil-Based Drilling Fluid, 11.2 lb./gal.



Oil-Based Drilling Fluid, 17.6 lb./gal.



CELL CAP REMOVAL TOOL #170-33

#170-33 Cell Cap Removal Tool

CARRYING TOOL FOR HTHP CELL #170-40

#170-40 Carrying Tool for HTHP Cell

ACCESSORIES AND CONSUMABLE PARTS FOR HTHP FILTER PRESSES

Complete Assemblies				
Part #	**Cell**	**Type**	**Pressure**	**Voltage**
170-00	170-12-1	-	CO_2, 1,500 PSI	115
170-00-2	170-45	-	N_2, 2,000 PSI	115
170-00-4	170-12-1	4-Unit	N_2, 1,500 PSI	115
170-01	170-12-1	-	CO_2, 1,500 PSI	230
170-01-2	17-045	-	N_2, 2,000 PSI	230
170-50	171-29*	Dynamic	N_2, 1,250 PSI	115
170-50-1	171-29*	Dynamic	N_2, 1,250 PSI	230
171-00-C	171-20	-	N_2, 2,000 PSI	115
171-01-C	171-20	-	N_2, 2,000 PSI	230
171-03	171-19	-	N_2, 2,000 PSI	115
171-04	171-19	-	N_2, 2,000 PSI	230
171-84	171-85	PPT	Hydraulic, 4,000 PSI	115
171-84-01	171-85	PPT	Hydraulic, 4,000 PSI	230
171-90	171-21	PPT	Hydraulic, 2,000 PSI	115
171-90-01	171-21	PPT	Hydraulic, 2,000 PSI	230
171-50	171-56	MB	CO_2, 1,500 PSI	115
171-51	171-56	MB	CO_2, 1,500 PSI	230

*Specially modified for Dynamic Filter Press.

Cell Assemblies				
Part #	**Capacity**	**Cap**	**Filter Media**	**Pressure**
170-12-1	175 mL	Single	Ceramic Disk	1,500 PSI
170-45	175 mL	Double	Cement	2,000 PSI
170-46	175 mL	Double	Ceramic Disk	2,000 PSI
171-56	250 mL	MB	Filter Paper	1,500 PSI
171-20	500 mL	Single	Ceramic Disk	2,000 PSI
171-19	500 mL	Double	Cement	2,000 PSI
171-29	500 mL	Double	Ceramic Disk	2,000 PSI
171-85	500 mL	Double	PPT	4,000 PSI

Cell Caps, 316 Stainless Steel		
Part #	**Type**	**Pressure**
170-14	with Screen	1,500 PSI
170-24	for Removable Screens	2,000 PSI
170-69	Scribed for Ceramic Disks	2,000 PSI
170-73	Screen for Filter Paper, 1⅛" Thick	2,000 PSI
171-21	with Screen	2,000 PSI
171-88-1	Scribed and Threaded	4,000 PSI
171-88-2	with Screen, Threaded	4,000 PSI
171-62	Lid for Model MB Cell	1,500 PSI
170-72	¼" Spacer, for Filter Paper	-

Heating Jackets and Stands		
Part #	**Capacity**	**Voltage**
170-00-1	175 mL	115
170-01-1	175 mL	230
171-00	500 mL	115
171-01	500 mL	230
171-55	250 mL (Model MB)	115
171-55-1	250 mL (Model MB)	230

Back Pressure Receivers:

#170-06 15 mL Stainless Steel Tube for CO_2
#171-10 100 mL
#171-58 MB Style

Cases:

#170-03 HTHP Filter Press, 175 mL
#170-52 Dynamic HTHP Filter Press
#171-81 Model MB HTHP Filter Press

Valves:

#143-06 Safety Bleeder Valve, ¼" NPT
#170-16 Valve Stem for HTHP Filter Presses, Male
#170-16-1 Valve Stem, 316 Stainless Steel
#170-32 Needle Valve, Male, ⅛" × ⅛" NPT
#170-34 Needle Valve, Male, ¼" × ¼" NPT
#171-25 Relief Valve for N_2 Manifold, 750 PSI or 1,200 PSI
#171-80 Needle Valve with Modified Handle for Model MB Filter Press, Male, ¼" × ¼" NPT
#171-90-08 Valve Stem for PPT Cell, Hydraulics Entry
#171-90-09 Valve Stem for PPT Cell, Filtrate Outlet
#171-90-10 Valve Stem for PPT, Receiver Entry
#171-92 Safety Relief Valve for PPT Inlet, 2,000 PSI
#171-92-1 Safety Relief Valve for PPT Inlet, 4,000 PSI
#171-97 Ball Valve for PPT Cell Outlet, ⅛" NPT
#171-98 Ball Valve for PPT Inlet Pressure Line, ¼" NPT
#175-16 Valve Stem for Aging Cells

#170-72 Spacer for Filter Paper, ¼"

Cell Bodies				
Part #	**Capacity**	**Cap**	**Filter Media**	**Pressure**
170-12	175 mL	Single	Ceramic Disk	1,500 PSI
170-47	175 mL	Double	Ceramic Disk	2,000 PSI
171-02	500 mL	Double	Ceramic Disk	2,000 PSI
171-60	250 mL	Model MB	Filter Paper	1,500 PSI

Cell Caps (Left to Right): #171-88-2, #171-88-1, #170-69, #170-73, #171-21, #171-14, #170-24, #170-72

MISCELLANEOUS PARTS (alphabetical order)

#170-33	Cell Cap Removal Tool
#170-19-1	Filter, Dynalloy®, 2½", Stainless Steel
#170-19	Filter Paper, 2½", Package of 100
#170-18	Screen, 325-Mesh with 60-Mesh Backup, Detachable
#170-44	Rubber Foot, ½"
#171-44	Rubber Foot, ¾"
#171-54	Thermal Fuse for Model MB Filter Press, 240°C
#171-65	Fuse Block
#171-34	Gauge, 1,500 PSI, 2" Face
#170-11	Heating Element for HTHP Filter Presses, 115-Volt
#171-26	Hose, 5000#, ⅛" Male, ¼" Female, 3/16" × 3'
#171-26-1	Hose, 5000#, ⅛" Male, ¼" Female, 3/16" × 2'
#171-27	Hose, 5000#, ⅛" Male, ¼" Female, 3/16" × 6'
#171-32	Knob, Midget
#171-67	Knob for Thermostat, Model MB Filter Press
#170-07	O-ring for 15 mL Back Pressure Receiver
#171-11	O-ring for 100 mL Back Pressure Receiver
#140-60-01	O-ring for Bleeder Valve
#170-13	O-ring for Cell, Buna N, 175/500 mL HTHP Press
#142-58	O-ring for Cell Coupling, MB-HTHP Filter Press
#170-13-1	O-ring for Cell, Teflon®, 175/500 mL HTHP Press
#171-52	O-ring for Model MB Cell
#170-17	O-ring for Valve Stem, Viton®
#171-96-1	Hydraulic Oil for PPT Hydraulic Pump, 32 oz
#171-96-2	Hydraulic Oil for PPT Hydraulic Pump, 1 gal
#171-68	Pilot Light, Red, Model MB Filter Press
#170-10	Pilot Light, Thermostat, 175/500 mL HTHP Press
#171-69	Pilot Light, White, Model MB Filter Press
#171-22	Pin, Retainer, Long, 175/500 mL Filter Press
#135-04	Retainer Ring, External
#170-26	Screw, Cap Locking, Stainless Steel, 175/500 mL
#170-26-1	Screw, Cap Locking, Hardened, 175/500 mL Press
#171-78	Screw, for Cell Assembly, MB-HTHP Filter Press
#171-84-03	Strap Wrench
#171-43	Tape, ½", Teflon®
#170-32	Valve, Needle, Male, ⅛" × ⅛" NPT
#170-34	Valve, Needle, Male, ¼" × ¼" NPT
#171-80	Valve, Needle, Male, ¼" × ¼" NPT, Modified Handle
#171-25	Valve, Relief, N_2 Manifold, 750 or 1200 PSI
#143-06	Valve, Safety Bleeder, ¼" NPT
#170-16	Valve Stem for Pressurizing, 175/500 mL Press, ⅜ - 24
#170-35	Wrench, Adjustable, 6"
#170-27	Wrench, Allen, 5/32", for Cap Locking Screws
#171-79	Wrench, Hex, ¼", for Cell Screw, MB-HTHP Press

Ceramic Filter Disks

Porous ceramic filters are commonly used for everything from sewage treatment to medical equipment monitoring. In the oilfield, ceramic filters are used as a replacement for filter paper in the HTHP filtration test. Available in a wide range of pore throat sizes, ceramic filters enable the operator to perform filtration tests at similar porosities to that of the formations being drilled, a big advantage over filter paper. Also, ceramic filters, unlike paper, have depth (usually ¼"), so invasion and return permeability studies may be performed and bridging characteristics of drilling and drill-in fluids may be analyzed.

Porous ceramics consist of closely-sized particles bonded together, resulting in a uniform, permeable material that forms a tortuous path for fluid flow. The most common materials used are alumina and silica, but there is an almost unlimited variety of material characteristics, shapes, and sizes available.

Ceramic filters are normally classified by mean pore throat size and/or units of permeability. Mean pore throat size is the average minimum pore diameter measured in microns, or a thousandth of a millimeter. Permeability is a measure of the volume flow of fluids through a porous media when subjected to a differential pressure and is mathematically equated by Darcy's Law.

Previously, mean pore throat size and permeability were roughly determined using air standards. Recent research funded by the American Petroleum Institute (API) used the latest mercury injection capillary pressure technology to determine these characteristics. This new testing procedure identified that the ceramic disk manufacturing process does not allow for absolute consistency between ceramic disk batches. Therefore, it was determined that the true mean pore throat size and permeability should result as a mean of the statistical data. Even though the ceramic filters are the same filters that have been provided for years, new API methods for determining mean pore throat size and permeability have resulted in new specifications as outlined in the chart below:

Ceramic Filter Disks, 2½" × ¼"

Part #	Mean Pore Throat (µm*)		Permeability (Darcy)	
	New (Mercury)	Old (Air)	New (Mercury)	Old (Air)
#170-55	10	3	775 mD	400 mD
#170-53-2	12	5	850 mD	750 mD
#170-53-3	20	10	3 D	2 D
#170-51	40	20	8 D	5 D
#170-53	50	35	15 D	10 D
#170-53-1	55	60	20 D	20 D
#170-53-4	120	90	40 D	100 D
#170-53-5	--	150	--	180 D
#170-53-6	--	190	--	--

***1 Micron (µm) = 1/25,400" or 1/1,000 mm**

HTHP filtration cell bodies must be recessed an extra ¼" on the outlet side in order to accommodate the ceramic filter. OFI Testing Equipment can retrofit existing equipment to specifications. A ¼" thick stainless steel spacer ring is available for those who also wish to use filter paper. Different sizes and an assortment of other permeable filters are available on a special order basis.

The retort provides a method for measuring the percentage (%) of oil and water, and for estimating both suspended and dissolved solids contained in a sample of water-based or oil-based muds and cuttings. Knowledge of oil, water, and solid content is fundamental to proper control of mud properties when considering oil/water ratios, rheology, density, filtration, and salinity. Knowledge of solids in drilling fluids is essential to evaluation of viscosity control and solids control equipment. In a typical test, a known volume of fluid is heated in a retort chamber to vaporize the liquid components. These vapors are then condensed and collected in a graduated receiver and noted by percent volume. The volume of percent solids, both suspended and dissolved, are calculated by subtracting the total final liquid volume from the initial total liquid volume.

OFITE retorts are available with either 50 mL, 20 mL, or 10 mL removable chambers. For increased accuracy, and for better comparisons between locations, OFITE provides the 50 and 20 mL retorts with digital temperature controllers so that test temperatures may be accurately set by the operator and to minimize the danger of overheating. An indicator lamp lights when the test begins and shuts off when completed. The chamber, heater, adapter cord, glassware, and accessories are included in a stainless steel carrying case.

#165-14-2 50-mL Retort Kit

50 ML RETORT KIT WITH STAINLESS STEEL CASE

#165-14 115-VOLT
#165-14-1 230-VOLT
#165-14-2 WITH ELECTRONIC TEMPERATURE CONTROLLER, 115-VOLT
#165-14-3 WITH ELECTRONIC TEMPERATURE CONTROLLER, 230-VOLT

Size: **9.5" × 8.75" × 17" (24 × 22 × 43 cm)**
Weight: **26 lb (11.8 kg)**

Components:

#131-28	Spatula, 3¾"
#153-02	Brush, Graduate, 1½" × 10¾"
#153-14	Graduated Cylinder, 50 mL × 1 mL, Glass
#165-01	On/Off Switch
#164-30	Receptacle (230-Volt Only)
#165-07	Receiver Tube, 50 mL, 2 Scales: 0 - 100% × 0.5%, 0 - 50 mL × 0.25 mL
#165-13	Retort Adapter
#165-14-13	T-handle Drill
#165-15-1	Condenser with Ultra-Torr Fitting, 50 mL
#165-15-4	O-ring for Ultra-Torr Fitting
#165-16	Retort Chamber with Non-Threaded Tube and Lid, 50 mL
#165-17-1	Insulator Block, Bottom
#165-17-2	Insulator Block, Top
#165-17-3	Insulator Block, Cover
#165-35	Heating Element, 350-Watt (115-Volt Only)
#165-36	Heating Element, 350-Watt (230-Volt Only)
#165-38	**Thermostat**
#165-39	Microswitch
#165-49	Rod, Ceramic
#164-17	Thermostat Adjusting Tube
#165-48	Spring
#165-49-2	Angle Bracket
#165-49-1	Fish Paper
#165-40	Power Cable (115-Volt Only)
#165-40-1	Power Cable (230-Volt Only)
#165-41	Corkscrew
#165-42	Steel Wool, Grade 00 Fine, Package of 4 Pads
#165-43	Pipe Cleaner, 3 mm, 10'
#165-44	Thread Lubricant, High-Temperature, 1 oz
#165-45	Neon Lamp, Red
#165-47	Receptacle (115-Volt Only)
#171-44	Rubber Foot, ¾"
#280-00	Wetting Agent, 1 oz

For Electronic Only:

#165-14-10	Fuse, 1-Amp
#165-14-11	Fuse Holder
#165-14-12	Thermocouple Adapter
#165-14-14	Fuse Panel Overlay
#165-14-5	Electronic Controller
#165-14-8	Thermocouple, Type "J", ⅛" × 6"
#165-14-9	Thermocouple Fitting, ⅛" × ⅛" NPT, Stainless Steel
#165-49-2	Angle Bracket
#172-07	Fuse, 5-Amp, Box of 5
#172-24	Solid State Relay, 25-Amp, 230-Volt

Case:

#165-14-6	Case for Non-Electronic Retort, Stainless Steel
#165-14-4	Case for Electronic Retort, Stainless Steel

Optional:

#153-08	Brush for 50 mL Receiver ("JP") Tube
#165-14-SP	Spare Parts for 50 mL Retort, 115-Volt
#165-14-1-SP	Spare Parts for 50 mL Retort, 230-Volt
#165-14-7	Special Legs for Use with JP Tubes, 50 mL
#165-16-4	Chamber with Threaded Tube and Lid

20 ML RETORT KIT WITH STAINLESS STEEL CASE

#165-80 115-VOLT
#165-80-1 230-VOLT
#165-80-2 WITH ELECTRONIC TEMPERATURE CONTROLLER, 115-VOLT
#165-80-3 WITH ELECTRONIC TEMPERATURE CONTROLLER, 230-VOLT

Size: **8.25" × 7" × 12.5" (21 × 18 × 32 cm)**
Weight: **18 lb 6 oz (8.3 kg)**

Components:

#131-15	Graduated Cylinder, 20 mL
#141-17	Clip for Graduated Cylinder
#153-03	Brush, Graduate, ½" × 8"
#164-30	Receptacle (230-Volt Only)
#165-06	Receiver Tube with Certificate, 20 mL, 2 Scales: 0 - 100% × 0.1%, 0 - 20 mL × 0.1 mL
#165-14-13	T-handle Drill
#165-15-4	O-ring for Ultra-Torr Fitting
#165-35	Heating Element, 350-Watt (115-Volt Only)
#165-36	Heating Element, 350-Watt (230-Volt Only)
#165-38	**Thermostat**
#165-39	Microswitch
#165-49	Ceramic Rod
#164-17	Thermostat Adjusting Tube
#165-48	Spring
#165-49-2	Angle Bracket
#165-49-1	Fish Paper
#165-40	Power Cable (115-Volt Only)
#165-40-1	Power Cable (230-Volt Only)
#165-41	Corkscrew
#165-42	Steel Wool, Grade 00 Fine, Package of 4 Pads
#165-43	Pipe Cleaner, 3 mm, 10'
#165-44	Thread Lubricant, High-Temperature, 1 oz Tube
#165-45	Neon Lamp, Red
#165-46	Clip with Bent arm for 10 mL Condenser
#165-47	Receptacle (115-Volt Only)
#165-81	Retort Adapter
#165-82-1	Condenser with Ultra-Torr Fitting, 20 mL
#165-83	Retort Chamber with Lid, 20 mL
#165-84	Insulator Block, Top
#165-85	Insulator Block, Bottom
#165-86	Insulator Block, Cover
#165-88	Spatula
#280-00	Wetting Agent, 1 oz

For Electronic Only:

#165-14-8	Thermocouple, Type "J", ⅛" × 6"
#165-14-9	Thermocouple Fitting, ⅛" × ⅛" NPT, Stainless Steel
#165-49-2	Angle Bracket
#165-80-4	Electronic Controller
#165-80-5	MS Mating Plug - 14S-6P
#165-80-6	MS Mating Receptacle - 14S-6S
#165-80-7	Cable Clamp with Rubber Bushing
#165-80-8	Thermocouple Adapter
#172-24	Solid State Relay, 25-Amp, 230-Volt

Case:

#165-87	Case for Non-Electronic Retort, Stainless Steel
#165-89	Case for Electronic Retort, Stainless Steel

Optional:

#153-07	Brush for 20 mL Receiver ("JP") Tube
#165-80-SP	Spare Parts for 20 mL Retort, 115-Volt
#165-80-1-SP	Spare Parts for 20 mL Retort, 230-Volt

#165-80-2 - 20 mL Temperature Controlled Retort

Did you know?

When you send something to us for repair, we know you are without a critical piece of equipment. That's why we make your repairs first priority (even equipment from other manufacturers!).

10 ML RETORT KIT WITH THERMOSTAT AND STAINLESS STEEL CASE

#165-00-1 115-VOLT
#165-10-1 230-VOLT

Size: 7.5" × 6.5" × 11.5" (19 × 17 × 29 cm)
Weight: 12 lb 5 oz (5.6 kg)

OFITE 10 mL Retort Kit

Components:

#141-17	Clip for Graduated Cylinder
#153-03	Brush, Graduate, ½" × 8"
#153-18	Graduated Cylinder, TC, 10 mL × 2/10 mL, Glass
#164-10	Insulator Block, Top
#164-11	Insulator Block, Bottom
#164-12	Insulator Block, Cover
#164-19	Retort Adapter
#165-25	Case, Stainless Steel
#164-30	Receptacle (230-Volt Only)
#165-31	Retort Chamber with Lid
#165-32	Condenser
#165-34	Spatula
#165-35	Heating Element, 350-Watt (115-Volt Only)
#165-36	Heating Element, 350-Watt (230-Volt Only)
#165-38	**Thermostat:**
#165-39	Microswitch
#165-49	Rod, Ceramic
#164-17	Thermostat Adjusting Tube
#165-48	Spring
#165-49-2	Angle Bracket
#165-49-1	Fish Paper
#165-40	Power Cable (115-Volt Only)
#165-40-1	Power Cable (230-Volt Only)
#165-41	Corkscrew
#165-42	Steel Wool, Grade 00 Fine, Package of 4 Pads
#165-43	Pipe Cleaner, 3 mm, 10'
#165-44	Thread Lubricant, High-Temperature, 1 oz
#165-45	Neon Lamp, Red
#165-46	Clip with Bent Arm
#165-47	Receptacle (115-Volt Only)
#280-00	Wetting Agent, 1 oz

10 ML REMOVABLE RETORT WITH THERMOSTAT

#165-00 115-VOLT
#165-10 230-VOLT

Size: 3.5" × 4" × 11" (9 × 10 × 28 cm)
Weight: 7 lb 9 oz (3.4 kg)

#165-00 Removable Retort

Components:

#164-01	Case, Stainless Steel
#164-13	Insulator Block, Top
#164-14	Insulator Block, Bottom
#164-15	Insulator Block, Cover
#164-19	Retort Adapter
#164-30	Receptacle (230-Volt Only)
#165-31	Retort Chamber with Lid
#165-32	Condenser
#165-35	Heating Element, 350-Watt (115-Volt Only)
#165-36	Heating Element, 350-Watt (230-Volt Only)
#165-38	**Thermostat:**
#165-39	Microswitch
#165-49	Rod, Ceramic
#164-17	Thermostat Adjusting Tube
#165-48	Spring
#165-49-2	Angle Bracket
#165-49-1	Fish Paper
#165-40	Power Cable (115-Volt Only)
#165-40-1	Power Cable (230-Volt Only)
#165-45	Neon Lamp, Red
#165-46	Clip with Bent Arm
#165-47	Receptacle (115-Volt Only)

Optional:

#153-06	Brush for 10 mL Receiver ("JP") Tube
#165-00-1-SP	Spare Parts for One Year for #165-00-1
#165-05	Receiver Tube with Certificate, 10 mL, Dual-Scale: 0 - 100% × 0.1%, 0 - 10 mL × 0.1 mL
#165-10-1-SP	Spare Parts for One Year for #165-10-1
#165-14-13	T-Handle Drill for Retort Chamber Tube
#171-48	Temperature Control Unit, 115-Volt
#171-48-1	Temperature Control Unit, 230-Volt

ACCESSORIES AND CONSUMABLE PARTS FOR RETORTS

#153-05	Brush with Curved Plastic Handle, Mini, 7½", Stainless Steel
#165-41	Corkscrew
#165-14-13	Drill for Retort Chamber Tube, T-Handle
#165-37	Heating Element, 100-Watt, 12-Volt
#165-35	Heating Element, 350-Watt, 115-Volt
#165-36	Heating Element, 350-Watt, 230-Volt
#165-45	Neon Lamp, Red
#165-43	Pipe Cleaner, 3 mm, 10'
#165-40	Power Cable for 115-Volt Retort
#165-47	Receptacle for 115-Volt Retort
#171-06	Safety Shield
#165-42	Steel Wool, Grade 00 Fine, Package of 4 Pads
#171-43	Teflon® Tape, ½"
#171-48	Temperature Control Unit, 115-Volt
#171-48-1	Temperature Control Unit, 230-Volt
#165-38	Thermostat
#165-44	Thread Lubricant, High-Temperature, 1 oz
#165-15-2	Ultra-Torr Fitting for 20 and 50 mL Condensers
#165-15-3	Ultra Torr Sleeve, ¼"

For 50 mL Retorts:

#131-28	Spatula, 3¾"
#153-08	Brush for 50 mL Receiver Tube
#165-07	50 mL Receiver Tube, 2 Scales: 0 - 100% × 0.5%, 0 - 50 mL × 0.25 mL
#165-13	Retort Adapter
#165-14-7	Special Legs for Use with JP Tubes, 50 mL
#165-15-1	Condenser with Ultra-Torr Fitting
#165-15-4	O-ring for Ultra-Torr Fitting
#165-16	Retort Chamber with Lid
#165-16-1	Lid for Mud Sample Cup
#165-16-2	Mud Sample Cup
#165-16-3	Expansion Chamber with Non-Threaded Tube
#165-17-1	Bottom Insulator Block
#165-17-2	Top Insulator Block
#165-17-3	Cover Insulator Block

For 20 mL Retorts:

#153-07	Brush for 20 mL Receiver Tube
#165-06	20 mL Receiver Tube with Certificate, 2 Scales: 0 - 100% × 0.1%, 0 - 20 mL × 0.1 mL
#165-15-4	O-ring for Ultra-Torr Fitting
#165-81	Retort Adapter
#165-82-1	Condenser with Ultra-Torr Fitting
#165-83	Chamber with Lid
#165-83-1	Lid for Mud Sample Cup
#165-84	Top Insulator Block
#165-85	Bottom Insulator Block
#165-86	Cover Insulator Block
#165-88	Spatula with 5½" Blade

For 10 mL Retorts:

#153-06	Brush for 10 mL Receiver Tube
#164-19	Retort Adapter
#165-05	10 mL Receiver Tube with Certificate, 2 Scales: 0 - 100% × 0.1%, 0 - 10 mL × 0.1 mL
#165-31	Chamber with Lid
#165-31-1	Mud Sample Cup
#165-32	Condenser
#165-33	Lid for Mud Sample Cup
#165-34	Spatula
#165-46	Graduated Cylinder Clip for Condenser

Did you know?

All OFITE reconditioned equipment carries the same warranty as new equipment manufactured by OFI Testing Equipment!

#171-06 Safety Shield

TEMPERATURE CONTROL UNIT

#171-48 1-UNIT, 115-VOLT
#171-48-1 1-UNIT, 230-VOLT
#171-48-4 4-UNIT, 115-VOLT
#171-48-4-1 4-UNIT, 230-VOLT

The OFITE Temperature Control Unit is a convenient tool for precisely controlling the temperature of an electrical heating device. Simply plug the heating device into the back of the Temperature Control Unit and the built-in Eurotherm 2123 controller will regulate the power output to the heater. The controller can be set with either a simple temperature setpoint or an advanced timer.

The Temperature Control Unit is ideal for use with thermocups, hot plates, retorts and heating jackets for filter presses.

Components:

#141-17	Clip for Graduated Cylinder
#152-37	AC Power Cord, 3-Conductor (115-Volt Only)
#152-38	AC Power Cord, 3-Conductor, International (230-Volt Only)
#163-27	Clip, Medium
#164-33	Plug Adapter (230-Volt Only)
#165-14-11	Fuse Holder
#171-48-001	Switch, DPDT
#171-48-002	Switch, SPST
#171-48-003	Plug Receptacle
#171-48-004	Rubber Feet
#171-48-005	Plastic Label
#171-48-008	Female Receptacle (230-Volt Only)
#171-48-2	Thermocouple with 60" Coil Cord, Type "J"
#171-48-3	Plug Receptacle
#172-09	Fuse, 10-Amp, Box of 5
#172-24	Solid State Relay, 25-Amp, 230-Volt
#174-03	Electronic Controller

#171-48 Temperature Control Unit

Did you know?

OFITE shipping specialists are certified for air flight transport of hazardous chemicals and they have been trained to build EU certified crates.

The OFITE Roller Oven (U.S. Patent No. 4,677,843) is an effective aid in determining the effects temperature has on drilling fluid as it circulates through the wellbore. Aging the drilling fluid in pressurized containers effectively demonstrates the thermal effects on viscosity and how various additives behave at elevated temperatures. Aging is done under conditions that vary from static to dynamic and from ambient to highly elevated temperatures. The OFITE 4 and 5-roller ovens are ideal for laboratory use. The OFITE portable oven is specifically designed for field use. OFITE rollers are variable-speed controlled and constructed of stainless steel for longer life and a cleaner environment inside the oven. Glass impregnated Teflon® roller bearings extend the life of the rollers and allow for longer maintenance-free service. All models feature a digital temperature controller that can be read directly from outside the oven. The temperature is controlled by an electronic solid state thermostat and operates between 100°F and 450°F (38°C - 232°C). The 4 and 5-roller ovens are provided with a seven-day programmable timer as standard equipment. The timer may be preset to automatically start and stop the heaters, thus avoiding the need for an operator to be in attendance during off hours. An optional circulation fan motor gives you greater control over the temperature inside the oven while the optional redundant heat control kit provides an important safety mechanism. Both options are available on the 4 and 5-roller ovens.

4-ROLLER OVEN, 9-CELL CAPACITY

#172-00 115-VOLT
#172-00-1 230-VOLT
#172-00-C WITH FAN CIRCULATION KIT, 115-VOLT
#172-00-1-C WITH FAN CIRCULATION KIT, 230-VOLT
#172-00-RC WITH REDUNDANT HEAT CONTROL AND FAN CIRCULATION KIT, 115-VOLT
#172-00-1-RC WITH REDUNDANT HEAT CONTROL AND FAN CIRCULATION KIT, 230-VOLT

Size: 26.75" × 22" × 26" (70 × 56 × 66 cm)
Weight: 141 lb (64 kg)

Crated Size: 35" × 29" × 36" (89 × 74 × 91 cm)
Crated Weight: 239 lb (108.4 kg)

5-ROLLER OVEN, 16-CELL CAPACITY

#173-00 115-VOLT
#173-00-1 230-VOLT
#173-00-C WITH FAN CIRCULATION KIT, 115-VOLT
#173-00-1-C WITH FAN CIRCULATION KIT, 230-VOLT
#173-00-RC WITH REDUNDANT HEAT CONTROL AND FAN CIRCULATION KIT, 115-VOLT
#173-00-1-RC WITH REDUNDANT HEAT CONTROL AND FAN CIRCULATION KIT, 230-VOLT

Size: 33.75" × 26.25" × 26" (86 × 67 × 66 cm)
Weight: 172 lb (78 kg)

Crated Size: 38" × 33" × 34" (97 × 84 × 86 cm)
Crated Weight: 290 lb (131.5 kg)

Components:

#163-26 Clip, Small
#165-14-8 Thermocouple, Type "J", ⅛" × 6"
#165-40-3 Power Cable (230-Volt Only)
#165-45 Neon Lamp, Red
#165-45-1 Neon Lamp, Clear
#170-05 Thermostat, 50° - 500°F (10° - 260°C)
#171-82 Power Cord with Male Plug, 16/3 SJ, Round, 8' (115-Volt Only)
#172-01 Fuse for Temperature Controller, ½-Amp
#172-02 Chain, 1'
#172-03 Sprocket, ½" Bore
#172-04 Connecting Link for Chain
#172-05 Fuse, 2-Amp, Box of 5 (230-Volt Only)
#172-07 Fuse, 5-Amp, Box of 5 (115-Volt Only)
#172-08 Bearing, Glass-Impregnated Teflon®
#172-09 Fuse, 10-Amp, Box of 5
#172-11-1 Temperature Controller
#172-13 Fuse Light Holder
#172-14 On/Off Toggle Switch
#172-15-1 Dayton Programmable Timer, Specify Voltage
#172-19 Heater Standoffs
#172-22 Heater, 350-Watt (4-Roller Only)
#172-23 Heater, 500-Watt (5-Roller Only)
#172-24 Solid State Relay, 25-Amp, 230-Volt
#173-04 Redundant Heat Control
#173-05 Fan Motor Circulation Kit, (115-Volt Only)
#173-06 Fan Motor Circulation Kit, (230-Volt Only)
#173-11 Wire, High-Temperature, 16 Gauge, 1'
#173-15 Knob for Oven Door, ¼-20 × ⅝" Threaded Hole, Black
#174-13 Motor for All Roller Ovens
#174-14 Motor Controller
#174-19 Motor Bracket
#174-21 115/230 Voltage Converter Switch
#174-22 Mounting Plate for Converter Switch
#174-23 10-Place Terminal Strip
#174-26 Fiber Board Plate for Motor Support Bracket

#173-00 5-Roller Oven

PORTABLE 3-ROLLER OVEN, 4-CELL CAPACITY

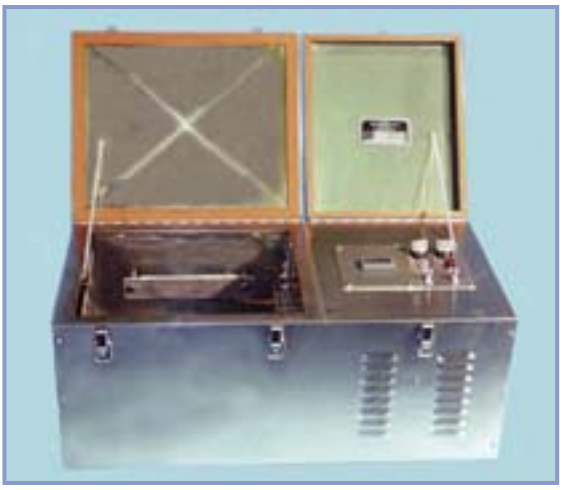
#174-00 115-VOLT
#174-00-1 230-VOLT

Size: **25" × 12" × 11" (64 × 31 × 28 cm)**
Weight: **53 lb (24.1 kg)**

Crated Size: **23" × 19" × 19" (58 × 48 × 48 cm)**
Crated Weight: **105 lb (47.6 kg)**

Components:

#135-17	Switch Plate
#140-60-04	E-ring for Base Cap
#163-26	Clip, Small
#164-30	Receptacle (230-Volt Only)
#165-14-8	Thermocouple, Type "J", ⅛" × 6"
#165-40	Power Cable (115-Volt Only)
#165-40-1	Power Cable (230-Volt Only)
#165-45	Neon Lamp, Red
#165-45-1	Neon Lamp, Clear
#165-47	Receptacle for Retort Kit (115-Volt Only)
#170-05	Thermostat, 50° - 500°F (10° - 260°C)
#171-44	Rubber Foot, ¾"
#172-02	Chain, 1'
#172-03	Sprocket, ½" Bore
#172-04	Connecting Link for Chain
#172-05	Fuse, 2-Amp, Box of 5 (230-Volt Only)
#172-07	Fuse, 5-Amp, Box of 5 (115-Volt Only)
#172-08	Bearing for Roller Shafts, Glass Impregnated Teflon®
#172-13	Fuse Light Holder
#172-14	On/Off Toggle Switch
#172-20	Heater, 150-Watt
#172-24	Solid State Relay, 25-Amp, 230-Volt
#173-11	Wire, High-Temperature, #16 Gauge, 1"
#174-03	Electronic Controller
#174-13	Motor for All Roller Ovens
#174-14	Motor Controller
#174-19	Motor Bracket
#174-21	115/230 Voltage Converter Switch
#174-22	Mounting Plate for Converter Switch
#174-23	10-Place Terminal Strip



#174-00 3-Roller Portable Oven

See page 68 - 69 for Aging Cells used in Roller Ovens (not included).

GRAVITY CONVECTION DRYING OVEN

#174-50 115-VOLT
#174-50-1 230-VOLT

Construction details play a decisive role in this Gravity Convection Oven with Electronic Controller. Predominant use of stainless steel and a carefully coordinated concept of heating, ventilation, and temperature control clearly show that our customers' requirements are taken seriously.

Stainless Steel Interior:
Volume: 3.8 ft^3 (108 L)
Width: 22.0" (56 cm)
Height: 18.9" (48 cm)
Depth: 15.7" (40 cm)
Shelves Supplied: 2

Stainless Steel Exterior:
Width: 28.0" (71 cm)
Height: 29.9" (76 cm)
Depth: 21.7" (55 cm)

Temperature Range: 86° - 482°F (30° - 250°C)

Options:
Temperature Range up to 572°F (300°C)
Locking Door
Timer 0 - 20 Hour
Programmable Timer
Additional Shelves (Up to 3)
Perforated Steel Shelf

Size: **28" × 30" × 22" (71 × 76 × 55 cm)**
Weight: **123 lb (56 kg)**

Crated Size: **34" × 38" × 26" (87 × 96 × 66 cm)**
Crated Weight: **179 lb (81 kg)**

#174-50 Gravity Convection Oven

Optional:

#173-05 Fan Motor Circulation Kit, 115-Volt

#173-06 Fan Motor Circulation Kit, 230-Volt

#130-74	Transformer, 230 to 115 Volt, 1.10 Amps, 50 / 60 Hz (230-Volt Only)
#164-32	Connector for Power Cable, Male (230-Volt Only)
#165-14-10	Fuse, 1-Amp
#172-05	Fuse, 2-Amp, Box of 5 (230-Volt Only)
#172-25	Fan Motor
#172-26	Shaft Extension for Fan Motor
#172-27	Shroud for Fan Motor
#172-28	Motor Bracket for Circulating Fan
#174-07-1	Fan Blade for Circulating Fan, 5"

#173-04 Redundant Heat Control

#165-14-8	Thermocouple, Type "J", ⅛" × 6"
#172-24	Solid State Relay, 25-Amp, 230-Volt
#173-04-1	Case for Electronic Controller, Stainless Steel
#174-03	Electronic Controller

Did you know?

Unlike most other companies, we make repairs first priority (even repairs for equipment from other manufacturers).

ACCESSORIES FOR ROLLER OVENS

Belt:

#174-17	Belt for Roller Oven

Electronics:

#130-74	Transformer, 230 to 115 Volts, 1.10 Amps, 50 / 60 Hz
#173-04	Redundant Heat Control for 4 and 5 Roll Ovens
#174-03	Electronic Controller for Portable Oven
#174-24	Mounting Plate for Controller on Portable Oven

Chain Drive:

#172-02	Chain for Roller Oven
#172-03	Sprocket, ½" Bore
#172-04	Connecting Link for Chain
#172-06	Half Link for Chain
#172-08	Bearing for Rollers, Glass Impregnated Teflon®

Fan:

#172-03-1	Sprocket for Portable Oven Gear Box, ⅝" Bore
#172-25	Fan Motor for Circulating Fan
#172-26	Shaft Extension for Fan Motor
#172-27	Shroud for Fan Motor
#172-28	Motor Bracket for Circulating Fan
#173-05	Fan Motor Circulation Kit, 115-Volt
#173-06	Fan Motor Circulation Kit, 230-Volt
#174-07	Fan Blade for Portable Oven, 4½"
#174-07-1	Fan Blade for Ovens and Circulating Fan, 5"
#174-15	Sheave for Motor, Small
#174-16	Sheave for Gear Motor, Large
#174-18	Motor Retention Bracket for Portable Oven
#174-19	Motor Bracket for 4 and 5-Roller Ovens
#174-20	Strip Lead Porcelain Bushing
#174-26	Plate for #174-19

Fuses:

#172-01	½-Amp, Box of 5, 115 or 230-Volt Ovens
#172-05	2-Amp, Box of 5, 230-Volt Ovens
#172-07	5-Amp, Box of 5, 115-Volt Ovens
#172-09	10-Amp, Box of 5, 115 or 230-Volt Ovens
#165-14-10	1-Amp

Gaskets:

#172-10	Door Gasket Set for 4-Roller Oven
#173-10	Door Gasket Set for 5-Roller Oven

Lamp:

#165-45	Neon, Red
#165-45-1	Neon, Clear
#172-16	Lamp for Roller Ovens

Lenses:

#172-17	Red
#172-18	Clear

Heater:

#172-20	150-Watt, for Portable Oven
#172-21	250-Watt, for 4-Roller Oven
#172-22	350-Watt, for 4-Roller Oven
#172-23	500-Watt, for 5-Roller Oven

Spare Parts:

#172-00-SP	Spare Parts for One Year for 4-Roller Oven (115-Volt Only)
#172-00-1-SP	Spare Parts for One Year for 4-Roller Oven (230-Volt Only)
#173-00-SP	Spare Parts for One Year for 5-Roller Oven
#174-00-SP	Spare Parts for One Year for Portable Oven

Aging Cells

The OFITE Aging Cell is a patented **(U.S. Patent No. 4,805,443)** pressure vessel that enables samples to be subjected to temperatures higher than the boiling point of water and still be maintained in a liquid state. The cells may be used for static temperature exposure or in a dynamic mode in a roller oven with a preset minimum aging time. OFITE Aging Cells are available in 260 mL and 500 mL sizes and utilize both Viton® and Teflon® O-ring seals. Aging cells are typically constructed of grade 303 or 316 stainless steel and are used for high-temperature testing (up to 450°F). For prolonged exposure to elevated salinity at high temperatures (e.g., 20,000 mg/L chlorides at 350°F), cells constructed from premium metals, such as Hastelloy® or Inconel® 600 are available. For corrosion testing, a special 500 mL, grade 303 stainless steel Corrosion Test Cell is available with a modified inner cap designed to hold a corrosion coupon. The aging cell walls may be protected against corrosive fluids by using the popular Teflon® liner designed by OFITE. An optional calibrated rupture disk, which can be installed in the inner cap to rupture and release pressure at a predetermined set point is available. OFITE can retrofit the rupture disk to existing cells.

PRESSURIZED AGING CELL WITH VALVE, 500 ML
#175-30 OFITE STYLE, 303 STAINLESS STEEL
#175-50 OFITE STYLE, 316 STAINLESS STEEL
#175-70 OLD STYLE WITH GASKET IN LID, 316 STAINLESS STEEL

Size: **4" × 4" × 8" (10 × 10 × 20 cm)**
Weight: **11 lb 3 oz (5.1 kg)**

Components:

#170-17	O-ring for Valve Stem
#175-04	Gasket for Inner Cap, Teflon® (Old Style Only)
#175-05	Thrust Washer
#175-09	O-ring for Inside of Cell, Viton® (OFITE Style Only)
#175-09-1	O-ring for Inside of Cell, Teflon® (OFITE Style Only)
#175-14	Set Screw, ⅜"
#175-15	Wrench for ⅜" Set Screw
#175-16	Valve Stem, 2"
#175-47	O-ring for Outside of Cell, Viton® 90

Optional:

#175-30-SP	Spare Parts for OFITE Style Aging Cell
#175-70-SP	Spare Parts for Old Style Aging Cell

#175-30 Aging Cell, 500 mL

PRESSURIZED AGING CELL WITH VALVE, 260 ML, 303 STAINLESS STEEL
#175-25

Size: **4" × 4" × 5" (10 × 10 × 13 cm)**
Weight: **8 lb 2 oz (3.7 kg)**

#175-25 Aging Cell, 260 mL

Components:

#170-17	O-ring for Valve Stem
#175-05	Thrust Washer
#175-09	O-ring for Inside of Aging Cell, Viton®
#175-14	Set Screw, ⅜"
#175-15	Wrench for ⅜" Set Screw
#175-16	Valve Stem, 2"
#175-47	O-ring for Outside of Aging Cell, Viton® 90

Did you know?

As with all of our equipment, our test kits may be custom fitted to meet specific requirements.

SHEAROMETER TUBE WITH WEIGHT SUPPORT #166-10

This 20 gram shearometer tube with weight support is used for testing heavier muds and is specifically designed for testing high gel strength drilling fluids. It is common for 10 minute gels to reach 35 lb / 100 ft². Drilling conditions and economics will determine the need to reduce gel strengths.

Optional:
#166-02 Weight Set with Box, 50 g - 10 mg

#166-10 Shearometer Tube with Weight Support

Did you know?

You can download or print OFITE Instruction Manuals on our web site at www.ofite.com.

PARTS AND ACCESSORIES FOR AGING CELLS

Caps:

#175-18	Inner, OFITE Style, 303 Stainless Steel
#175-18-1	Inner, OFITE Style, 316 Stainless Steel
#175-18-2	Inner, Old Style, 316 Stainless Steel
#175-18-3	Inner, Old Style, Accepts Rupture Disk, 303 Stainless Steel
#175-00-3	Inner, OFITE Style, Accepts Rupture Disk, 316 Stainless Steel
#175-45	Inner for Corrosion Cell, 303 Stainless Steel
#175-13	Outer, 303 Stainless Steel
#175-05	Washer for Inner Cap

Liner, Teflon®:

#175-60	Teflon® Liner for 500 mL Aging Cell

O-rings and Gaskets:

#175-03	Gasket for Inside of Aging Cell, Peek
#175-04	Gasket for Inner Cap, Teflon® (Old Style)
#175-09	O-ring for Inside of Aging Cell, Viton® (OFITE Style)
#175-09-1	O-ring for Inside of Aging Cell, Teflon® (OFITE Style)
#175-46	O-ring for Outside of Aging Cell, Teflon®
#175-47	O-ring for Outside of Aging Cell, Viton®
#175-54	O-ring for Outside of Aging Cell, Buna N
#175-62	O-ring for Teflon® Liner Plug, Viton®
#175-63	O-ring for Teflon® Liner Lid (Piston), Viton®
#170-17	O-ring for Valve Stem, Viton®

Rupture Disk ¼":

#175-56	2,000 PSI
#175-57	1,500 PSI

Set Screws and Wrenches:

#175-14	Set Screw, ⅜"
#175-06	Set Screw, ⅝"
#175-15	Wrench for ⅜" Set Screw
#175-08	Wrench for ⅝" Set Screw

Valve Stem:

#175-16	Valve Stem for Pressurized Aging Cells

Spare Parts Kits:

#175-30-SP	Spare Parts for OFITE Style Aging Cell
#175-40-SP	Spare Parts for Corrosion Test Cell
#175-60-SP	Spare Parts for Teflon® Liner
#175-70-SP	Spare Parts for Old Style Aging Cell

Corrosion Testing

Corrosion is the destruction of a metal by a chemical or electrochemical reaction within its environment. It is a costly and severe problem in the drilling industry. Because tubular goods are mostly iron and most drilling fluids are water-based, corrosion is inevitable. To aid in providing corrosion protection, special chemicals may be added to the fluid system. Pre-weighed corrosion rings are the most effective way of measuring the corrosivity of the drilling fluid and the benefits of any treatment. Corrosion rings, made from metal similar to that used to make drill pipe, are sized to fit into the relief groove in the tool joint box. After exposure in the system (usually for a minimum of 80 hours), the rings are retrieved, cleaned, and re-weighed to within .1 milligram. The weight loss is attributed to corrosion and is calculated and reported as lb/ft²/yr or mils per year (MPY). For best results, rings should be re-weighed as soon as possible after removal from the system and may be returned to OFITE for weighing and analysis. OFITE inventories a complete selection of drill pipe corrosion rings to fit most sizes of drill pipe, and each ring size is listed in order of best fit.

Corrosion coupons (flat and rod shaped) are mounted on the appropriate coupon holder and usually placed inside an aging cell, but sometimes directly in the flow line at the rig site. Testing is based upon the same principles as the corrosion rings. A simple formula gives a corrosion rate per year.

Did you know?

Because OFITE is an independent manufacturer, you never have to worry about how your orders are prioritized. When we receive your order, we move fast.

Corrosion Rings and Coupons

Corrosion Coupons:

#180-08	Round, 4½" × ¼" Diameter
#180-10	Scale, 1" × 3" × 1/16" (with Holes)
#180-12	1" × 3" × 1/16"
#180-34	¾" × 3" × 1/16"

Holders:

#180-00	Coupon Holder for Flat Coupon, 1" NPT
#180-02	Coupon Holder for Flat Coupon, 2" NPT
#180-06	Coupon Holder for Round Coupon, 2" NPT
#180-04	Grommets for Coupon Holder, Package of 10

Corrosion Rings:

Part #	Drill Pipe Size and Type	K-Factor	Dimensions
#180-14	2⅞" Internal Flush and 3½" Slim Hole	394	2.425" OD 2.125" ID
#180-16	3½" X-Hole and 3½" Full Hole	357	2.685" OD 2.405" ID
#180-18	3½" Internal Flush and 3½" Full Hole	337	2.965" OD 2.435" ID
#180-20	4" Full Hole	256	3.156" OD 2.820" ID
#180-22	4" Internal Flush and 4½" X-Hole	250	3.703" OD 3.227" ID
#180-24	4½" Full Hole and 4½" X-Hole and 4" Internal Flush	207	3.500" OD 3.000" ID
#180-26	4½" Internal Flush and 5" X-Hole	253	4.185" OD 3.749" ID
#180-28	5 9/16", 5½" API Regular or Full Hole and 6⅝" API Regular	134	4.590" OD 4.004" ID
#180-30	4½" X-Hole	184	3.805" OD 3.399" ID
#180-32	5" X-Hole Tool Joint	179.12	4.185" OD 3.745" ID

CORROSION TEST CELL WITH COUPON HOLDER, 500 ML, 303 STAINLESS STEEL #175-40

Size: **4" × 4" × 8" (10 × 10 × 20 cm)**
Weight: **11 lb 3 oz (5.1 kg)**

Components:

#175-30	Aging Cell with Valve Stem, 500 mL, 303 Stainless Steel
#175-45	Inner Cap with Coupon Holder
#180-04	Grommet, Nylon

Optional:
#175-40-SP Spare Parts for Corrosion Test Cell

#175-40 Corrosion Test Cell

TEFLON® LINER FOR 500 ML AGING CELLS (U.S. Patent No. 5,152,184) #175-60

Components:

#175-60-1	Liner, Teflon®
#175-60-2	Piston, Teflon®
#175-60-3	Plug, Teflon®
#175-60-4	T-Screw
#175-62	O-ring for Plug, Viton®
#175-63	O-ring for Lid (Piston), Viton®

#175-60 Teflon® Liner

Optional:
#175-60-SP Spare Parts for Teflon® Liner

HTHP CORROSION TESTER #120-700

The OFITE HTHP Corrosion Tester is designed to perform corrosion tests under elevated temperature and pressure. The device is capable of heating the sample up to 400°F (204.4°C) and applying up to 5,000 PSI (34.5 MPa). Four specimen can be tested simultaneously. All wetted components are made of 316 stainless steel.

Size: **25" × 16" × 26" (64 × 41 × 66 cm)**
Weight: **215 lb (97.6 kg)**

Crated Size: **30" × 20" × 30" (76 × 51 × 76 cm)**
Crated Weight: **255 lb (115.8 kg)**

#120-700 Corrosion Tester

Did you know?

OFITE offers a variety of payment options, including most major credit cards. If you are interested in a Net-30 day account, a credit application is available in the index.

Balances

For making laboratory-quality precision measurements, OFITE offers an extensive line of the finest balances. The PGW Top Loading Balances are perfect for monitoring retention of fluids in cuttings on offshore drilling rigs. With a capacity of 2500 grams and sensitivity of 0.01 gram, the PGW Balance is suitable for your mud as well as cementing needs. The rugged, low cost Triple Beam Balance features a simple design and can be used to weigh samples up to 610 grams, with an accuracy of 0.1 gram. Other balances are available upon request.

OHAUS ADVENTURER™ PRO ANALYTICAL BALANCE, 260 GRAM CAPACITY, 0.0001 GRAM READABILITY
#166-17

The OHAUS Adventurer™ Pro is one of the most versatile balances in the industry. It counts, sums, holds, and delivers traceable results. Operation is fast and usually takes only three seconds for settings to stabilize. It is provided with an AC adapter for 230 or 115 volt operation.

Standard Features:
- Internal Calibration
- Stability Indicator
- Mechanical and Software Over/Under Load Protection
- Low Battery Indicator
- AC Adapter
- Auto Tare
- User Selectable Printing Options
- User Selectable Communication Settings

Size: **15.5" × 20.5" × 19" (39 × 53 × 50 cm)**
Weight: **16.3 lb (7.4 kg)**

#166-17 OHAUS Adventurer™ Pro Balance

Balances			
Part #	**Type**	**Capacity**	**Readability**
#166-25	AMB Moisture	50 g	.001 g
#166-17	Electronic, Top Loading	260 g	.0001 g
#166-03	Electronic, Handheld	320 g	.1 g
#166-20-2	Electronic, Top Loading	600 g	.01 g
#166-04	Electronic, Top Loading	600 g	.1 g
#166-06	Triple Beam	610 g	.1 g
#166-15	Electronic, Top Loading	2,500 g	.01 g
#166-16	Electronic, Top Loading	33 lb	.01 lb

AMB MOISTURE BALANCE, 50 GRAM CAPACITY, 0.001 GRAM / 0.01% READABILITY
#166-25 115-VOLT
#166-25-1 230-VOLT

The AMB moisture balance is a precision device for the determination of moisture content in small samples of materials by drying the sample with halogen heaters. Features include 7 preset drying modes; large LED display showing percentage moisture or percentage solid, plus temperature and time; automatic termination when drying is complete or after a user selected time; bi-direction RS-232 interface; and 2 quartz halogen heaters for improved drying distribution.

Size: **15" × 16" × 20" (38 × 41 × 51 cm)**
Weight: **16 lb (7.3 kg)**

#166-25 AMB Moisture Balance

Optional:

#166-26	Thermal Printer with Date and Time
#166-27	Anti-Vibration Table
#166-28	Data Collection Program (Balance Talk SL)
#166-29	Disposable Aluminum Sample Pans, Package of 250

PGW TOP LOADING BALANCE, 2500 GRAM CAPACITY, 0.01 GRAM READABILITY
#166-15 115-VOLT
#166-15-1 230-VOLT

The PGW Series of precision balances combines precision weighing technology with the latest processing software. Features include backlit LCD with dual display, security locking station, GLP printouts, and more. Additional models available with capacities from 150 g - 4,500 g and readabilities from 0.001 g - 0.01 g.

Size: **13" × 11" × 21" (33 × 28 × 53 cm)**
Weight: **11 lb (4.9 kg)**

Note: **OFITE can provide NIST traceable calibration weights to meet quality assurance requirements.**

#166-15 PGW Top Loading Balance

OHAUS SCOUT® PRO MODEL SP601 ELECTRONIC BALANCE, 600 GRAM CAPACITY, 0.1 GRAM READABILITY
#166-04 115-VOLT
#166-04-1 230-VOLT

The OHAUS Model SP601 is an easy-to-read 600 gram scale with simple operation. Standard features include: finger touch operation, large LCD screen, USB or RS232 connectivity, multiple weighing units, integral weigh-below hook, and battery (not included) or AC power.

Size: **2.5" × 7.7" × 7" (6 × 20 × 18 cm)**
Weight: **3 lb 13 oz (1.7 kg)**

#166-04 OHAUS SP601 Balance

Optional:
#166-05 230-Volt (European Plug) Adapter

HORIZON PORTABLE PRESCRIPTION BALANCE, 600 GRAM CAPACITY, 0.01 GRAM READABILITY
#166-20-2 115-VOLT
#166-20-3 230-VOLT

Horizon balances have what it takes for basic lab work, field use, and various industrial applications. Features include an LCD display, multiple weighing units and modes, both RS-232 and USB interfaces, internal rechargeable battery pack / AC operation, capacity tracker, and internal manual calibration. Dual tare keys are color coded for easy recognition. Density and specific gravity determinations are easy with the below balance weighing feature and the removable draft shield eliminates wind disturbances in drafty environments or outdoors. Other capacity models are available.

Size: **10" × 6.8" × 3" (25 × 17 × 8 cm)**
Weight: **4 lb 6 oz (2 kg)**

#166-20-2 Horizon Portable Prescription Balance

HANDHELD SCALE, 0 - 320 × 0.1 GRAM, AAA BATTERIES
#166-03

This portable unit features a professional four-button keypad with a button-activated luminescent backlight, which automatically turns off after 10 seconds. The balance displays weights in grams (g), ounces (oz), pennyweight (dwt), or troy ounces (ozt). It is powered by two AAA batteries (included) and includes an auto shut off to extend battery life.

Size: **8" × 5.13" × 0.75" (20 × 13 × 2 cm)**
Weight: **7 oz (0.2 kg)**

#166-03 Handheld Balance

OHAUS VALOR™ 1000 COMPACT ECONOMICAL SCALE, 33 LB CAPACITY, 0.01 LB (0.1 OZ) READABILITY

#166-16 115-VOLT
#166-16-1 230-VOLT

The OHAUS Valor™ 1000 precision scale is an economical choice for your basic weighing needs. Standard software includes check-weighing mode, accumulation mode, and multiple units of measure. This scale features a removable stainless steel weighing platform and a mid-profile ABS plastic housing with leveling adjustment. It also comes standard with a long-lasting, internal rechargeable battery and AC power adapter for ultimate portability and convenience.

Size: **12.8" × 6.25" × 11.9" (34 × 16 × 30 cm)**
Weight: **8.8 lb (4.0 kg)**

#166-16 OHAUS Valor™ 1000 Balance

ACCESSORIES FOR BALANCES

#153-26	Titration Dish, Polyethylene
#153-28	Stirring Rod, 4", Polyethylene
#153-68	Weigh Boat, Disposable, Medium, 78 × 78 mm
#153-69	Weigh Boat, Disposable, Large, 124 × 124 mm
#166-02	Weight Set with Hinged Covered Weight Box, Precision, 10 mg to 50 g
#166-07	Weight Set Attachment for Triple Beam Balance to Expand Capacity to 2610 g
#166-26	Thermal Printer with Date and Time for #166-25
#166-27	Anti-Vibration Table
#166-28	Data Collection Program (Balance Talk SL) for #166-25
#166-29	Disposable Aluminum Sample Pans, Package of 250

TRIPLE BEAM BALANCE, 610 × 0.1 GRAM #166-06

The Triple-Beam Balance features tiered, notched beams; below balance weighing; an integral security bracket; and a mass holder. An optional metric attachment weight set extends the scale range to 2,610 grams.

Size: **19.9" × 4.3" × 6.3" (51 × 11 × 16 cm)**
Weight: **7 lb (3.2 kg)**

#166-06 Triple Beam Balance

#166-07 Attachment Weight Set for Triple Beam Balance (Optional)

Special attention to mixing procedures and reagent preparation is essential in any qualitative fluid analysis. Factors such as low or high shear, initial mix concentrations, and an ability to change mixing speeds are important considerations when choosing a laboratory or field mixer. Routine laboratory mixing is easily handled with the Hamilton Beach® mixer. These mixers are perfect for formulating drilling fluids in the lab, and for pilot testing and mud additive analysis. All Hamilton Beach® mixers are available in either 115 or 230-volt power requirements. The Multi-Mixer 3-spindle and 5-spindle laboratory models are specifically recommended for many API test procedures. Spare impeller blades and stainless steel containers are also available. For higher shear rates, the Dispersator is commonly used.

SILVERSON® LAB MIXER WITH DIGITAL TACHOMETER

#152-15 L4RT, 115-VOLT
#152-15-1 L4RT, 230-VOLT
#152-15-5 L4RT-A WITH AMMETER DISPLAY

Size: **12" × 20" × 37" (31 × 51 × 94 cm)**
Weight: **50 lb (22.7 kg)**

The Silverson Laboratory Mixer is a high shearing instrument that is unsurpassed in speed, efficiency, and product uniformity. The L4RT is the most popular Silverson mixer and is ideal for mixing, emulsifying, homogenizing, disintegrating, and dissolving - with an efficiency and flexibility unmatched by other machines. It includes a general purpose mixing head, axial flow head and emulsifier screen.

Capacity: 1 mL to 12 Liters
Motor: ⅓ HP, 115-Volt, Single Phase, 50/60 Hz 230-Volt Optional
Max Speed: 8,000 RPM no load
6,000 RPM full load
Speed Control: Infinitely variable, electronic

Components:

#152-15-2	Bushing, PTFE
#152-15-3	Bushing, Bronze Alloy
#152-15-4	Coupling Pin
#152-15-6	Drive Shaft and Rotor

#152-15 Silverson L4RT Mixer®

DISPERSATOR MODEL 50 LAB MIXER WITH POWERSTAT AND HI-VIS HEAD WITH ANALOG TACHOMETER

#152-70 115-VOLT
#152-75 230-VOLT

The Model 50 Dispersator rotates at an extremely high speed of up to 10,000 RPM and is capable of handling quantities of materials ranging from 250 mL to 19 Liters. Dispersators disperse, emulsify, and put materials into solution quickly. Agglomerates are broken up, liquid particles are reduced in size, surface forces are overcome, and difficult products are "wetted out." The Model 50 features a 1 HP motor and powerstat speed controller for adjustments from 0 to 10,000 RPM. Three different interchangeable mixing heads are offered and should be specified when ordering.

Components:

#152-70-4	Analog Tachometer
#152-70-001	Dispersator with Powerstat (115-Volt Only)
#152-70-5	Powerstat, 0 - 10,000 RPM (115-Volt Only)
#152-75-002	Dispersator with Powerstat (230-Volt Only)
#152-75-003	Powerstat, 0 - 10,000 RPM (230-Volt Only)
#152-75-001	Shaft, 17" × ¾" Diameter
#152-70-3	Hi-Vis Head, 1½"

Size: **18" × 18" × 36" (46 × 46 × 91 cm)**
Weight: **50 lb (22.7 kg)**

#152-70-1 Duplex Head
A precision slotted cylindrical head with internal baffles that perform like a submerged centrifugal pump. Double shearing results in faster, more thorough mixing because it disperses materials that float and sink. Excellent for mixing low viscosity materials with solids that tend to settle.

#152-70-2 Simplex Head
Similar to the duplex head, the simplex head is more useful for dispersing materials heavier than the suspending liquid and is excellent for emulsifying and liquifying.

#152-70-3 Hi-Vis Head
A flat rotating disc with angled teeth along the periphery is useful for very high shearing action on shear thinning viscous liquids and pastes from 10,000 to 30,000 centipoise.

#152-70 Model 50 Dispersator

FIVE SPINDLE SINGLE-SPEED MULTI-MIXER

#152-50 NO LOAD SPEED 11,000 RPM, 115-VOLT, 60 HZ
#152-52 NO LOAD SPEED 9,225 RPM, 230-VOLT, 60 HZ
#152-52-1 NO LOAD SPEED 11,000 RPM, 230-VOLT, 50 HZ

Size: **22" × 18" × 14" (56 × 46 × 36 cm)**
Weight: **71 lb (32.2 kg)**

Note: Male connector for 230-Volt power cable sold separately.

Optional:

#152-40	Container, 30 oz, Stainless Steel
#152-41	Agitator Button
#152-41-1	Screw for Bottom Agitator
#152-43	Impeller Blade
#152-50-SP	Spare Parts for One Year for #152-50
#152-51	Case for Multi-Mixer, Soundproof, Stainless Steel
#152-52-2	Spare Part for Multi-Mixer
#164-32	Male Connector for 230-Volt Power Cable (US)
#164-34	Male Connector for 230-Volt Power Cable (European)

#152-50 Five Spindle Multi-Mixer

2-SPEED LABORATORY MIXER WITH STAND

#152-18 115-VOLT, 60 HZ
#152-18-1 230-VOLT, 50 HZ

Two Speed Switch and Motor - No load - 6,000 and 12,600 RPM

Size: **8" × 12" × 25" (20 × 31 × 64 cm)**
Weight: **18 lb 7 oz (8.4 kg)**

#152-18 2-Speed Laboratory Mixer with Stand

Component:

#152-18-100	Laboratory Mixer, 2-Speed (115-Volt Only)
#152-18-101	Laboratory Mixer, 2-Speed (230-Volt Only)
#152-18-2	Adjustable Stand

POWERSTAT®

#152-35 115-VOLT
#152-36 230-VOLT

#152-35 POWERSTAT® for 2-Speed Laboratory Mixer

THREE SPINDLE HAMILTON BEACH® MIXER WITH CONTAINERS, THREE SPEED

#152-20 115-VOLT, 60 HZ
#152-30 230-VOLT, 50 HZ

Size: 15" × 15" × 24" (38 × 38 × 61 cm)
Weight: 39 lb (17.7 kg)

Components:
#152-40 Container, Stainless Steel

#152-20 Three Spindle Hamilton Beach® Mixer

CUP MIXER

#163-10 12-VOLT
#163-20 115-VOLT

Size: 9" × 5" × 5" (23 × 12 × 12 cm)
Weight: 2 lb 14 oz (1.3 kg)

Components:

#130-46	Male Plug Connector (12-Volt Only)
#152-42	Agitator Button, Lower
#152-87	Motor, 1/15 HP (115-Volt Only)
#163-10-001	Motor, 1/35 HP (12-Volt Only)
#163-10-1	Power Cord, 18-2 (12-Volt Only)
#163-20-1	Splash Guard
#163-20-2	Shaft, Stainless Steel
#163-20-3	Power Cord with In-line, Single-Speed Switch, 18-3 SJT, 8' (115-Volt Only)
#163-20-4	All Thread, 8-32 × 4½"

#163-10 Cup Mixer

SINGLE SPINDLE HAMILTON BEACH® MIXER WITH CONTAINER, THREE SPEED#152-00

115-VOLT, 60 HZ
#152-10 230-VOLT, 50 HZ

Size: 7.25" × 8.5" × 21.25" (18 × 22 × 54 cm)
Weight: 13 lb (5.9 kg)

Components:
#152-40 Container, Stainless Steel

Optional:
#152-00-SP Spare Parts for One Year for #152-00

#152-00 Single Spindle Hamilton Beach® Mixer

Did you know?

We want to make ordering easy for you! You can email us at sales@ofite.com, call us at 1-877-TEST-MUD (1-877-837-8683) or 713-880-9885, fax us at 713-880-9886, or shop online at www.ofite.com.

WARING BLENDER WITH GLASS CONTAINER
#152-60 MODEL 700G, 115-VOLT
#152-60-1 MODEL 800G, 230-VOLT

The Model 700G/800G is a single-speed blender with a one-liter heat-resistant glass container with handle and two-piece vinyl and styrene lid. With a no-load test speed of 22,000 RPM, it is perfect for high-shear blending.

Size: 8" × 9" × 15.5" (20 × 23 × 39 cm)
Weight: 10 lb 12 oz (4.9 kg)

Components:
#152-64 Container, 1 L, Glass

#152-60 Model 700G Waring Blender

2-SPEED HAMILTON BEACH® BLENDER, 32 OZ (946 ML) STAINLESS STEEL CONTAINER, 115-VOLT, 60 HZ
#152-04

Size: 13" × 10.8" × 8" (33 × 27 × 20 cm)
Weight: 9 lb 4 oz (4.2 kg)

Did you know?

OFITE has an engineering services department ready to help you with your next custom design project.

WARING BLENDER WITH EXCITER GEAR, MAGNETIC PICK UP, AND STAINLESS STEEL CONTAINER, 2-SPEED
#122-210 115-VOLT
#122-209 230-VOLT

Size: 13.5" × 9.5" × 8.25" (34 × 24 × 21 cm)
Weight: 12 lb 13 oz (5.8 kg)

#122-209 Waring Blender

Component:

#122-208-1	Exciter Gear, Ten-Tooth
#122-209-1	Waring Blender (230-Volt Only)
#122-210-1	Waring Blender (115-Volt Only)
#122-210-2	Computer Plug
#122-210-3	DBA Connector, 9-Pin
#122-210-4	Connector Shield

2-SPEED HAMILTON BEACH® BLENDER WITH ½ GALLON (1.9 L) STAINLESS STEEL CONTAINER, MODEL HBF400
#152-05 115-VOLT
#152-05-1 230-VOLT

Size: 18" × 7" × 8" (45 × 18 × 20 cm)
Weight: 9 lb 7 oz (4.3 kg)

#152-05 2-Speed Hamilton Beach® Blender

Compact magnetic stirrers use a minimum amount of bench space and are routinely used in chemical preparation and testing.

STIR LIGHT MAGNETIC STIRRER WITH FLUORESCENT LIGHT
#153-53-2 115-VOLT, 60 HZ
#153-53-3 230-VOLT, 50 HZ

Variable 100 - 1,000 RPM

Size: **8.75" × 12.5" × 11.5" (22 × 32 × 29 cm)**
Weight: **8 lb 12 oz (4 kg)**

Component:
#153-53-2-001 Cover, Plastic

#153-53-2 Stir Light Magnetic Stirrer

STIRRING HOT PLATE
#150-83 115-VOLT
#150-84 230-VOLT

Size: **12" × 10" × 7.5" (31 × 25 × 19 cm)**
Weight: **6 lb 6 oz (2.8 kg)**

#150-83 Stirring Hot Plate

HEATED MAGNETIC STIRRER WITH STIR BAR
#152-45 115-VOLT, 60 HZ
#152-46 230-VOLT, 50 HZ

Temperature to 1,022°F (550°C), 100 - 1,100 RPM

Size: **10" × 7.5" × 12" (25 × 19 × 30 cm)**
Weight: **8 lb 8 oz (3.8 kg)**

#152-45 Heated Magnetic Stirrer

STIRRING HOT PLATE
#152-48 115-VOLT
#152-49 230-VOLT

Temperature to 1,004°F (540°C), 60 to 1,200 RPM

Size: **8.75" × 6" × 11.5" (22 × 15 × 29 cm)**
Weight: **6 lb 12 oz (3 kg)**

#152-48 Stirring Hot Plate

Optional:
#152-48-1 Support Rod, ½" × 12"

MAGNETIC STIRRER WITH TFE-COATED STIR BAR, 60 - 1,200 RPM, 230-VOLT #153-53-7

Size: 9" × 12" × 6" (23 × 30 × 15 cm)
Weight: 6 lb 3 oz (2.8 kg)

#153-53-7 Magnetic Stirrer

MAGNETIC STIRRER WITH TFE-COATED STIR BAR, 200 - 2,500 RPM, 115-VOLT #153-53

Size: 13" × 9" × 11" (33 × 23 × 28 cm)
Weight: 3 lb 14 oz (1.8 kg)

#153-53 Magnetic Stirrer

CORNING® MAGNETIC STIRRER, DIGITAL READOUT, 60 - 1,150 RPM, TOP PLATE 5" × 7" (12.7 × 17.8 CM)
#153-53-12 115-VOLT
#153-53-13 230-VOLT

The digital display accurately indicates stirring speeds and also indicates when set stirring speeds are reached. Exclusive closed-loop stirring control monitors and regulates the speed with an accuracy within 5%. The frame includes a built-in mount for an optional 18" (45.7 cm) support rod for accurate titrating, and the angled front panel deflects spills from the electronics.

Size: 7.75" × 10" × 4.5" (20 × 25 × 11 cm)
Weight: 6.4 lb (2.9 kg)

#153-53-12 Magnetic Stirrer

BATTERY-POWERED MAGNETIC STIRRER #153-53-10

This battery-powered magnetic stirrer operates on two D-size batteries (not included). The small size makes it ideal for portable operation.

Size: 6" × 3.3" × 2.1" (15 × 8 × 5 cm)
Weight: 12 oz (340 g)

#153-53-10 Battery-Powered Magnetic Stirrer

HOT PLATE WITH THERMOSTAT
#168-01 115-VOLT
#168-01-1 230-VOLT

Size: 6" × 6" × 6" (15 × 15 × 15 cm)
Weight: 2 lb (907 g)

#168-01 Hot Plate with Thermostat

HOT PLATE
#168-03 115-VOLT
#168-03-1 230-VOLT

Size: 8" × 7.5" × 6" (20 × 19 × 15 cm)
Weight: 3 lb 5 oz (1.5 kg)

#168-03 Hot Plate

SPIN DRYER FOR CUTTINGS
#152-80

Size: 15" × 8" × 7" (38 × 20 × 18 cm)
Weight: 4 lb (1.8 kg)

The Cuttings Spin Dryer is designed for centrifugal quick-drying of cuttings samples without damaging them. Its compact design makes it ideal for remote locations. It is constructed of stainless steel and brass.

Components:
#152-81 Inner Dryer Basket
#152-82 Outer Cup, Stainless Steel
#152-83 Bearing Post
#152-84 Rubber Drive Clutch
#152-85 Motor Shaft Collar
#152-86 Bearing
#152-87 Motor, 1/15 HP, 115-Volt
#152-88 Bracket Set
#152-89 Microswitch
#170-29 Power Cord with Male Plug, 6'

ACCESSORIES FOR MIXERS, BLENDERS, AND STIRRERS

#152-37	AC Power Cord, 3-Conductor
#152-37-1	AC Power Cord, 3-Conductor, Beige
#152-38	AC Power Cord, 3-Conductor, International
#152-47	Agitator for Hamilton Beach® Mixers, Butterfly
#152-41	Agitator Button for Hamilton Beach® Mixers, Upper
#152-42	Agitator Button for Hamilton Beach® Mixers, Lower
#152-01	Armature for Model 936 Hamilton Beach® Mixer, 115-Volt
#152-02	Armature for Model 936 Hamilton Beach® Mixer, 230-Volt
#122-200	Blending Assembly for Waring Blender, 1 qt
#122-207	Blade for Blender, 1 qt
#152-03	Brush and Spring Set for Hamilton Beach® Mixer, 115-Volt
#152-03-1	Brush and Spring Set for Hamilton Beach® Mixers, 230-Volt
#152-51	Case for Multi Mixer®, Sound Proof, Stainless Steel
#152-40	Container for Mixers, 30 oz, Stainless Steel
#152-39	Container with Handle for Mixers, Stainless Steel, 30 oz
#152-64	Container Assembly with Lid for Model 700, 1 L, Glass
#152-07	Container Guide for Model 936
#152-09	Container Guide for Model 950
#152-06	Container Rest for Model 936
#163-09	Impeller for 2-Speed Laboratory Mixer
#152-43	Impeller Blade for Multi-Mixer
#152-11	Motor for Models 936 and 950 Hamilton Beach® Mixers, 115-Volt
#152-12	Motor for Models 936 and 950 Hamilton Beach® Mixers, 230-Volt
#152-35	Powerstat, 115-Volt
#152-36	Powerstat, 230-Volt
#152-44	Screw for Lower Impeller for Hamilton Beach® Mixer
#152-41-1	Screw for Bottom Agitator for Multi-Mixer
#152-08	Screw for Container Guide for Model 936
#152-53	Spacer for One-Agitator Spindle
#153-53-11	Stirring Bar, Magnetic, ½" × 5/16"
#153-53-6	Stirring Bar, Magnetic, ⅞" × 5/16"
#153-53-1	Stirring Bar, Magnetic, 1" × 5/16"
#153-53-4	Stirring Bar, Magnetic, 1½" × 5/16"
#153-53-5	Stirring Bar, Magnetic, 2" × 5/16"
#153-53-8	Stirring Bar, Spin Wedge, 1¾" × ½"
#130-74	Transformer, 230 to 115 Volts, 1.10 Amps, 50 / 60 Hz

#152-80 Spin Dryer for Cuttings

Optional:
#130-74 Transformer, 230 to 115 Volt, 1.10 Amps, 50 / 60 Hz

Centrifuges

A centrifuge, or “shake-out device”, as it is sometimes called, mechanically subjects fluids to increased “G forces” that accelerate the settling rate of particles within the fluid. This procedure separates particles from fluids into heavy-coarse and light-fine fractions and is dependent upon separation by particle size and specific gravity.

The OFITE hand crank centrifuge is perfect for field use. Available in several sizes, the simple, compact design eliminates complicated operation and assures years of dependable service. OFITE also offers electric, heated, and multiple-head models suitable for many laboratory applications.

Also available is a wide variety of centrifuge tubes, sold separately.

PORTABLE CENTRIFUGE, 2-PLACE HEAD AND SHIELDS FOR 12.5 ML TUBES, 1750 RPM

#153-25-15 115-VOLT
#153-25-12 12-VOLT

Size: 13.75" × 8" × 6.5" (34.9 × 20.3 × 16.5 cm)
Weight: 7 lb 4 oz (3.3 kg)

#153-25-15 Portable Centrifuge

Optional:
#130-74 Transformer, 230 to 115 Volts, 1.10 Amps, 50 / 60-Hz

CENTRIFUGE FOR 12.5 ML TUBES, 4-PLACE HEAD, HEATED

#153-220 115-VOLT
#153-222 230-VOLT

Size: 18" × 14" × 9" (46 × 36 × 23 cm)
Weight: 32 lb (14.5 kg)

CENTRIFUGE FOR 12.5 ML TUBES, 4-PLACE HEAD, NON-HEATED

#153-221 115-VOLT
#153-223 230-VOLT

Size: 14" × 14" × 9" (36 × 36 × 23 cm)
Weight: 24 lb (10.9 kg)

CENTRIFUGE FOR 100 ML SHORT-CONE TUBES, 4-PLACE

#153-224 NON-HEATED, 115-VOLT
#153-225 NON-HEATED, 230-VOLT
#153-226 HEATED, 115-VOLT
#153-227 HEATED, 230-VOLT

Size: 21.5" × 20" × 11.5" (55 × 51 × 29 cm)
Weight: 40 lb (18.1 kg)

CENTRIFUGE FOR 100 ML PEAR-SHAPED CONE TUBES, 4-PLACE

#153-228 NON-HEATED, 115-VOLT
#153-229 NON-HEATED, 230-VOLT
#153-230 HEATED, 115-VOLT
#153-331 HEATED, 230-VOLT

Size: 21.5" × 20" × 11.5" (55 × 51 × 29 cm)
Weight: 40 lb (18.1 kg)

#153-220 - #153-331 Robinson Centrifuge

HAND-CRANK CENTRIFUGE WITH 4-PLACE HEAD AND SHIELDS FOR 15 ML TUBES #153-25-2

Size: 11.5" × 6" × 4.5" (29 × 15 × 11 cm)
Weight: 2 lb (900 g)

#153-25-2 Hand-Crank Centrifuge, 15 mL

HAND-CRANK CENTRIFUGE WITH 2-PLACE HEAD AND SHIELDS FOR 100 ML TUBES #153-25-1

Size: 9.5" × 4" × 3.5" (24 × 10 × 8.9 cm)
Weight: 1 lb 8 oz (680 g)

#153-25-1 Hand-Crank Centrifuge, 100 mL Capacity

TUBES AND PARTS FOR CENTRIFUGE

#153-00 Bottle Brush for Centrifuge Tubes
#153-19 Tube, 15 mL × 0.1 mL, Glass, 12 cm
#153-21 Tube, Kolmer, 10 mL, Glass, 12.5 cm
0 - 2 mL × 0.1 mL
2 - 10 mL × 0.2 mL
#153-22 Tube, API, 12.5 mL, 100%, Glass, 12 cm
0 - 3% × 0.2%
3 - 10% × 0.5%
10 - 50% × 1%
#153-23 Tube, ASTM, Pear Shaped, 100 mL
0 - 2 mL × 0.2 mL
2 - 10 mL × 1.0 mL
10 - 25 mL × 5.0 mL
25 - 100 mL × 25.0 mL
#153-24 Tube, Pear Shaped, 100 mL, Glass Stoppered
0 - 0.2 mL × 0.01 mL
Body at 25, 50, and 100 mL
#153-25-20 Centrifuge Tube, Oil, 100 mL, Short Cone
0.0 - 0.5 mL × 0.05 mL
0.5 - 2.0 mL × 0.1 mL
2.0 - 3.0 mL × 0.2 mL
3.0 - 5.0 mL × 0.5 mL
5.0 - 10.0 mL × 1.0 mL
10.0 - 25.0 mL × 5.0 mL
25.0 - 100.0 mL × 25.0 mL
#153-25-3 Shield for 10 - 15 mL Tubes, Aluminum
#153-25-4 Head Assembly for two 15 mL Tubes for #153-25
#153-25-5 Shield for 10 - 15 mL Tubes, Plastic, for #153-25-2
#153-25-7 Handle for #153-25-2 Centrifuge
#153-25-13 Shield for 12.5 mL Tube with Cushion for #153-25-12 and #153-25-15

#153-19

#153-21

#153-22

#153-23

#153-24

#153-25-20

DYNAMIC LINEAR SWELL METER WITH COMPACTOR AND COMPUTER

#150-80 115-VOLT
#150-80-1 230-VOLT

Investigating the swelling characteristics of shale formations is vital in selecting a proper drilling fluid to give maximum inhibition and wellbore stability. While drilling a well, a shale formation will immediately begin to swell if the drilling fluid is not completely compatible with the formation. This swelling can cause many problems, such as bit balling, pipe drag, hole sloughing, or other "gumbo" related problems. Therefore, selecting the proper drilling fluid prior to, or during the drilling operation, can be very beneficial in achieving a stable wellbore.

The OFITE Linear Swell Meter is designed to simultaneously test up to four drilling fluids (expandable to eight) on a representative shale sample for extended periods of time at temperatures up to 180°F.

Most swell meters are designed to test shale samples in static fluid. However, fluids circulate as you drill, so testing shale samples in a static environment does not always provide accurate readings.

The OFITE Linear Swell Meter is the *only* swell meter on the market capable of **dynamically** testing your fluids**,** so you obtain the most accurate data possible.

Size: **20.5" × 14.5" × 25" (52 × 37 × 64 cm)**
Weight: **220 lb (100 kg)**

Swell Meter and Compactor:
Crated Size: **27" × 21" × 47" (65 × 53 × 120 cm)**
Crated Weight: **312 lb (142 kg)**

Instrument Control:
Crated Size: **37" × 20" × 32" (94 × 51 × 81 cm)**
Crated Weight: **235 lb (107 kg)**

Components:

#122-224	Valve
#130-75-71	Monitor
#130-75-74	Desktop Computer
#130-76-03	Thermocouple
#130-76-11	Terminal
#130-77-025	Leveling Leg
#130-78-046	Tube Fitting, Swagelok, Male Connector, ¼" Tube OD × ⅜" Male NPT, Stainless Steel
#130-79-06	Cable
#130-79-09	Connector Board, 50-Channel
#130-79-14	Printer
#150-80-001	Knob
#150-80-03	Screen, Flat, 1 1/16" Diameter
#150-80-047	Fuse Holder
#150-80-058	Spring
#150-80-061	Thermocouple Module
#150-80-062	DC Voltage Module
#150-80-064	LVDT
#150-80-065	Connector for LVDT
#150-80-067	Micrometer
#150-80-074	Quick-Connect Stem
#150-80-11	Micrometer Bushing
#150-83	Stirring Hot Plate (115-Volt Only)
#150-84	Stirring Hot Plate (230-Volt Only)
#150-85	Relief Valve, 2,900 PSI (20 MPa)
#152-37	AC Power Cord, 3-Conductor (115-Volt Only)
#152-38	AC Power Cord, 3-Conductor, International (230-Volt Only)
#153-67	Syringe, Disposable, 60 cc
#171-44	Rubber Foot, ¾"
#171-68	Pilot Light, Red

Optional:

#130-79-14-1	USB 2.0 Cable, A/B, 10'
#150-81-1	Swell Meter Control Assembly, Single Unit (115-Volt Only)
#150-81-2	Swell Meter Control Assembly, Single Unit (230-Volt Only)

#150-80 Dynamic Linear Swell Meter

#150-82 Compactor for Dynamic Linear Swell Meter

OFITE DIGITAL EP / LUBRICITY TESTER
#111-00 115-VOLT
#111-00-1 230-VOLT

When there is relative motion between two contacting bodies, frictional forces that resist motion always come into play. Frictional resistance to rotation of the drill string is called torque, and is especially enhanced when drilling a deviated hole. Many different materials, such as graphite, fine mica, and diesel or crude oil, have been used as mud additives to improve lubricity. Since evaluation of the various materials cannot realistically be done on the drilling rig, a lubricity test was designed to simulate the speed of rotation of the drill pipe and the pressure with which the pipe bears against the wall of the hole. The OFITE combination EP and Lubricity tester is a high-quality instrument used to measure the lubricating quality of drilling fluids, provide data to evaluate the type and quantity of lubricating additives that may be required, and predict wear rates of mechanical parts in known fluid systems. The test consists of measuring the torque of a steel block while being pressed against a rotating steel ring. The torque limit is 600 inch-pounds. Test rings and blocks for both tests are available from OFITE.

EP (Extreme Pressure Test)
This test produces an indication of the film strength of the fluid being tested by applying a measured force to a torque-sensitive bearing cup with the torque arm. The EP test is typically run at a high shear rate, 1,000 RPM, with fluid pressures ranging from 5,000 to 100,000 PSI between the steel surfaces.

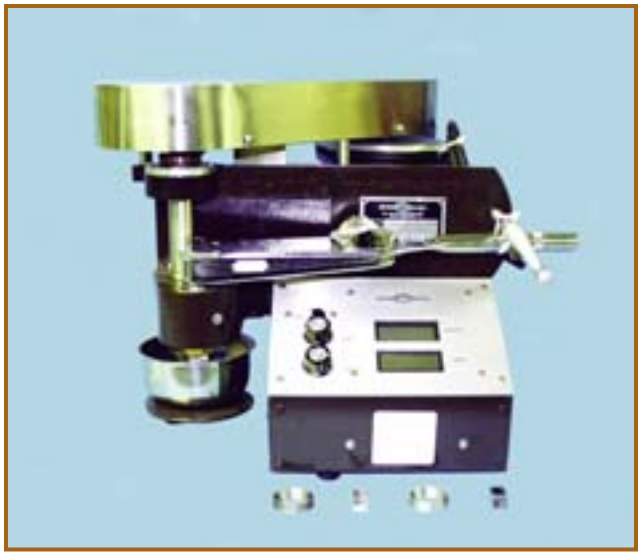
Lubricity
(Surface to Surface Drag Test)
The more common lubricity test measures fluid resistance of various lubricating additives. For the standard lubricity coefficient test, 150 in-pounds of force (the equivalent of 5,000 to 10,000 PSI pressure on the intermediate fluid) is applied between two hardened steel surfaces, a block, and a ring rotating at 60 RPM.

Size: **19" × 15" × 14" (48 × 38 × 36 cm)**
Weight: **56 lb (25.4 kg)**

Crated Size: **22" × 20" × 21" (56 × 51 × 53 cm)**
Crated Weight: **95 lb (43 kg)**

Components:
#111-02 Test Ring for Lubricity Test
#111-04 Test Block for EP Test (Cube)
#111-06 Test Ring for EP Test
#111-08 Test Block for Lubricity Test (Concave)
#111-09 Sample Cup
#111-10 Torque Wrench
#111-13 Grinding Compound, Abrasive Paste, 280 Grit, Fine, 16 oz, Silicone Carbide
#111-14 Grinding Compound, Abrasive Paste, 120 Grit, Coarse, 16 oz, Silicone Carbide
#111-16 Service Wrench, ¾"
#111-17 Service Wrench, 1¼"
#111-18 Combination Wrench, 15⁄16"
#164-32 Male Connector for Power Cable (230-Volt Only)

Optional:
#111-00-5 Power Supply Assembly
#111-00-SP Spare Parts for One Year for #111-00
#111-00-1-SP Spare Parts for One Year for #111-00-1
#111-01 Case, Padded for Transport
#111-11 Measuring Magnifier with Inch Scale, 7×
#111-15 Transformer, 230/115 V, 60 Hz (older models)



#111-00 OFITE Digital EP and Lubricity Tester

OFITE Innovation

OFITE was the first to offer an EP/Lubricity Tester with digital readout.

ANALOG RESISTIVITY METER WITH BATTERY AND CASE
#130-85

The OFITE Resistivity Meter is a portable measuring instrument designed to give a quick, reliable measurement of the resistivity from a small sample, expressed in ohm-meters. This transistorized meter accurately measures the resistivity of fluids, slurries, and semi-solids with resistivities from 0.01 to 10 ohm-meter^2/meter. This ohm-meter reading can also be converted into parts per million sodium chloride using the Nomograph supplied.

The transparent Lucite® cell with built-in thermometer can be easily removed and cleaned. The meter is powered by readily available 9-Volt batteries and is rugged enough for field usage. Highly accurate and reproducible readings of filter cake and fluids are easily obtained.

Size: **9.5" × 6.5" × 3.5" (24 × 17 × 9 cm)**
Weight: **2 lb 7 oz (1.1 kg)**

Components:

#130-85-01	Electrode Contacts (65303)
#130-85-02	Probe with Thermometer (65314)
#130-85-04	Rubber Suction Bulb for Probe (63207)
#130-85-05	Analog Meter (L6847)
#130-85-020	Printed Circuit Board Assembly
#147-02	Alkaline Battery, 9-Volt
#165-43	Pipe Cleaner

Case:

#130-85-07	Carrying Case with Padded Insert

Optional:

#130-87-014	Calibration Fluid, 1,413 µmhos, 1 L
#130-87-015	Calibration Fluid, 10,000 µmhos, 1 L
#130-87-016	Calibration Fluid, 50,000 µmhos, 1 L

#130-85 OFITE Resistivity Meter with Case

DIGITAL RESISTIVITY METER WITH BATTERIES AND CASE
#130-87

The OFITE Digital Resistivity Meter accurately measures the resistivity of fluids, slurries, and semisolids having resistivities from 0.01 to 400 ohm-meters. The digital display shows both resistivity (in ohm-meters) and concentration of NaCl (in ppm, kppm, and gr/gal), as well as temperature (in °C or °F).

Size: **8.0" × 5.0" × 3.5" (20 × 13 × 9 cm)**
Weight: **2 lb 14 oz (1.3 kg)**

Components:

#130-10-501	Socket
#130-76-42	Display
#130-85-04	Rubber Suction Bulb
#130-87-001	Standoff
#130-87-003	Black Case
#130-87-004	Mounting Plate
#130-87-005	Screw
#130-87-006	Keypad
#130-87-007	Circuit Board
#130-87-008	Thermister
#130-87-009	Battery Holder Plate
#130-87-010	Bezel
#130-87-011	Stand Off
#130-87-012	Flat Head Screw, 4 - 40, Stainless Steel
#130-87-013	Header, 16-Pin
#130-87-04	Contact Post
#130-87-05	Resistivity Probe Assembly
#147-02	9-Volt Battery, Alkaline
#165-43	Pipe Cleaner

Optional:

#130-10-30	Power Supply
#152-37	AC Power Cord, 3-Conductor (115-Volt Only)
#152-38	AC Power Cord, 3-Conductor (230-Volt Only)
#130-87-014	Calibration Fluid, 1,413 µmhos, 1 L
#130-87-016	Calibration Fluid, 50,000 µmhos, 1 L

#130-87 Digital Resistivity Meter with Case

OFITE EMULSION STABILITY TESTER WITH CALIBRATION STANDARDS, BATTERIES, AND CASE
#131-50

The Electrical Stability (ES) of an oil-based drilling fluid is a property related to its emulsion stability and oil wetting ability. The OFITE Emulsion Stability Tester determines ES by applying a precision voltage-ramped sinusoidal signal across a pair of parallel flat plate electrodes that are immersed in the fluid. The resulting current remains low until a threshold voltage (61 ± 5 µA) is reached. Then the current rises very rapidly. The point at which the fluid becomes conductive is the dielectric breakdown voltage, or the "ES" of the fluid, and is the voltage in peak volts measured when the current reaches the 61 µA point. The API recommended sine-wave circuitry results in a more efficient energizing of the fluid and generates considerably lower ES values than the old style "spiky" waveform instruments. The symmetry of the sinusoidal signal inhibits the buildup of solids on the electrode faces and enhances reproducibility. To further enhance reproducibility and as a safety factor, OFITE introduced push button automatic voltage ramping at a fixed ramp rate. The unit consists of a meter, probe electrode, calibration standards, and four 9-volt alkaline batteries.

Size: **9.5" × 6.5" × 3.5" (24 × 17 × 9 cm)**
Weight: **2 lb 15 oz (1.3 kg)**

Components:

#131-01	Probe
#131-51	High/Low Calibration Standard
#131-52	Battery Holder, 9-Volt
#131-53	Switch, Push-Button, On / Off
#131-54	Switch Boot
#147-02	Battery, 9-Volt Alkaline

Optional:
#131-50-SP Spare Parts for One Year for #131-50

#131-50 OFITE Sine Wave Emulsion Stability Tester

OFITE Innovation

OFITE was the first to offer a push-button Emulsion Stability Tester.

TYPE K DIGITAL THERMOMETER
#154-25 STANDARD
#154-25-5 WITH NIST CERTIFICATION

This economical meter features a large ½" display and accepts all type K thermocouple probes with ANSI mini-connectors. The meter components include a HOLD button which freezes readings, °C/°F switch, and Field Cal. which allows the user to calibrate our error factors of individual probes. The meter comes with a 9-volt battery, a carrying case and instructions. The type K probes must be ordered separately and are listed below.

Features and Specifications:
- Temperature range of -50 - 1,999°F (-50 - 1,300°C)
- 0.1 resolution from -50.0 - 199.9 auto-ranging to 1 above 199.9
- ±0.5% of reading or ±1°C, whichever is greater
- Low battery indicator
- 3½" digit LCD, ½" H
- One 9-Volt battery provides 120 hours continuous operation
- NIST certification available upon request

Size: **3" × 6.5" × 1" (8 × 17 × 3 cm)**
Weight: **2 lb (0.9 kg)**

Probes (must be ordered separately):

#154-25-1	Type K Probe, 4", -418° - 1,500°F (-250° - 816°C) with 5-ft Coiled Cable
#154-25-2	Type K Flexible Probe for Retorts, 12" -418° - 1290°F (-250° - 700°C) *Not recommended for aqueous solutions*

#154-25 Thermometer with Probe

TRACEABLE FULL-SCALE THERMOMETER
#154-06

Readings are displayed every second and displayed on a 0.4" (1 cm) LCD readout. Magnetic back allows for placement on metal surface. Stainless steel probe with 10' (304.8 cm) long cable and piercing tip. Switchable ranges are -58 to 500°F and -50 to 250°C. A 1.5-Volt silver oxide battery provides 1½ years of continuous use. A serial numbered certificate indicates instrument traceability to standards provided by the NIST.

#154-06 Thermometer, Traceable Full-Scale

OTHER THERMOMETERS

#154-24	ASTM 90C, Glass, 0 - 30°C × 0.1°C
#154-26	ASTM 34F, Glass, 77° - 221°F × 0.5°F
#154-04	Digital Long Stem, NIST Traceable, 8" Stem, -58° - 302°F (-50° - 150°C)
#154-05	Digital, 4" Probe, 14° - 392°F (-10 - 200°C)
#154-01	Dual-Scale, 5" Stem, Metal Dial, 0° - 220°F (-10° - 100°C)
#154-10	Dual-Scale, 5" Stem, Metal Dial, 50 - 500°F (0° - 250°C)
#154-15	Dual-Scale with Metal Dial, 4" Stem, 50° - 500°F (0° - 250°C)
#154-20	Dual-Scale with Metal Dial, 8" Stem, 50° - 500°F (0° - 250°C)
#154-23	General Purpose, Total Immersion, Mercury-Filled, Glass, 0° - 230°F
#154-22	Pocket, 5" Stem, 1" Dial, 0° - 220°F
#154-00	Metal Dial, 5" Stem, 0 - 220°F
#147-03	Spirit-Filled (Non-Mercury), -20° - 105°C

Did you know?

We want to make ordering easy for you! You can email us at sales@ofite.com, call us at 1-877-TEST-MUD (1-877-837-8683) or 713-880-9885, fax us at 713-880-9886, or shop online at www.ofite.com.

The most commonly measured chemical parameter in aqueous solutions is acidity and alkalinity. pH analysis is fundamental to drilling fluid control, water and wastewater treatment, chemical production, and environmental monitoring. The pH of the fluid affects clay dispersion and the solubility and effectiveness of chemical additives. A change in pH while drilling often indicates contamination by substances such as cement, gypsum, or carbon dioxide. Effective corrosion control and treatment depends upon the proper pH adjustment.

The full pH scale ranges from 0 to 14, with a "neutral" solution having a pH value of 7 at 77°F (25° C). In a neutral solution the hydrogen ion (H^+) and the hydroxyl ion (OH^-) concentrations are equal at 1×10^{-7} moles/liter. Solutions with a pH value less than 7 are termed "acid" while those with a pH value greater than 7 are termed "basic" or "alkaline". Since pH is defined as the negative logarithm of the hydrogen ion concentration, a change of 1 pH unit indicates a tenfold change in the hydrogen ion concentration.

There are two accepted methods for measuring pH, the colorimetric method using paper strips, and the electrometric method which utilizes a pH meter and electrode.

ION 510 LABORATORY PH/ION/MV/TEMP METER, DOUBLE-JUNCTION PH ELECTRODE AND TEMPERATURE PROBE, ELECTRODE STAND, ADAPTER 110 AND 230 VAC
#147-04

The pH 510 is the ideal advanced meter for water quality testing in the laboratory or field, providing an economical way to read multiple test parameters. The operator can easily toggle between pH, Ion or mV modes, and the large dual display simultaneously shows the measured parameter and the temperature (°C / °F). The instrument features easy push button calibration for pH with automatic buffer recognition. The memory function stores and recalls a combination of 50 pH, mV, and ion readings. The Ion 510 meter includes a built-in electrode stand and a handy slide-out instruction card. The water resistant membrane keypad protects components from accidental spills. AC adapters are included, enabling the instrument to operate on 115 VAC 60 Hz or 230 VAC 50 Hz.

Specifications:

Measuring Parameters: ph, mV, °C, Ion concentration, relative mV
Special Features: Low cost
Direct ion concentration readout

pH:
- Range: 0.00 - 14.00
- Resolution: 0.01
- Accuracy: ±0.01
- Calibration: Three custom points

Millivolt:
- Range: -1999 - 1999
- Resolution: 0.1 mV from ±199.9 mV, > 1.0 mV
- Accuracy: ±0.2 mV from ±199.9 mV, > ±2.0 mV
- Calibration: Offset up to ± 150 mV

Ion:
- Range: 0.01 - 1999 ppm
- Resolution: 0.01 ppm / 0.1 ppm / 1 ppm
- Accuracy: ±0.5% of reading
- Calibration: 2 or 3 points: 0.1, 1, 10 , 100

Temperature:
- Range: 0.0 - 100.0°C
- Resolution: 0.1°C
- Accuracy: ±0.3°C
- Calibration: Offset 0.1°C, Increments to ± 5°C
- Temperature Compensation Automatic or Manual, 0 - 100°C

Special Functions:
- Memory: Holds 50 pH, mV or ion readings
- Output: Recorder
- Stand: Built-in Electrode Stand
- Power: 115 / 230 VAC, 50 / 60 Hz

Optional:

#147-09	Reference Fill Solution for Double Junction Electrodes, KCl, 4M, 125 mL
#147-10-2	ISE with Solution Kit, Potassium, Double-Junction, Glass Body

#147-04 Ion 510 pH Meter

ACORN® PORTABLE METER WITH PH ELECTRODE AND ATC PROBE, PH BUFFER SOLUTIONS, SAMPLE BOTTLES, PROBE SOAKER BOTTLE, BATTERIES, AND HARD CARRYING CASE

147-01 ACORN® PH 5, PH / TEMP METER
147-06 ACORN® ION 6, PH / mV / ION / TEMP METER

The Acorn® pH 5 and Acorn® Ion 6 Meters are rugged and compact instruments offering a high degree of accuracy at an extremely affordable price. They provide precise readings with a 0.01 pH resolution over the full 0-14 pH range, and are equally suitable in the field, plant, laboratory, or classroom. Simple, push-button operations are fast and easy and automatic buffer recognition makes calibration procedures a snap. The meters are furnished in kit form, with a combination electrode in a carrying case, and include everything necessary for highly accurate pH measurements. The meter itself is shielded in a protective boot which features a convenient, built-in stand. The Ion 6 Meter may be used with any ion selective electrode (ISE) with BNC connections to take accurate direct measurements of ion concentrations such as sodium and potassium readings, etc.

#147-06 Acorn® 6 pH System

#147-01 Acorn® 5 Digital pH Meter

Specifications:

Acorn® pH 5 and Ion 6

pH Range:	0.00 to 14.00
Resolution:	0.01 pH
Accuracy:	±0.01 pH
Calibration Points:	1 to 3 (push button)
Temp Range:	0.0 - 100.0°C
Temp Resolution:	0.1°C
Temp Compensation:	Automatic / Manual (0 to 100°C)
Temp Calibration:	Yes
Buffer Recognition:	Yes
Auto Shut-Off:	17 Minutes
Display:	LCD
Power:	4 × AAA Batteries
Battery Life:	70 hours
Dimensions:	5.5" × 2.7" × 1.3" (14 × 7 × 4 cm)
Weight:	1 lb (500 g)

Ion 6 Meter #147-06:

Ion Range:	0.01 - 1999 ppm
Ion Resolution:	0.01 ppm up to 199.9 ppm 1 ppm up to 1999 ppm
Ion Accuracy:	±.5% of Reading
Millivolt:	Accepts Ion Selective Electrodes (ISE)
Millivolt Range:	-500 - 500 mV
mV Resolution:	0.1 mV between -199.9 mV and 199.9 mV 1 mV outside this range
mV Accuracy:	±.2 mV between -199.9 mV and 199.9 mV ±2 mV outside this range

Size: 14" × 10.5" × 3" (36 × 27 × 8 cm)
Weight: 3 lb 12 oz (1.7 kg)

Components for #147-06 Acorn® Ion 6 Meter:

#147-10-1	Double-Junction Electrode, Epoxy Body, Flushable and Refillable

Optional:

#147-01-SP	Spare Parts for One Year for #147-01
#147-02-1	Battery, AAA
#147-03	Thermometer, -20° - 105°C
#147-06-2	Deluxe Portable pH Meter Kit
#147-06-3	pH Electrode Saver Bottle
#147-06-4	pH Calibration Pouch, pH 4.01
#147-06-5	pH Calibration Pouch, pH 7.00
#147-06-6	pH Calibration Pouch, pH 10.0
#147-06-7	Deionized Rinse Water Pouch

SOLID STATE PH METERS, IQ SYSTEMS

These are ultra rugged pH systems ideally designed for field usage, utilizing a non-glass pH probe with a silicon chip sensor that stores dry, requires no maintenance, and is easily cleaned. Accurate measurements of samples as small as a single drop are easily performed. The probes have an extremely long life ranging from 18 months to over 5 years.

MINILAB SERIES IQ125 POCKET-SIZE PH METER, NON-GLASS SENSOR, WATERPROOF, ATC #147-11

pH Range:	2.00 - 12.00
Temp Range:	40 - 105°F (5°C - 40°C), A.T.C.
Resolution:	0.1 pH
Display:	LCD (0.1 pH resolution), Easy to Read
Sensor:	Non–Glass, Replaceable Reference electrode, fast response
Calibration:	One, Two or Three Point
Buffer Recognition:	Automatic – 4.00, 7.00, 10.00, Buffer solutions supplied
Power:	Two 3v Lithium Batteries, CR2032, Long Battery Life – Over 150 Hours

Size: **5.5" × 1" × 0.6" (14 × 3 × 2 cm)**
Weight: **1.0 lb (0.45 kg)**

Component:
#147-11-1 Reference Electrode

#147-11 IQ125 Minilab pH Meter

IQ240 PH/MV/TEMP METER, STAINLESS STEEL PROBE, RESEARCH GRADE MATERIAL #147-14

pH Range:	0.00 - 14.00
mV Range:	±420 mV
Temp Range:	0 - 140°F (0 - 60°C), A.T.C.
Resolution:	0.1 / 0.01 / 0.001 pH, 0.1 mV, 0.1°C
Accuracy:	±0.01 pH, ±0.1 mV, ±0.5 °C
Probe:	Stainless Steel, 3.5 mm micro-probe, Unbreakable, Resists Corrosion and Breaking, Silicon Chip, Reference and Temperature sensor
Buffer Recognition:	Automatic Nine Buffers
Memory:	20 Data Sets
Output:	RS 232 Graphs Data to a PC
Power:	115-Volt AC Adapter (Included), 9-Volt Battery Backup (Included)

Size: **6.5" × 2" × 4.5" (17 × 5 × 11 cm)**
Weight: **3.0 lb (1.3 kg)**

Optional:
#147-15 NMR Tube Micro Probe, 3.5 mm, Stainless Steel

#147-14 IQ240 pH Meter

POCKET PH METER
#147-16-1 PHTESTR® BASIC, SINGLE-JUNCTION
#147-16-3 PHTESTR® 10, DOUBLE-JUNCTION

These reliable and economical pocked sized instruments feature a longer life, lower drift, and a better value over many pocket-sized meters. Recent advances in reference electrolyte gel, superior reference wire technology and clog resistant junctions, put these meters at the high end of pH analysis. The pHTestr® 10 features double-junction reference electrodes, resulting in significantly longer electrode life, and may be used in the widest array of applications. The custom thermoplastic housing is waterproof and the instrument will even float if dropped into water.

	pHTestr® Basic #147-16-1	pHTestr® 10 #147-16-3
Range	-1.0 - 15.0	-1.0 - 15.0
Resolution	0.1	0.1
Accuracy	± 0.2	± 0.1
Electrode Design	Single Junction Replaceable	Double Junction Replaceable
Housing	Water / Dust Proof	Water / Dust Proof
Calibration	One Point (Either 4.0, 7.0, 10.0)	Up to 3 Points (4.0, 7.0, 10.0)
Operating Temp	0° - 50°C 32° - 122°F	0° - 50°C 32° - 122°F With ATC*
Special Functions	Auto-Off After 8.5 Minutes	Auto-Off After 8.5 Minutes
Battery Life	1.5-Volt Batteries (3), 250 Hours	1.5-Volt Batteries (3), 500 Hours
Boxed Dimensions	16.5 × 3.8 cm	16.5 × 3.8 cm
Boxed Weight	4.5 oz (125 g)	4.5 oz (125 g)

*Automatic Temperature Compensation

#147-16-1 Single Junction pHTestr® Basic

#147-16-3 Double Junction pHTestr® 10

Optional:

#147-16-2	Replacement Electrode for #147-16-1
#147-16-4	Sensor for #147-16-3
#147-17	1.5-Volt Battery, Set of 3

Did you know?

When you send something to us for repair, we know you are without a critical piece of equipment. That's why we make your repairs first priority (even equipment from other manufacturers!).

pH Paper – Colorimetric Method:

This method is quick and easy and the measurement is accurate to 1.0 – 0.2 pH depending upon the range. The paper soaks up the liquid and the indicator dye in the paper changes color, which varies with the pH of the fluid. The pH is then estimated by comparison with a color chart. Prolonged exposure to high temperatures and humidity can affect the dye in the paper, and paper which has been stored for a year under field conditions may result in errors of 1 full pH unit. Other interferences are high salt content and deeply colored dark fluids which may make it impossible to recognize the dye color. Reusable dispensers hold two rolls of standard size pHydrion pH papers, 15' L × 7/32" W (4.6 m × 0.55 cm), with matching color charts. The refills consist of a pack of 5 rolls, with each pack tightly sealed in a plastic container with two color charts. The pH Indicator Strips are accurate in weakly buffered, or lightly colored samples and feature sharp clear color changes that will not bleed, dilute or contaminate.

Part No.	Package	Range	Resolution
pH Indicator Strips:			
#147-53	Box of 100	0.0 - 14	1.0
#147-54	Box of 100	7.5 - 14	0.5
pHydrion Papers:			
#147-50	Dispenser 1 Roll Dispenser 1 Roll	1-11 2-10	1.0 1.0
#147-51	Refill 5 Rolls	2 - 10	2.0
#147-52	Refill 5 Rolls	1 - 11	2.0
#147-60	Dispenser 1 Roll Dispenser 1 Roll	6 - 8 8 - 9.5	0.2 0.5
#147-61	Refill 5 Rolls	6 - 8	0.2
#147-63	Refill 5 Rolls	6 - 11	1.0
#147-70	Dispenser 1 Roll Dispenser 1 Roll	10 - 12 12.5 - 14	0.5 0.5
#147-80	Dispenser 1 Roll	8 - 12	0.5

pH Electrodes and Temperature Probes

pH combination electrodes are housed in a glass or epoxy body and contain a sensing or measuring electrode, and a reference electrode. The sensing electrode responds only to hydrogen ions, while the reference electrode, filled with an electrolyte solution, has an unvarying electric potential, against which the sensing electrode is compared. A voltage proportional to the hydrogen ion concentration of the test solution is generated in the sensing probe. The meter amplifies the signal and converts it to a digital value. All electrodes furnished by OFITE are BNC-connected and have reference and measuring cells in one-housing. Gel filled electrodes are economical, but have a slower response time than liquid-filled electrodes. Glass-body electrodes are able to withstand higher temperatures (100°C as opposed to 80°C for epoxy), and the glass design offers better sealing. The reference electrode must allow the electrolyte solution to flow into the sample. A faster flow produces faster stable readings but lessens the life of the electrode. The most popular electrodes use silver chloride (AgCl) reference solution, but this may react unfavorably with heavy metals, sulfides, and organics. If these contaminants are present, a double-junction electrode will significantly prolong electrode life, especially in harsh applications and liquids containing particles. Double Junction electrodes have a sealed reference electrode requiring a second internal interface junction. This restricts the AgCl solution to the upper chamber, where it is more isolated from the sample.

PH ELECTRODE, REFILLABLE, DOUBLE-JUNCTION, GLASS BODY, FAST RESPONSE #147-08

For high-grade laboratory applications, dirty water, and solutions with heavy metals or organics.

- Range: 0 - 14
- Max Temp: 100°C
- 3' Cable

#147-08 Double-Junction pH Electrode

PH ELECTRODE, ECONOMICAL, SINGLE-JUNCTION, EPOXY BODY, GEL-FILLED #147-10

Ideal for field and general purpose applications
- Range: 0 - 12
- Max Temp: 80°C
- 3' Cable

#147-10 Combination Electrode

PH ELECTRODE, REFILLABLE, DOUBLE-JUNCTION, EPOXY BODY, FLUSHABLE TEFLON® JUNCTION TO PREVENT JUNCTION CLOGGING #147-10-1

For dirty water, slurries, oils, pastes, low-ionic solutions, heavy metals, and organics.
Range: 0 - 12
Max Temp: 80°C
3' Cable

#147-10-1 Double-Junction pH Electrode

TEMPERATURE PROBE FOR ACORN® 5 AND 6 PH METERS #147-10-9

For taking readings with Automatic Temperature Compensation (ATC) meters. Separate temperature probes offer faster response.

Always keep pH electrodes moist using a 4M KCl solution, pH 4 or pH 7 buffer solution. Tap water may be used, but never store electrodes in distilled or deionized water, as this causes ions to leach out of the glass bulb and reference electrolyte, rendering the electrode useless.

Ion Selective Electrodes (ISE) and Solution Kits (For #147-04 and 147-06 Meters)

In an ISE electrode, the potential developed between the sensing and the reference electrodes is a measure of the activity of the specific reactive ion. Time consuming steps such as filtration, weighing, distillation, and titration are not required. Liquids that are dark or colored are easily analyzed without having to see an obscured end-point. The electrode method, with practice, results in fewer mistakes and tighter standard deviations. Direct measurements are independent of sample volume and analysis may be run on samples as small as a 5 mL. With the Ion 6 and Ion 510 meters, the ppm concentration may be read directly from the meter display, leading to direct reproducible electrode measurements.

Each electrode has a typical response time of 20 to 30 seconds but will vary with solution concentration. Double-junction electrodes are ideal for testing solutions with suspended particles and for heavy metals or organics. All electrodes are refillable and include 15 mL of electrolyte, a filling pipette, and instructions. The Solution Kit is necessary and contains the solutions and accessories needed for calibration, sample preparation, and measurement of ion concentration and activity. Solution Kits include replacement reference electrolyte, ionic strength adjustor (ISA), calibration standards (1,000 ppm), and a filling pipette. Serial dilutions for lower values may be obtained with an optional labware kit consisting of plastic beakers, flasks, and pipettes.

All ISE Electrodes have glass bodies, double-junction reference Electrodes, Solution Kits, and BNC connections.

Part #	ISE	Electrode Type	Measuring Range
#147-10-2	Potassium, K^{+}	Polymer Membrane	0.04 - 39,000 ppm
#147-10-3	Hardness, Ca^{+2} Mg^{+2}	Polymer Membrane	0.4 - 40,000 ppm
#147-10-4	Calcium, Ca^{+2}	Polymer Membrane	0.2 - 40,000 ppm
#147-10-5	Sodium, Na^{+}	Glass Bulb Electrode	0.2 - 23,000 ppm
#147-10-6	Chloride, Cl^{-}	Solid State Electrode	1.8 - 35,500 ppm
#147-10-7	Iodide, I^{-}	Solid State Electrode	0.006 - 127,000 ppm
#147-10-8	Fluoride, F^{-}	Solid State Electrode	0.02 ppm to saturated

#147-10-6 Double-Junction Chloride ISE with Glass Body and Solution Kit

HAND-HELD REFRACTOMETER, (GLYCOL AND BATTERY TESTER WITH VIEWPOINT) #153-57

The MISCO Glycol & Battery Tester (refractometer) is a fast and easy-to-use method for testing the freeze point of glycol-based solutions and battery charge conditions. It provides automatic-temperature compensation for immediate, accurate direct readings of ethylene glycol or propylene glycol fluids and battery electrolyte.

Size: **10" × 2.25" × 2.25" (25 × 6 × 6 cm)**
Weight: **8 oz (227 g)**

#153-57 Hand-held Refractometer

Did you know?

OFITE offers the most competitive labor rates in the industry!

PH ANALYSIS ACCESSORIES

#147-20	Buffer Solution, pH 4, 16 oz
#147-20-1	Buffer Solution, pH 4, 1 gal
#147-06-4	Buffer Solution, pH 4, Single Pouch
#147-30	Buffer Solution, pH 7, 16 oz
#147-30-1	Buffer Solution, pH 7, 1 gal
#147-06-5	Buffer Solution, pH 7, Single Pouch
#147-40	Buffer Solution, pH 10, 16 oz
#147-40-1	Buffer Solution, pH 10, 1 gal
#147-06-6	Buffer Solution, pH 10, Single Pouch
#147-06-8	Capsule Set, pH 4, 7, and 10, 1 Vial of 10 Capsules Each
#147-42	High pH Indicator Solution, 2 oz
#147-44	High pH Indicator Solution, 8 oz
#147-09	Reference Fill Solution for Double Junction Electrodes, KCl, 4M, 125 mL

Mud Testing Kits

Following is a listing of the field and laboratory testing kits that are provided by OFI Testing Equipment. All kits may be custom designed to meet customers' individual specifications. Special requests and suggestions are always welcome.

KITS (alphabetical order)

Part No.	Description	Page
#160-00	Airplane Kit	100
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#161-10	Basic Test Kit	107
#162-50	Basic Water Well Test Kit	104
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#168-00	Methylene Blue	112
#144-90	Nitrate Ion	124
#161-00	Offshore Kit	101
#162-60	Oil Mud Laboratory	99
#145-60	Paraformaldehyde	120
#169-00	Particle Size by Wet Sieve Analysis Kit	107
#290-00	PHPA Polymer Concentration	123
#163-00	Pilot Test Kit	104
#295-00	Polymer Test Kit - Clapper	122
#285-09	Potassium and Potassium Chloride	126
#285-30	Potassium Ion	126
#165-65	Reverse Phase Extraction	127
#144-20	Rig Laboratory	105 - 106
#167-00	Sand Content Kit	108
#145-40	Sodium Chromate	119
#295-50	Static Sheen	128
#145-20	Sulfate Ion	119
#145-50	Sulfide Ion	118
#145-70	Sulfite	119
#144-94	Thiocyanate Ion	124
#145-10	Total Hardness Titration	115
#144-82	Underbalance Drilling Test Kit	109
#144-95	Water Analysis	127
#145-65	Zinc Carbonate	125
#145-66	Zinc in Brines Determination	125

Knowledge of the mud and filtrate properties are important in many drilling operations to ensure proper control of the mud chemistry. The proper equipment and reagents for running routine analysis in the field or laboratory are essential for any mud engineer.

The OFITE International Kit is the most complete and versatile test kit available anywhere in the world. It contains everything needed to perform a complete drilling fluid analysis.

OFITE's new Mud Engineer's Testing Equipment on Rollers (METEOR) Kit contains everything needed to conduct complete tests on water or oil-based muds - all in *one* waterproof, portable case.

The OFITE Oil Mud Laboratory contains all of the apparatus and reagents necessary for the complete analysis of oil muds in the field or in the laboratory.

The OFITE Airplane Kit is the most complete portable mud testing kit available anywhere in a single stainless steel carrying case. It contains all of the contents of the Offshore Kit plus a stopwatch, a metal thermometer, a portable mixer and reagents for testing calcium, sulfate, hardness, and alkalinity content, and has room for a retort and rheometer.

The OFITE Offshore Kit is a popular, basic mud engineer's kit containing a Sand Content Kit, pH paper, and all reagents to run alkalinity, chloride, or hardness analysis. All necessary glassware and equipment are included, and space is available for a retort and rheometer.

The OFITE Rig Laboratory incorporates all of the basic equipment needed to run routine mud checks into one convenient heavy-gauge stainless steel cabinet. It readily adapts to any work location and the hinged front provides a convenient work place for conducting tests.

Another popular kit is the OFITE Water Well Kit, which contains the same chemicals and glassware as the Offshore Kit plus a stopwatch, Sand Content Kit, marsh funnel, filter press, and mud balance.

The OFITE Basic Test Kit provides a convenient storage area for all of those items that never seem to stay in the same place. In addition to the standard mud balance, marsh funnel, and cup, there is ample room for equipment and extra chemicals.

INTERNATIONAL KIT
#162-00 115-VOLT
#162-00-1 230-VOLT

Designed for long distance shipping, the International Test Kit is enclosed inside a portable case with reinforced handles and latches. The storage area is divided into three main sections. The top tray contains a glassware storage area with protective shipping containers for pipettes and all testing reagents. The middle tray area contains a portable mixer, marsh funnel and cup, pressuring assemblies for the high-temperature / high-pressure filter press, a hot plate, cup heater, 30 minute timer, and pocket balance. In the large bottom section is the OFITE 8-Speed Viscometer, 10 mL retort, API filter press, the HTHP heater jacket, and a complete OFITE Offshore Test Kit in a stainless steel case. Also included is the OFITE Mud Balance, pH meter, and hand-crank centrifuge. Commonly needed spare parts have been included for all assembled items.

Size: **36.5" × 25" × 25" (93 × 64 × 64 cm)**
Weight: **225 lb (102.2 kg)**

#162-00 OFITE International Kit

Density:
#115-00 Mud Balance, Metal
#115-06 Lid for Metal Mud Balance, Stainless Steel
Viscosity:
#110-10 Marsh Funnel Viscometer, Plastic
#110-20 Measuring Cup, 1,000 mL, Plastic
#130-10 Model 800, 8-Speed Viscometer
#130-20 Cup Heater, (115-Volt Only)
#130-30 Cup Heater, (230-Volt Only)
#130-31 Thermostat for Cup Heaters, 50° - 300°F (10° - 149°C)
Filtration:
#140-30 Filter Press with CO_2 Pressure Assembly, API, Benchmount
#170-00 Filter Press, HTHP, 175 mL, Single-End Test Cell, CO_2 (115-Volt Only)
#170-01 Filter Press, HTHP, 175 mL, Single-End Test Cell, CO_2 (230-Volt Only)
Portable Drilling Fluids Test Kit:
#161-00 Offshore Kit with Stainless Steel Case
Retort:
#165-00 Retort with Thermostat, Removable, 10-mL (115-Volt Only)
#165-10 Retort with Thermostat, Removable, 10-mL (230-Volt Only)
#165-34 Spatula
#165-41 Corkscrew
pH Testing:
#147-01 pH Meter with Probe and Case, Digital, Portable
#147-20 Buffer Solution, 4 pH, 16 oz
#147-30 Buffer Solution, 7 pH, 16 oz
#147-40 Buffer Solution, 10 pH, 16 oz
#147-44 High pH Indicator Solution, 8 oz
Supplies:
#130-74 Transformer, 230 to 115 Volts, 1.10 Amps, 50 / 60 Hz (230-Volt Only)
#140-55 Filter Paper, 3½" (9.0 cm), WLP, Box of 100
#141-04 Screen, 60-Mesh
#141-05 Gasket, Neoprene
#143-02-11 Puncture Pin Holder Assembly
#143-02-13 O-ring for Puncture Pin Holder Assembly
#143-05 *CO_2 Bulbs, Package of 10 **UN1013**
#152-37 AC Power Cord, 3 Conductor (115-Volt Only)
#152-38 AC Power Cord, 3 Conductor (230-Volt Only)
#153-14 Graduated Cylinder, 50 mL × 1 mL, Glass
#153-14-1 Case for 50-mL Graduated Cylinder, Polycarbonate
#153-16 Graduated Cylinder, 25 mL × .2 mL, Glass
#153-16-1 Case for 25-mL Graduated Cylinder, Polycarbonate
#153-18 Graduated Cylinder, 10 mL × .2 mL, Glass
#153-20 Graduated Cylinder, 5 mL × .1 mL, Glass
#153-21 Centrifuge Tube, Kolmer, 10-mL
#153-25-2 Centrifuge for 15-mL Tubes, Hand-Crank, 4-Place
#153-29 Syringe, 2 CC, Glass-Tip
#153-34 Pipette, 1 mL × .01 mL, Glass
#153-35 Case for 1, 2, and 5-mL Pipettes, Polycarbonate
#153-38 Pipette, 5 mL × .1 mL, Glass
#153-39 Case for 10-mL Pipette, Polycarbonate
#153-40 Pipette, 10 mL × .1 mL, Glass
#153-50 Erlenmeyer Flask, 250 mL
#155-10 Timer, 30-Minute Interval
#162-05 Electric Outlet Strip, 6 Outlets
#162-77 Sample Bottle, 4 oz, Polypropylene
#163-20 Mixer for Mud Cup, (115-Volt Only)
#165-35 Heating Element, 350-Watt (115-Volt Only)
#165-36 Heating Element, 350-Watt (230-Volt Only)
#165-42 Steel Wool, Grade 00. Fine, Package of 4 Pads
#165-43 Pipe Cleaner
#165-44 Thread Lubricant, High-Temperature, 1 oz
#166-03 Balance, Hand-Held, 0 - 320 g × 0.1 g
#168-01 Hot Plate with Thermostat (115-Volt Only)
#168-01-1 Hot Plate with Thermostat (230-Volt Only)
#168-04 Stirring Rod, 6" (15.2 cm), Glass
#170-10 Thermostat Pilot Light
#170-13 O-ring for Test Cell, Buna N
#170-16 Valve Stem
#170-17 O-ring for Valve Stem
Reagents:
#200-01 Methylene Blue Solution, 1 mL - 0.01 ME, 8 oz (250 mL)
#200-11 Hydrogen Peroxide, 3%, 8 oz (250 mL)
#206-01 Deionized Water, 8 oz (250 mL)
#230-13 *Sulfuric Acid, 5 N, 8 oz (250 mL) **UN2796**
#280-00 Wetting Agent, 1 oz (30 mL)
#285-10 *Sodium Perchlorate Solution, 16 oz (500 mL) **UN3139**
#285-11 Potassium Chloride Solution, 4 oz (120 mL)
Case:
#162-01-1 Case, Molded Plastic
#162-03 Padlock

*Requires special handling for shipping.

Mud Testing Kits

METEOR KIT
#162-70 115-VOLT
#162-70-1 230-VOLT

The OFITE Mud Engineer's Testing Equipment on Rollers (METEOR) Kit contains all the equipment you'll need to conduct tests on water and oil-based muds (with the optional ES Meter) - all in one waterproof, portable case! In addition to the standard mud balance, marsh funnel, and cup, the METEOR Kit includes an 8-Speed Viscometer, an HTHP Filter Press, a Full Area Filter Press, a pH meter, a retort, and a Methylene Blue Test (MBT) Kit, with ample room for regulators, supplies, and extra chemicals. The rugged, plastic case is built according to military specs, enabling it to withstand the harshest of conditions, while protecting your equipment.

Size: **33.5" × 21" × 18" (85 × 53 × 46 cm)**
Weight: **114 lb (51.8 kg)**

#162-70 OFITE METEOR Kit

Components:

#115-00	Mud Balance with Case, 4-Scale, Machined Arm
#110-10	Marsh Funnel Viscometer, Plastic
#110-20	Measuring Cup, 1,000 mL, Plastic
#130-10	Model 800, 8-Speed Viscometer
#130-38-4	Thermocup with Stainless Steel Insert (115-Volt Only)
#130-38-6	Thermocup with Stainless Steel Insert (230-Volt Only)
#142-53	Filter Press, API, Model MB
#170-00	Filter Press, HTHP (115-Volt Only)
#170-01	Filter Press, HTHP (230-Volt Only)
#165-00	Retort, Removable, 10-mL (115-Volt Only)
#165-10	Retort, Removable, 10-mL (230-Volt Only)
#167-00	Sand Content Kit

Supplies:

#140-55	Filter Paper, 3½" (9.0 cm), WLP, Box of 100
#140-57	Filter Paper, Whatman Grade 1, 2¾" (7.0 cm), Package of 100
#142-54	O-ring for T-fitting for Model MB Filter Press
#142-58	O-ring for HTHP Coupling for Model MB Filter Press
#142-60	O-ring for Model MB Test Cell
#143-02-13	O-ring for Puncture Pin Holder Assembly
#143-02-14	O-ring for Puncture Pin Holder Assembly
#143-05	*CO_2 Bulbs, 8-Gram, Package of 10 **UN1013**
#144-90-05	Dropper Pipette, 2-mL, Poly
#147-11	pH Meter, Solid State
#147-53	pH Strips, 0 - 14, Package of 100
#152-37	AC Power Cord, 3-Conductor (230-Volt Only)
#153-02	Brush, Graduate, 1½" × 10¾"
#153-03	Brush, Graduate, ½" × 8"
#153-06	Brush for 10-mL Receiver Tube

*Requires special handling for shipping.

#153-14-1	Case for 50-mL Graduated Cylinder, Polycarbonate
#153-16	Graduated Cylinder, 25 mL × .2 mL, Glass
#153-16-1	Case for 25-mL Graduated Cylinder, Polycarbonate
#153-18-1	Graduated Cylinder, TD, 10 mL × .2 mL, Glass
#153-26	Titration Dish, Polyethylene
#153-31-1	Wash Bottle, 250 mL
#153-34	Pipette, 1 mL × .01 mL, Glass
#153-35	Case for 1, 2, and 5-mL Pipettes, Polycarbonate
#153-36	Pipette, 2 mL × .1 mL, Glass
#153-38	Pipette, 5 mL × .1mL, Glass
#153-39	Case for 10-mL Pipette, Polycarbonate
#153-40	Pipette, 10 mL × .1 mL, Glass
#153-41	Pipette Aid (Safety Bulb)
#153-50-1	Erlenmeyer Flask, 125-mL
#153-55	Stopcock Grease, 150 g Tube, Silicone
#153-60	Syringe, Disposable, 3 cc
#154-05	Thermometer with 4" Probe, Digital, 14° - 392°F (-10° - 200°C)
#154-75	Scoop, Brass
#155-05	Electronic Clock / Timer
#162-73	Turtlebox, 6½" × 3⅞" × 3⅜"
#162-75	Tool Box, Cantilever
#162-76	Tackle Box, Plano 378, Plastic
#162-77	Sample Bottle, 4 oz, Polypropylene
#165-42	Steel Wool, Grade 00. Fine, Pack of 4 Pads
#165-44	Thread Lubricant, High-Temperature, 1 oz
#168-01	Hot Plate with Thermostat (115-Volt Only)
#168-01-1	Hot Plate with Thermostat (230-Volt Only)
#168-04	Stirring Rod, 6", Glass
#170-13	O-ring for HTHP Test Cell, Buna N
#170-16	Valve Stem
#170-17	O-ring, Valve Stem
#170-19	Filter Paper for Filter Presses, 2½" (6.35 cm)
#170-26	Locking Screw, Stainless Steel
#171-22	Retainer Pin

Reagents:

#200-01	Methylene Blue Solution, 1 mL - 0.01 ME, 8 oz (250 mL)
#200-11	Hydrogen Peroxide, 3%, 8 oz (250 mL)
#205-02	Versenate® Hardness Indicator Solution, 2 oz (60 mL)
#205-04-01	*Hardness Buffer, 1 oz (30 mL) **UN2672**
#205-06	Versenate® Hardness Titration Solution, 1 mL = 2 EPM, 8 oz (250 mL)
#205-10	Versenate® Hardness Titration Solution, 1 mL = 20 EPM, 8 oz (250 mL)
#205-14-01	Calcium Buffer, 1 oz (30 mL)
#210-00-2	CalVer® 2, 20 g, 1 oz Bottle (30 mL)
#215-00	Potassium Chromate Solution, 2 oz (60 mL)
#220-00	Phenolphthalein Solution, 2 oz (60 mL)
#230-00-01	*Sulfuric Acid, N/10, 1 oz (30 mL) **UN2796**
#230-15-01	*Sulfuric Acid, 5 N, 1 oz (30 mL) **UN2796**
#230-17-01	*Sulfuric Acid, N/50, 1 oz (30 mL) **UN2796**
#240-00	Methyl Orange Indicator Solution, 2 oz (60 mL)
#261-55-01	Masking Agent, 1 oz (30 mL)
#265-00	Silver Nitrate Solution, .001 g, 0.0282 N, 8 oz (250 mL)
#265-06	Silver Nitrate Solution, 0.01 g, 0.282 N, 8 oz (250 mL)

Case:

#162-72	Case with Rollers and Foam Insert, Waterproof, Plastic
#162-72-4	Velcro Strip

Optional:

#131-50	Emulsion Stability Tester
#153-25-2	Centrifuge for 100-mL Tubes, Hand-Crank, 2-Place Head and Shields
#153-51-2	Beaker, 600 mL, Glass
#163-20	Mixer for Mud Cup, 115-Volt
#171-50	Filter Press, HTHP, Model MB, 115-Volt
#171-51	Filter Press, HTHP, Model MB, 230-Volt

OIL MUD LABORATORY WITH STAINLESS STEEL CASE

#162-60 115-VOLT
#162-60-1 230-VOLT

Oil mud emulsions are used to reduce filtration loss, alleviate sticky hole problems, improve drilling rate, and increase drill bit life. With oil muds, soft sticky gumbo shales may be drilled without washing out or caving into the wellbore, and producing formations with clay within their pore spaces will not be as affected by swelling, which impairs permeability. Some reservoirs that will not produce when drilled with water-based mud will become commercially viable when drilled and completed with oil-based mud. Oil muds are also routinely used for drilling horizontal holes because of the lubricating properties they possess.

The OFITE Oil Mud Laboratory retort analysis is a standard guide for controlling the oil/water ratio, which influences the viscosity and filtration of the oil mud. Labware and reagents are included for de-emulsification and for the determination of the aniline point, alkalinity, calcium, and chloride content. Everything is housed in a convenient stainless steel cabinet with lots of storage space and shelving for ease of usage.

Size: **26" × 13" × 10" (66 × 33 × 25 cm)**
Weight: **68 lb (30.9 kg)**

#162-60 Oil Mud Laboratory

Components:

#131-50	Emulsion Stability (ES) Tester, OFITE Sine Wave
#152-37	AC Power Cord, 3-Conductor (115-Volt Only)
#152-38	AC Power Cord, 3-Conductor, International (230-Volt Only)
#165-00	Retort, Removable, 10 mL (115-Volt Only)
#165-10	Retort, Removable, 10 mL (230-Volt Only)
#130-10	Model 800, 8-Speed Viscometer
#130-38	Thermocup (115-Volt Only)
#130-38-1	Thermocup (230-Volt Only)
#166-03	Balance, Hand-Held, 0 - 320 g

Sand Content Kit:

#167-10	Sieve, 200-Mesh
#167-20	Funnel
#167-30	Tube

Labware:

#110-30	Measuring Cup, 500 mL, Stainless Steel
#145-83	Utility Clamp
#152-48	Stirring Hot Plate (115-Volt Only)
#152-49	Stirring Hot Plate (230-Volt Only)
#152-48-1	Support Rod for Stirrer, ½" × 12"
#153-03	Brush for Graduated Cylinder, ½" × 8"
#153-06	Brush for 10 mL Receiver Tube
#153-15-1	Test Tube, 20 × 1.2 × 150 mm, Glass
#153-15-2	Test Tube, 41 × 2.0 × 150 mm, Glass
#153-16	Graduated Cylinder, 25 mL × .2 mL, Glass
#153-18	Graduated Cylinder, 10 mL × .2 mL, Glass
#153-29	Syringe, 2 mL, Glass-Tip
#153-29-2	Syringe, 10 mL, Glass-Tip
#153-31-1	Wash Bottle, 250 mL
#153-34	Pipette, 1 mL × .01 mL, Glass
#153-38	Pipette, 5 mL × .1 mL, Glass
#153-40	Pipette, 10 mL × .1 mL, Glass
#153-42	Pipette Filler, Rapid Release, 10 mL
#153-51-2	Beaker, 600 mL, Glass
#153-51-3	Beaker, 50 mL, Glass
#153-53-1	Stir Bar, 1" × 5/16"
#153-53-11	Stir Bar, ½" × 5/16"
#153-88	Cork for Thermometer, Size 8
#153-89	Cork for Test Tubes, Size 20
#154-26	Thermometer, Aniline Point, 77 - 221°F
#154-50	Spatula, 4"
#165-05	Receiver Tube with Certificate, 10 mL, 2 Scales: 0 - 100% × 0.1%, 0 - 10 mL × 0.1 mL
#165-34	Spatula for 10 mL Retort
#165-41	Corkscrew
#165-42	Steel Wool, Grade 00. Fine, Package of 4 Pads
#165-43	Pipe Cleaner
#165-44	Thread Lubricant, High-Temperature, 1 oz
#165-62	Filter for Syringe, 25 mm, 0.45 µm, PTFE

Reagents:

#130-78-25	Heating Bath Oil, 16 oz (500 mL)
#131-16	Aerosol Solution, ½ oz (15 mL)
#145-84	*Aniline Solution, 8 oz (250 mL) **UN1547**
#205-14-4	*Calcium Buffer Solution, 16 oz (500 mL) **UN1824**
#205-17-2	Titration Solution (EDTA), 4,000 mg/L, 8 oz (250 mL)
#206-01	Deionized Water, 8 oz (250 mL)
#210-00-1	CalVer® 2 Indicator Powder, 100 gram
#215-00	Potassium Chromate Solution, 2 oz (60 mL)
#215-02	Potassium Chromate Solution, 8 oz (250 mL)
#220-00	Phenolphthalein Indicator Solution, 2 oz (60 mL)
#220-01	Phenolphthalein Indicator Solution, 8 oz (250 mL)
#230-10	*Sulfuric Acid, 0.1 N, 8 oz (250 mL) **UN2796**
#265-08	Silver Nitrate Solution, 0.01 g, 16 oz (500 mL)
#280-30	*Arcosolv, PNP, 1 Gal (3.785 L) **UN1993**
#285-06	Calcium Sulfate, Anhydrous, 58 g

Case:

#141-17	Clip for Graduated Cylinder
#162-61	Case, Stainless Steel
#163-26	Clip, Small
#163-27	Clip, Medium
#163-28	Clip, Large

Optional:

#152-60	Blender with Glass Container, Waring, 115-Volt
#153-59	Hydrometer, Protimeter Hydromaster
#162-60-SP	Spare Parts for One Year for #162-60
#162-60-1-SP	Spare Parts for One Year for #162-60-1

*Requires special handling for shipping.

AIRPLANE TEST KIT
#160-00

Components:
#147-50 pH Paper, pHydrion Dispenser, pH 2 - 10, 1 - 11
#147-60 pH Paper, pHydrion Dispenser, pH 6 - 8, 8 - 9.5
#147-70 pH Paper, pHydrion Dispenser, pH 10 - 12, 12.5 - 14
#153-03 Brush for Graduated Cylinder, ½" × 8"
#153-04 Brush for Pipette, ½" × 3" Bristles, 24" Wire Length
#153-18 Graduated Cylinder, 10 mL × .2 mL, Glass
#153-20 Graduated Cylinder, 5 mL × .1 mL, Glass
#153-26 Titration Dish, Polyethylene
#153-28 Stirring Rod, Polyethylene
#153-29 Syringe, 2 mL, Glass-Tip
#153-34 Pipette, 1 mL × .01 mL, Glass
#153-38 Pipette, 5 mL × .1 mL, Glass
#153-40 Pipette, 10 mL × .1 mL, Glass
#154-10 Thermometer with Metal Dial, 5" Stem, Dual-Scale: 50 - 500°F (0° - 250°C)
#154-50 Spatula, 4" Blade
#155-25 Stopwatch, Digital
#163-20 Mixer for Mud Cup, 115-Volt
#165-34 Spatula for 10 mL Retort
#165-41 Corkscrew
#165-42 Steel Wool, Grade 00. Fine, Package of 4 Pads
#165-43 Pipe Cleaner
#165-44 Thread Lubricant, High-Temperature, 1 oz

Sand Content Analysis:
#167-10 Sieve, 200-Mesh
#167-20 Funnel
#167-30 Tube

Reagents:
#205-02 Versenate® Hardness Indicator Solution, 2 oz (60 mL)
#205-04 *Versenate® Hardness Buffer Solution, 2 oz (60 mL) **UN2672**
#205-08 Versenate® Hardness Titration Solution, 1 mL = 20 EPM, 4 oz (120 mL)
#205-14 *Versenate® Calcium Buffer Solution, 2 oz (60 mL) **UN1824**
#205-15 Versenate® Hardness Titration Solution, 1 mL = 2 EPM, 4 oz (120 mL)
#206-00 Deionized Water, 4 oz (120 mL)
#210-00 CalVer® 2 Indicator Powder, 10 g
#215-00 Potassium Chromate Indicator Solution, 2 oz (60 mL)
#220-00 Phenolphthalein Indicator Solution, 2 oz (60 mL)
#230-16 *Sulfuric Acid, 0.1 N, 4 oz (120 mL) **UN2796**
#230-17 *Sulfuric Acid, 0.02 N, 4 oz (120 mL) **UN2796**
#240-00 Methyl Orange Indicator Solution, 2 oz (60 mL)
#250-00 Calcium Indicator Solution, 2 oz (60 mL)
#255-00 *Sulfate Indicator Solution, 2 oz (60 mL) **UN1789**
#260-00 Sodium Hydroxide, 0.1 N Solution, 2 oz (60 mL)
#265-12 Silver Nitrate Solution, 0.001 g, .0282 N, 4 oz (120 mL)
#265-13 Silver Nitrate Solution, 0.01 g, 0.282 N, 4 oz (120 mL)
#280-00 Wetting Agent, 1 oz

Case:
#141-17 Clip for Graduated Cylinder
#160-02 Case, Stainless Steel
#163-26 Clip, Small
#163-27 Clip, Medium
#163-28 Clip, Large

Note: CO_2 bulbs must be ordered separately.

AIRPLANE TEST KIT WITH RHEOMETER, FILTER PRESS, AND RETORT
#160-00-C 115-VOLT
#160-00-1-C 230-VOLT

Size: 27" × 7" × 12.25" (69 × 18 × 31 cm)
Weight: 56 lb (25.4 kg)

Components:
#132-00 Rheometer, Hand-Crank
#140-60 Filter Press, Half-Area
#160-00 Airplane Test Kit
#165-00 Retort, Removable, 10 mL (115-Volt Only)
#165-10 Retort, Removable, 10 mL (230-Volt Only)

#160-00 OFITE Basic Airplane Test Kit

#160-00-C OFITE Complete Airplane Test Kit

Optional:
#130-74 Transformer, 230 to 115 Volts, 1.10 Amps, 50 / 60 Hz
#143-05 *CO_2 Bulbs, Package of 10 **UN1013**
#160-00-SP Spare Parts for One Year for #160-00

Please specify all voltages required when placing orders.

*Requires special handling for shipping.

OFFSHORE TEST KIT, BASIC
#161-00

Components:
#147-70 pH Paper, pHydrion Dispenser, pH 10 - 12, 12.5 - 14
#153-03 Brush for Graduated Cylinder, ½" × 8"
#153-18 Graduated Cylinder, 10 mL × .2 mL, Glass
#153-20 Graduated Cylinder, 5 mL × .1 mL, Glass
#153-26 Titration Dish, Polyethylene
#153-28 Stirring Rod, Polyethylene
#153-29 Syringe, 2 mL, Glass-Tip
#153-34 Pipette, 1 mL × .01 mL, Glass
#153-38 Pipette, 5 mL × .1 mL, Glass
#153-40 Pipette, 10 mL × .1 mL, Glass
#165-34 Spatula for 10 mL Retort
#165-41 Corkscrew
#165-42 Steel Wool, Grade 00. Fine, Package of 4 Pads
#165-43 Pipe Cleaner
#165-44 Thread Lubricant, High-Temperature, 1 oz

Sand Content Analysis:
#167-10 Sieve, 200-Mesh
#167-20 Funnel
#167-30 Tube

Reagents:
#205-02 Versenate® Hardness Indicator Solution, 2 oz (60 mL)
#205-04 *Versenate® Hardness Buffer Solution, 2 oz (60 mL) **UN2672**
#205-08 Versenate® Hardness Titration Solution, 1 mL = 20 EPM, 4 oz (120 mL)
#205-15 Versenate® Hardness Titration Solution, 1 mL = 2 EPM, 4 oz (120 mL)
#206-00 Deionized Water, 4 oz (120 mL)
#215-00 Potassium Chromate Indicator Solution, 2 oz (60 mL)
#220-00 Phenolphthalein Indicator Solution, 2 oz (60 mL)
#230-16 *Sulfuric Acid, 0.1 N, 4 oz (120 mL) **UN2796**
#230-17 *Sulfuric Acid, 0.02 N, 4 oz (120 mL) **UN2796**
#240-00 Methyl Orange Indicator Solution, 2 oz (60 mL)
#265-12 Silver Nitrate Solution, 0.001 g, .0282 N, 4 oz (120 mL)
#265-13 Silver Nitrate Solution, 0.01 g, 0.282 N, 4 oz (120 mL)
#280-00 Wetting Agent, 1 oz

Case:
#141-17 Clip for Graduated Cylinder
#161-02 Case, Stainless Steel
#163-26 Clip, Small
#163-27 Clip, Medium
#163-28 Clip, Large

Optional:
#161-00-SP Spare Parts for One Year for #161-00

Please specify all voltages required when placing orders.

COMPLETE OFFSHORE TEST KIT WITH RHEOMETER AND RETORT
#161-00-C 115-VOLT
#161-00-1-C 230-VOLT

Size: **20.5" × 7.5" × 12" (52 × 19 × 31 cm)**
Weight: **50 lb (22.7 kg)**

Components:
#132-00 Rheometer, Hand-Crank
#161-00 Offshore Test Kit
#165-00 Retort, Removable, 10 mL (115-Volt Only)
#165-10 Retort, Removable, 10 mL (230-Volt Only)

#161-00 OFITE Basic Offshore Test Kit

#161-00-C OFITE Complete Offshore Test Kit

*Requires special handling for shipping.

Mud Testing Kits

FRONTIER KIT
#161-25

Size: **20.25" × 13.5" × 8.5" (51 × 34 × 22 cm)**
Weight: **48 lb (21.8 kg)**

Components:
Filter Press:
#142-53 Filter Press with CO_2 Assembly, Support Bracket, and Graduated Cylinder Holder, Model MB
Retort:
#165-34 Spatula, 2"
#165-41 Corkscrew
#165-42 Steel Wool, Grade 00. Fine, Package of 4 Pads
Sand Content Kit:
#167-10 Sieve, 200-Mesh
#167-20 Funnel
#167-30 Tube
Labware:
#140-55 Filter Paper, 3½" (9.0 cm), Box of 100
#147-50 pH Paper, Hydrion Dispenser, pH 2 - 10, 1 - 11
#153-03 Graduate Brush, ½" × 8 "
#153-18 Graduated Cylinder, TC, 10 mL × .2 mL, Glass
#153-18-1 Graduated Cylinder, TD, 10 mL × .2 mL, Glass
#153-26 Titration Dish, Polyethylene
#153-28 Stirring Rod, 4", Polyethylene
#153-29 Syringe, 2 cc, Glass-Tip
#153-31-1 Wash Bottle, 250 mL
#153-34 Pipette, 1 mL × .01 mL, Glass
#153-38 Pipette, 5 mL × .1 mL, Glass
#153-40 Pipette, 10 mL × .1 mL, Glass
#153-42 Pipette Filler, Fast Release, 10 mL
#153-60 Syringe, Disposable, 3 cc
#154-01 Thermometer with Metal Dial, 5" Stem, Dual-Scale: 0° - 220°F (-10° - 100°C)
#162-77 Sample Bottle, 4 oz, Polypropylene
#165-43 Pipe Cleaner
#165-44 Thread Lubricant, High-Temperature, 1 oz Tube
Reagents:
#205-02 Versenate® Hardness Indicator Solution, 2 oz
#205-04 *Versenate® Hardness Buffer Solution, 2 oz, **UN2672**
#205-06-M-I Versenate® Hardness Titration Solution, 1 mL = 2 EPM, 8 oz
#205-10-M-I Versenate® Hardness Titration Solution, 1 mL = 20 EPM, 8 oz
#215-00 Potassium Chromate Solution, 2 oz
#220-00 Phenolphthalein Solution, 2 oz
#230-08-M-I *Sulfuric Acid, N/50, 8 oz **UN2796**
#230-10-M-I *Sulfuric Acid, N/10, 8 oz **UN2796**
#240-05 Bromocresol Green - Methyl Orange Indicator Solution, 2 oz
#265-00-M-I Silver Nitrate Solution, .001 g, 0.0282 N, 8 oz
#265-06-M-I Silver Nitrate Solution, .01 g, 0.282 N, 8 oz
#280-00 Wetting Agent, 1 oz
Case:
#141-17 Clip for Graduated Cylinder
#161-03 Case, Stainless Steel
#163-26 Clip, Small
#163-27 Clip, Medium
#163-28 Clip, Large

Optional:
#130-10-33 Cigarette Lighter Adapter Cable for Model 800

*Requires special handling for shipping.

COMPLETE FRONTIER KIT WITH VISCOMETER AND RETORT
#161-25-C 115-VOLT
#161-25-1-C 230-VOLT

Components:
#161-25 Frontier Kit
#130-10-L Model 800, 8-Speed Viscometer with Retractable Legs, 230-12-Volt
#165-00 Retort with Thermostat, Removable, 10 mL, 350-Watt (115-Volt Only)
#165-10 Retort with Thermostat, Removable, 10 mL, 350-Watt (230-Volt Only)
#152-38 AC Power Cord, 3-Conductor, International (Continental European) (230-Volt Only)

Note: **CO_2 bulbs must be ordered separately.**

Optional:
#143-05 *CO_2 Bulbs, Package of 10 **UN1013**

#161-25 Frontier Kit

DRILLING FLUIDS TEST KIT (MES), BASIC
#161-50

Size: **20.25" × 12.75" × 10" (51 × 32 × 25 cm)**
Weight: **45 lb (20.4 kg)**

Components:
#115-01 Mud Balance, Metal, 4-Scale
Wall-Mount Filter Press Components:
#140-55 3½" Filter Paper, Package of 100
#141-01 Base Cap for Filter Press
#141-04 Screen, 60-Mesh
#141-05 Gasket for Cell, 3/32", Neoprene
#141-08-1 Frame, MES Design
#141-08-2 Mounting Bracket, MES Design**
#141-08-3 Wall-Mount Screw, MES Design
#141-09 Threaded Insert for T-Screw
#141-10 T-Screw for Filter Press
#141-16 Support for Graduated Cylinder
#141-17 Clip for Graduated Cylinder
#142-00 CO_2 Pressuring Assembly with Top Cap
#142-70 Cell Body, Half Height, Clear Acrylic
Sand Content Analysis:
#167-10 Sieve, 200-Mesh
#167-20 Funnel
#167-30 Tube
Labware:
#147-60 pH Paper, pHydrion Dispenser, pH 6-8, 8-9.5
#147-80 pH Paper, pHydrion Dispenser, pH 8-12
#153-03 Brush for Graduated Cylinder, ½" × 8"
#153-16 Graduated Cylinder, 25 mL × .2 mL, Glass
#153-18 Graduated Cylinder, 10 mL × .2 mL, Glass
#153-26-1 Porcelain Casserole with Handle, 140 mL
#153-31-1 Wash Bottle, 250 mL
#153-34 Pipette, 1 mL × 1/100 mL, Glass
#153-36 Pipette, 2 mL × 1/10 mL, Glass
#153-38 Pipette, 5 mL × 1/10 mL, Glass
#153-40 Pipette, 10 mL × 1/10 mL, Glass
#153-60 Disposable Syringe, 3 cc
Reagents:
#205-02 Versenate® Hardness Indicator Solution, 2 oz (60 mL)
#205-04 *Versenate® Hardness Buffer Solution, 2 oz (60 mL) **UN2672**
#205-10 Versenate® Hardness Titration Solution, 1 mL = 20 EPM, 8 oz (250 mL)
#215-00 Potassium Chromate Indicator Solution, 2 oz (60 mL)
#220-00 Phenolphthalein Indicator Solution, 2 oz (60 mL)
#230-08 *Sulfuric Acid, N/50, 8 oz (250 mL) **UN2796**
#240-00 Methyl Orange Indicator Solution, 2 oz (60 mL)
#265-00 Silver Nitrate Solution, .001 g, 0.0282 N, 8 oz (250 mL)
#265-06 Silver Nitrate Solution, .01 g, 0.282 N, 8 oz (250 mL)
#280-00 Wetting Agent, 1 oz (30 mL)
Case:
#161-60 Case, Stainless Steel
#163-26 Clip, Small
#163-27 Clip, Medium
#163-28 Clip, Large

****MES = Mud Engineering Supply Co.**

Note: **CO_2 bulbs must be ordered separately.**

Optional:
#143-05 *CO_2 Bulbs, Package of 10 **UN1013**

*Requires special handling for shipping.

DRILLING FLUIDS TEST KIT (MES), COMPLETE
#161-50-C 115-VOLT
#161-50-C-1 230-VOLT

Components:
#161-50 Drilling Fluids Test Kit (MES)
#132-00 Rheometer, Hand-Crank
Removable Retort Assembly:
#164-33 Plug Adapter, 230-Volt
#165-00 Retort, Removable, 10 mL (115-Volt Only)
#165-10 Retort, Removable, 10 mL (230-Volt Only)
#165-14-13 T-Handle Drill for Retort Chamber Tube
#165-34 Spatula for Retort Kit, 2"
#165-41 Corkscrew
#165-42 Steel Wool, Grade 00 Fine, Package of 4 Pads
#165-44 Thread Lubricant, High-Temperature, 1 oz
#171-44 Rubber Foot, ¾"

#161-50-C Drilling Fluids Test Kit

Did you know?

As with all of our equipment, our test kits may be custom fitted to meet specific requirements.

PILOT TEST KIT WITH STAINLESS STEEL CASE #163-00

The OFITE Pilot Test Kit is the ideal supplemental kit to either the Offshore or Airplane Kit. An oil field barrel holds 350 pounds of fresh water and a pilot test "barrel equivalent" contains 350 mL of fluid. Adding one gram of material to a barrel equivalent is the same as adding one pound of material to an oil field barrel. The OFITE Pilot Test Kit enables the operator to quickly mix and test a wide variety of drilling fluids on site. The test kit includes a wall-mount filter press, timer, pocket balance, and two-ounce glass bottles for mud additives. The Pilot Test Kit is conveniently packaged in an OFITE stainless steel carrying case.

#163-00 OFITE Pilot Test Kit

Size: **16" × 7" × 12.25" (41 × 18 × 31 cm)**
Weight: **30 lb (13.6 kg)**

Components:

#110-20	Measuring Cup, 1,000 mL, Plastic
#140-60	Filter Press, Half-Area
#153-18	Graduated Cylinder, 10 mL × .2 mL, Glass
#153-20	Graduated Cylinder, 5 mL × .1 mL, Glass
#153-26	Titration Dish, Polyethylene
#153-28	Stirring Rod, Polyethylene
#153-34	Pipette, 1 mL × .01 mL, Glass
#153-38	Pipette, 5 mL × .1 mL, Glass
#153-40	Pipette, 10 mL × .1 mL, Glass
#154-50	Spatula, 4" Blade
#155-10	Timer, 30-Minute Interval
#163-20	Mixer for Mud Cup, 115-Volt
#166-03	Balance, Hand-Held, 0 - 320 G × 0.1 g
#206-00	Deionized Water, 4 oz (120 mL)

Case:

#141-17	Clip for Graduated Cylinder
#163-02	Case, Stainless Steel
#163-26	Clip, Small
#163-27	Clip, Medium

Note: **CO_2 bulbs must be ordered separately.**

Optional:

#143-05	*CO_2 Bulbs, Package of 10 **UN1013**
#163-00-SP	Spare Parts for One Year for #163-00

*Requires special handling for shipping.

BASIC WATER WELL TEST KIT WITH STAINLESS STEEL CASE #162-50

Size: **20.5" × 10.25" × 12.25" (52 × 26 × 31 cm)**
Weight: **45 lb (20.4 kg)**

Components:

#100-51	Mud Balance, 4-Scale
#100-52	Base for Mud Balance
#110-10	Marsh Funnel Viscometer, Plastic
#110-20	Measuring Cup, Plastic
#147-53	pH Strips, range 0-14, Package of 100
#147-60	pH Paper, pHydrion Dispenser, pH 6-8, 8-9.5
#147-80	pH Paper, pHydrion Dispenser, pH 8-12

Wall-Mount Filter Press Components:

#140-55	Filter Paper, 3½", Package of 100
#141-01	Base Cap for Filter Press
#141-04	Screen, 60-Mesh
#141-05	Gasket for Cell, Neoprene, 3/32"
#141-08-1	Frame for Wall-Mount Filter Press
#141-08-2	Mounting Bracket for Filter Press
#141-08-3	Wall-Mount Screw, MES
#141-09	Threaded Insert for Filter Press
#141-10	T-Screw for Filter Press
#142-00	CO_2 Pressuring Assembly with Top Cap
#142-70	Cell Body for Filter Press, Clear Acrylic

Sand Content Analysis:

#167-10	Sieve, 200-Mesh
#167-20	Funnel
#167-30	Tube

Labware:

#141-16	Support for Graduated Cylinder
#141-17	Clip for Graduated Cylinder
#153-16	Graduated Cylinder, 25 mL × .2 mL, Glass
#153-18	Graduated Cylinder, 10 mL × .2 mL, Glass
#153-26-1	Porcelain Casserole with Handle, 14 mL
#153-28	Polyethylene Stirring Rod, 4"
#153-31	Wash Bottle, 500 mL
#153-34	Pipette, 1 mL × .01 mL, Glass
#153-36	Pipette, 2 mL × .1 mL, Glass
#153-38	Pipette, 5 mL × .1 mL, Glass
#153-40	Pipette, 10 mL × .1 mL, Glass
#155-25	Stopwatch, Digital

Reagents:

#205-02	Versenate® Hardness Indicator Solution, 2 oz (60 mL)
#205-04	*Versenate® Hardness Buffer Solution, 2 oz (60 mL) **UN2672**
#205-06	Versenate® Hardness Titration Solution, 1 mL = 2 EPM, 8 oz (250 mL)
#205-10	Versenate® Hardness Titration Solution, 1 mL = 20 EPM, 8 oz (250 mL)
#206-01	Deionized Water, 8 oz (250 mL)
#210-00	CalVer® 2 Indicator Powder, 10 g
#215-00	Potassium Chromate Indicator Solution, 2 oz (60 mL)
#220-00	Phenolphthalein Indicator Solution, 2 oz (60 mL)
#230-08	*Sulfuric Acid, N/50, 8 oz (250 mL) **UN2796**
#240-00	Methyl Orange Indicator Solution, 2 oz (60 mL)
#265-00	Silver Nitrate Solution, .001 g, 0.0282 N, 8 oz (250 mL)
#265-06	Silver Nitrate Solution, .01 g, 0.282 N, 8 oz (250 mL)

Case:

#161-60	Case, Stainless Steel
#163-26	Clip, Small
#163-27	Clip, Medium
#163-28	Clip, Large
#171-44	Rubber Foot, ¾"

RIG LABORATORY IN STAINLESS STEEL CASE #144-20

Included in the Rig Laboratory are a mud balance, marsh funnel, measuring cup, filter press, Sand Content Kit, timer, and all the reagents and labware for performing chloride ion analysis. An air hose and connections are included to run the filter press from rig air, and this model has a small sink with hook-ups for rig water. Due to its design, this kit can be custom tailored to meet specific requirements.

Size: **26" × 13" × 26.75" (58 × 33 × 68 cm)**
Weight: **75 lb (34.1 kg)**

Crated Size: **30" × 16" × 31" (76 × 41 × 79 cm)**
Crated Weight: **150 lb (68.1 kg)**

#144-20 Rig Laboratory

Components:
#110-10 Marsh Funnel Viscometer, Plastic
#110-20 Measuring Cup, 1,000 mL, Plastic
#115-01 Mud Balance with Machined Arm, OFITE, Metal
#140-10 Wall-Mount Filter Press:
- #140-55 Filter Paper, 3½", Box of 100
- #141-00 Cell Body
- #141-01 Base Cap
- #141-04 Screen, 60-Mesh
- #141-05 Gasket, 3/32", Neoprene
- #141-07 Wall-Mount Frame
- #141-09 Threaded Insert
- #141-10 T-screw
- #141-13 Air Hose, Low-Pressure, 15"
- #141-16 Support for Graduated Cylinder
- #141-19 Air Hose Adapter

#142-00 CO_2 Pressuring Assembly with Top Cap:
- #141-02 Top Cap
- #141-05 Gasket, 3/32", Neoprene
- #141-22 Filter, Felt
- #143-00 Regulator
- #143-01 Gauge, 200-PSI, ⅛" Bottom Connection
- #143-02-10 CO_2 Puncture Head Assembly
- #143-03 Barrel for CO_2 Cartridge, Polished Chrome
- #143-06 Safety Bleeder Valve, ¼" NPT
- #144-12 Ell, 90°, Male, ¼"
- #152-84 Drive Clutch, Rubber

Sand Content Kit:
#167-10 Sieve, 200-Mesh
#167-20 Funnel
#167-30 Tube
Labware:
#147-50 pH Paper, Hydrion Dispenser, pH 2 - 10, 1 - 11
#147-70 pH Paper, Hydrion Dispenser, pH 10 - 12, 12.5 - 14
#153-01 Bottle Brush, 3" × 12"
#153-03 Brush, Graduate, ½" × 8"
#153-16 Graduated Cylinder, 25 mL × .2 mL, Glass
#153-18 Graduated Cylinder, 10 mL × .2 mL, Glass
#153-26 Titration Dish, Polyethylene
#153-28 Stirring Rod, 4", Polyethylene
#153-34 Pipette, 1 mL × .01 mL, Glass
#153-40 Pipette, 10 mL × .1 mL, Glass
#154-10 Thermometer with Metal Dial, 5" Stem, Dual-Scale: 50 - 500°F (0° - 250°C)
#155-20 Timer, 60 Minutes Interval
#155-25 Stopwatch, Digital
Reagents:
#206-01 Deionized Water, 8 oz
#215-00 Potassium Chromate Solution, 2 oz
#265-00 Silver Nitrate Solution, .001 g, 0.0282 N, 8 oz
#265-06 Silver Nitrate Solution, .01 g, 0.282 N, 8 oz
Case:
#141-17 Clip for Graduated Cylinder
#144-21 Cabinet, Stainless Steel
#163-26 Clip, Small
#163-27 Clip, Medium
#163-28 Clip, Large
#144-25 Air Manifold

Note: **CO_2 bulbs must be ordered separately.**

Optional:
#144-20-SP Spare Parts for One Year for #144-20

RIG LABORATORY WITH DEAD WEIGHT HYDRAULIC ASSEMBLY #144-22

Components:
#140-70 Dead Weight Hydraulic Assembly
#144-20 Rig Laboratory in Stainless Steel Cabinet (without CO_2 Pressuring Assembly Components)

RIG LABORATORY WITH SINK AND STAINLESS STEEL CASE
#144-30

Size: 36" × 16" × 43" (91 × 41 × 109 cm)
Weight: 110 lb (49.9 kg)

Components:
#110-10 Marsh Funnel Viscometer, Plastic
#110-20 Measuring Cup, 1,000 mL, Plastic
#115-01 Mud Balance with Machined Arm, OFITE, Metal
#140-10 API Filter Press with CO_2 Pressuring Assembly:
- #140-55 Filter Paper, 3½" (9.0 cm), Box of 100
- #141-00 Cell Body
- #141-01 Base Cap
- #141-04 Screen, 60-Mesh
- #141-05 Gasket, 3/32", Neoprene
- #141-07 Wall-Mount Frame
- #141-09-002 Threaded Insert
- #141-10 T-screw
- #141-16 Support for Graduated Cylinder
- #141-20 Frog Bracket
- #141-21 Wall Bracket
- #142-00 CO_2 Pressuring Assembly with Top Cap
- #153-16 Graduated Cylinder, 25 mL × 2/10 mL, Glass
- #170-44 Rubber Foot, ½"

#141-19 Air Hose Adapter
#142-35 Hex Nipple, Brass, ¼", Chrome Plated
#144-13 Street Elbow, ¼", Plated
#144-25 Air Manifold
Sand Content Kit:
#167-10 Sieve, 200-Mesh
#167-20 Funnel
#167-30 Tube
Labware:
#147-50 pH Paper, Hydrion Dispenser, pH 2 - 10, 1 - 11
#147-70 pH Paper, Hydrion Dispenser, pH 10 - 12, 12.5 - 14
#153-01 Bottle Brush, 3" × 12"
#153-03 Graduate Brush, ½" × 8"
#153-14 Graduated Cylinder, 50 mL × 1 mL, Glass
#153-18 Graduated Cylinder, 10 mL × .2 mL, Glass
#153-26 Titration Dish, Polyethylene
#153-28 Stirring Rod, 4", Polyethylene
#153-34 Pipette, 1 mL × .01 mL, Glass
#153-40 Pipette, 10 mL × .1 mL, Glass
#154-10 Thermometer with Metal Dial, 5" Stem, Dual-Scale: 50 - 500°F (0° - 250°C)
#155-25 Stopwatch, Digital
Reagents:
#206-00 Deionized Water, 4 oz
#215-00 Potassium Chromate Solution, 2 oz
#265-12 Silver Nitrate Solution, .001 g, 0.0282 N, 4 oz
#265-13 Silver Nitrate Solution, .01 g, 0.282 N, 4 oz

#144-30 Rig Laboratory with Sink and Cabinet

HORIZONTAL DIRECTIONAL DRILLING (HDD) MUD TEST KIT
#161-05

Size: 23" × 18" × 7.25" (58 × 46 × 18 cm)
Weight: 7 lb (3.2 kg)

Components:
#100-01 Mud Balance, OFITE, Plastic, 4-Scale
#110-10 Marsh Funnel Viscometer, Plastic
#110-20 Measuring Cup, 1,000 mL, Plastic
#147-53 pH Strips (Sticks), pH range 0 - 14, Box of 100
#147-95 Total Hardness Test Strips, SofChek, Package of 50
#153-31-1 Wash Bottle, 250 mL
#155-26 Stopwatch, Bodytronics
#166-08 Shearometer
#167-00 Sand Content Kit
Case:
#161-06 Case, Executive-Style

#161-05 HDD Mud Kit

PARTICLE SIZE BY WET SIEVE ANALYSIS TEST #169-00

The major solids component of a drilling fluid is often the weight material Barite. The American Petroleum Institute outlines several test procedures that help assure the quality of this important ingredient. Among these is the wet screen procedure for particle size analysis. The OFITE Particle Size Kit contains all of the equipment necessary to perform particle size analysis as specified in API Specification 13A. The kit is furnished complete with U.S. Standard screens of 200 and 325-mesh, screen holder, and spray wash assembly. The spray system includes a pressure monitoring gauge (0 to 30 PSI), one 24" water hose, and an adapter plug for easy connection to a water supply. OFITE also provides replacement parts, which may be ordered separately.

Size: **9" × 6" × 6" (23 × 15 × 15 cm)**
Weight: **3 lb 5 oz (1.5 kg)**

#169-00 Particle Size by Wet Sieve Analysis Kit

Components:

#142-35	Connecting Tube
#169-01	Spray Cup
#169-02	Screen, 200-Mesh, 75 µm
#169-03	Gauge, 60 PSI, ¼" Bottom Connect, 2" Face
#169-04	Screen, 325-Mesh, 45 µm
#169-05	Hose with Adapter
#169-06	Complete Tee Jet
#169-08	Pressure Regulator, Water

Optional:
For additional sieves and mesh sizes, see page 172.

#169-00-SP	Spare Parts for One Year for #169-00
#167-86	Ro-Tap, for Six 8" Diameter Sieves, 1,750 RPM, 115-Volt, 60 Hz
#167-87	Ro-Tap, for Six 8" Diameter Sieves, 1,450 RPM, 230-Volt, 50 Hz

BASIC TEST KIT #161-10

In addition to the standard mud balance, marsh funnel, and cup, the Basic Test Kit provides ample room for equipment and extra chemicals that just don't seem to fit in conventional testing equipment kits. As with all of our equipment, this kit may be custom fitted to meet specific requirements.

Size: **23" × 10.25" × 11" (58 × 26 × 28 cm)**
Weight: **9 lb 6 oz (4.26 kg)**

#161-10 Basic Test Kit

Components:

#110-10	Marsh Funnel Viscometer, Plastic
#110-20	Measuring Cup, 1,000 mL, Plastic
#115-01	Mud Balance, OFITE, Metal
#147-53	pH Strips (Sticks), pH range 0 - 14, Box of 100
#155-25	Stopwatch, Digital
#167-00	Sand Content Kit

Case:

#161-11	Case, Plastic
#161-12	Foam Insert

Optional:

#147-95	Sofchek Total Hardness Test Strips, Range 0-425 ppm, Package of 50

DIRECTIONAL DRILLING TEST KIT #161-15

Same at the Basic Test Kit, except includes #147-95 - Total Hardness Test Strips and comes with a Plastic Mud Balance, rather than a Metal Mud Balance.

SAND CONTENT KIT WITH CASE
#167-00-C

One of the primary functions of a drilling fluid is to carry drilled solids from the well bore. These solids are a contaminant, and if left in the system, can lead to numerous problems. The OFITE Sand Content Kit determines the volume percent of sand-sized particles in the drilling fluid. API defines sand-sized particles as any material larger than 74 µm* (200-mesh) in size. The test can be performed on low solids fluids as well as on weighted fluids. The kit consists of a glass tube graduated to read percent (%) by volume, a funnel, and a 200-mesh sieve contained in a cylindrical-shaped holder.

Size: **13" × 6" × 6" (33 × 15 × 15 cm)**
Weight: **1 lb 8 oz (0.7 kg)**

#167-00-C Sand Content Kit

Components:
#153-31 Wash Bottle, 500 mL
#167-00 Sand Content Kit
- #167-10 Sieve, 200-Mesh (75 µm), 2.5" Diameter
- #167-20 Funnel, Plastic
- #167-30 Graduated Tube, Glass, 0 - 20%

Case:
#167-01 Carrying Case

***Micron (µm) = 1/25,400" or 1/1,000 mm**

Optional:
#167-00-C-SP Spare Parts for One Year for #167-00-C

OIL THIEF WITH SAMPLE COCK, 16"
#153-25-21 ACRYLLIC
#153-25-22 BRASS

This is a simple, one-spring device for taking samples of liquids from any specified depth within a tank. It features a one-line adjustable control, an adjustable hanger, and a replacement valve seat. It is also available in various lengths.

#153-25-21 Oil Thief with Sample Cock

Did you know?

You can download or print OFITE Instruction Manuals on our web site at www.ofite.com.

UNDERBALANCE DRILLING TEST KIT (UBD) #144-82

Size: **20.25" × 13.5" × 8.5" (51 × 34 × 22 cm)**
Weight: **55 lb (24.9 kg)**

Components:
#110-10 Marsh Funnel Viscometer, Plastic
#110-20 Measuring Cup, 1,000 mL, Plastic
#152-00 Mixer with Container, Hamilton Beach®, Single Spindle, 115-Volt
#152-40 Container for Mixers, 30 oz, Stainless Steel
#153-25-2 Centrifuge for 15 mL Tubes, Hand-Crank, 4-Place Head and Shields
#153-52 Hydrometer Set in Plastic Carrying Case

Labware:
147-53 pH Strips, 0 - 14, Package of 100
#153-19 Centrifuge Tube, 15 mL, PYREX® 8080
#153-26 Titration Dish, Polyethylene
#153-28 Stirring Rod, 4", Polyethylene
#153-29 Syringe, 2 cc, Glass-Tip
#153-29-1 Syringe, 5 cc, Glass-Tip
#153-29-2 Syringe, 10 cc, Glass-Tip
#153-34 Pipette, 1 mL × .01 mL, Glass
#153-36 Pipette, 2 mL × .1 mL, Glass
#153-38 Pipette, 5 mL × .1 mL, Glass
#153-40 Pipette, 10 mL × .1 mL, Glass
#153-42 Pipette Filler, Fast Release, 10 mL

Reagents:
#205-02 Versenate® Hardness Indicator Solution, 2 oz (60 mL)
#205-04 *Versenate® Hardness Buffer Solution, 2 oz (60 mL), **UN2672**
#205-06 Versenate® Hardness Titration Solution, 1 mL = 2 EPM, 8 oz (250 mL)
#205-08 Versenate® Hardness Titration Solution 1 mL = 20 EPM, 4 oz (120 mL)
#206-02 Deionized Water, 16 oz (500 mL)
#215-00 Potassium Chromate Solution, 2 oz (60 mL)
#220-00 Phenolphthalein Solution, 2 oz (60 mL)
#230-04 *Sulfuric Acid, N/50, 16 oz (500 mL) **UN2796**
#245-00 Bromocresol Green Methyl Red Indicator Solution, 2 oz (60 mL)
#265-00 Silver Nitrate Solution, .001 g, 0.0282 N., 8 oz (250 mL)
#265-13 Silver Nitrate Solution, .01 g, 0.282 N, 4 oz (120 mL)
#285-00 Precipitated Calcium Carbonate Powder, 35 g

Case:
#144-82-03 Case with Custom Foam

#144-82 UBD Test Kit

Did you know?

OFITE offers a variety of payment options, including most major credit cards. If you are interested in a Net-30 day account, a credit application is available in the index.

*Requires special handling for shipping.

Filtrate Analysis Kits

OFITE maintains a complete line of chemical testing kits for standard titration analysis of most drilling fluids. Due to the constantly changing mineral composition encountered while drilling, these test results are vital to any successful drilling and completion operation. Each kit contains all of the glassware and reagents necessary to run complete tests and many are furnished in rugged stainless steel and lightweight plastic cases. OFITE can readily make up specialty kits to suite a specific need. For example, there is more than one way to test for chlorides, hardness, or alkalinity. Customized kit requests are encouraged. All kits are supplied with appropriate instructions and include Material Safety Data Sheets (MSDS) where applicable.

FILTRATE ANALYSIS TEST / CLAY ANALYSIS TEST "FAT - CAT" KIT

#162-74 115-VOLT
#162-74-2 230-VOLT

Size: **15" × 10" × 10" (38 × 25 × 25 cm)**
Weight: **17 lb 11 oz (8 kg)**

#162-74 Filtrate Analysis Kit - "FAT - CAT" with Filter Press

Components:

#140-55	Filter Paper, 3½" (9.0 cm), Package of 100
#140-57	Filter Paper 7 cm, Whatman Grade 1, Package of 100
#142-53	Filter Press with CO_2 Assembly, Support Bracket, and Graduated Cylinder Holder, Model MB
#143-05	*CO_2 Bulbs, Package of 10 **UN1013**
#144-90-05	Dropper Pipette, 2 mL, Poly
#147-53	pH Sticks, Range 0-14, Package of 100
#153-02	Brush, Graduate, 1½" × 10¾"
#153-03	Brush for Graduated Cylinder, ½"
#153-06	Brush for 10 mL Receiver Tube
#153-18-1	Graduated Cylinder, TD, 10 mL × .2 mL, Glass
#153-26	Titration Dish, Polyethylene
#153-31-1	Wash Bottle, 250 mL, Polyethylene
#153-34	Pipette, 1 mL × .01 mL, Glass
#153-36	Pipette, 2 mL × .1 mL, Glass
#153-38	Pipette, 5 mL × .1 mL, Glass
#153-40	Pipette, 10 mL × .1 mL, Glass
#153-41	Safety Bulb for Pipette
#153-50-1	Erlenmeyer Flask, 125 mL, Glass
#153-60	Syringe, Disposable, 3 cc
#154-75	Scoop, Brass
#168-01	Hot Plate (115-Volt Only)
#168-01-1	Hot Plate (230-Volt Only)
#168-04	Stirring Rod, 6", Glass

Reagents:

#200-01	Methylene Blue Solution, 1 mL = 0.01 ME, 8 oz (250 mL)
#200-11	Hydrogen Peroxide, 3% Solution, 8 oz (250 mL)
#205-02	Versenate® Hardness Indicator Solution (Calmagite®), 2 oz (60 mL)
#205-04-01	*Buffer Solution, Hardness, Versenate®, Ammonium Hydroxide, 1 oz (30 mL) **UN2672**
#205-06	Versenate® Hardness Titration Solution, 1 mL = 2 EPM, 8 oz (250 mL)
#205-10	Versenate® Hardness Titration Solution, 1 mL = 20 EPM, 8 oz (250 mL)
#205-14-01	Calcium Buffer, 1 oz (30 mL)
#210-00-2	CalVer® 2, 20 g
#215-00	Potassium Chromate Solution, 2 oz (60 mL)
#220-00	Phenolphthalein Indicator Solution, 2 oz (60 mL)
#230-00-01	Sulfuric Acid, N/10, 1 oz (30 mL)
#230-15-01	Sulfuric Acid, 5 N,1 oz (30 mL)
#230-17-01	Sulfuric Acid, N/50, 1 oz (30 mL)
#240-00	Methyl Orange Indicator Solution, 2 oz (60 mL)
#261-55-01	Masking Agent, 1 oz (30 mL)
#265-00	Silver Nitrate Solution, 0.0282 N, 8 oz (250 mL)
#265-06	Silver Nitrate Solution, .01 g, 0.282 N, 8 oz (250 mL)

Cases:

#153-35	Case for 1, 2, and 5 mL Pipettes, Polycarbonate
#153-39	Case for 10 mL Pipettes, Polycarbonate
#162-73	Turtlebox, 6½" × 3⅞" × 3⅜"
#162-74-1	Custom Foam Insert for Reagent Test Kit
#162-75	Tool Box, Cantilever

*Requires special handling for shipping.

FILTRATE ANALYSIS KIT WITH CASE #145-00

Size: **12.25" × 6.25" × 11" (31 × 16 × 28 cm)**
Weight: **13 lb 6 oz (6.1 kg)**

Labware:

#140-55 Filter Paper, 3½" (9.0 cm), Box of 100
#147-53 pH Strips, 0 - 14, Package of 100
#153-16 Graduated Cylinder, 25 mL × .2 mL, Glass
#153-26 Titration Dish, Polyethylene
#153-28 Stirring Rod, 4", Polyethylene
#153-30 Funnel, 3", Polyethylene
#153-34 Pipette, 1 mL × .01 mL, Glass
#153-38 Pipette, 5 mL × .1 mL, Glass
#153-40 Pipette, 10 mL × .1 mL, Glass
#153-60 Syringe, Disposable, 3 cc

Reagents:

#205-02 Versenate® Hardness Indicator Solution, 2 oz (60 mL)
#205-04 *Versenate® Hardness Buffer Solution, 2 oz (60 mL) **UN2672**
#205-08 Versenate® Hardness Titration Solution, 1 mL = 20 EPM, 4 oz (120 mL)
#205-14 *Versenate® Calcium Buffer Solution, 2 oz (60 mL), **UN1824**
#205-15 Versenate® Hardness Titration Solution, 1 mL = 2 EPM, 4 oz, (120 mL)
#206-02 Deionized Water, 16 oz (500 mL)
#210-00 CalVer® II Indicator, 10 g
#215-00 Potassium Chromate Solution, 2 oz (60 mL)
#220-00 Phenolphthalein Solution, 2 oz (60 mL)
#230-08 *Sulfuric Acid, N/50, 8 oz (250 mL), **UN2796**
#230-16 *Sulfuric Acid, N/10, 4 oz (120 mL), **UN2796**
#245-00 Bromocresol Green Methyl Red Indicator Solution, 2 oz (60 mL)
#250-00 Calcium Indicator Solution, 2 oz (60 mL)
#255-00 *Sulfate Indicator Solution, 2 oz (60 mL), **UN1789**
#265-12 Silver Nitrate Solution, .001 g, 0.0282 N, 4 oz (120 mL)
#265-13 Silver Nitrate Solution, .01 g, 0.282 N, 4 oz (120 mL)

Case:

#134-36-1 Knob, Red
#141-17 Clip for Graduated Cylinder
#144-36 Kit, Multi-Purpose, Diagonal, Large

#145-00 - Filtrate Analysis Kit with Case

Optional:
#145-00-SP Spare Parts for One Year for #145-00

*Requires special handling for shipping.

TEST STRIPS

Easy to use test strips for rapid (20 - 60 seconds) field testing of selective ions. For most applications, pretreatment is unnecessary when other ionic species are present at concentrations less than 1000 ppm. Appropriate dilution procedures may be used to test concentrations above the upper range of the test strip. All strips are supplied in protective cylinders and include instructions, a color comparison scale, and expiration date.

#147-92 QUANTOFIX® Chloride Test Sticks, 500 - 3000 mg/L, Box of 100
#147-93 QUANTOFIX® Nitrate Test Strips, 10 - 500 mg/L NO_3, 10 - 080 mg/L NO_2, Box of 100
#147-94 QUANTOFIX® Sulfite Test Strips, 10 - 1000 mg/L SO_3, Box of 100
#147-95 SofChek Total Hardness Test Strips, 0 - 425 ppm, Package of 50

#147-94 and #147-93 QUANTOFIX® Test Strips

METHYLENE BLUE TEST KIT WITH STAINLESS STEEL CASE

#168-00 115-VOLT
#168-00-1 230-VOLT

Optimized drilling fluid control requires that some measurement be made to give information about the nature and types of clays that are present in the drilling fluid. The same information is also required about the types of clays and shales that are being drilled, since they become a part of the fluid system.

The OFITE Methylene Blue Test (MBT) is routinely used to analyze foundry molding sands and many other industrial clay applications.

The MBT Kit measures the total exchange capacity of a clay system and determines the reactive solids content of fluids. The test measures the capacity of a clay to absorb cations from solution where exchangeable cations on the clay surfaces are replaced by methylene blue cations. The more ions the clay can exchange for methylene blue cations, the more reactive the clay, and the greater the swelling potential. Only the reactive portions of the clay are involved, and other materials present, such as sand, limestone, barite, etc. do not absorb methylene blue. When only a single clay type is present, an accurate estimate of the reactive clay content can be made. When unknown clay mixtures are present, the method offers a reasonable estimate of the predominate clay mineral and the purity of the sample.

Knowledge of the type of clays in both the fluid and formation will aid in preventing excessive gel strengths, viscosity, density, pipe drag, stuck pipe, chemical costs, and borehole instability. Without the MBT, drilled solids would remain the most misdiagnosed contaminant in a drilling fluid. A complete solids analysis using an MBT, retort, and salt content determination is the best remedy for maintaining optimized drilling fluid control.

The OFITE Methylene Blue Test Kit comes complete with all necessary chemicals, glassware, and equipment to perform this important and informative test in the field. All of the equipment is stored in a convenient stainless steel carrying case.

Size: **11.25" × 6.5" × 12" (27 × 17 × 31 cm)**
Weight: **12 lb 8 oz (5.7 kg)**

Components:

#140-56	Filter Paper, Whatman No. 1, 12.5 cm, Package of 100
#153-14	Graduated Cylinder, Glass, 50 mL × 1 mL
#153-29	Syringe, 2 mL, Glass
#153-34	Pipette, 1 mL × .01 mL, Glass
#153-40	Pipette, 10 mL × .1 mL, Glass
#153-41	Pipette Aid (Safety Bulb)
#153-50	Erlenmeyer Flask, 250 mL
#168-03	Hot Plate (115-Volt Only)
#168-03-1	Hot Plate (230-Volt Only)
#168-04	Stirring Rod, 6", Glass

Reagents:

#200-03	Methylene Blue Solution, 16 oz (500 mL)
#200-11	Hydrogen Peroxide, 3% Solution, 8 oz (250 mL)
#206-01	Deionized Water, 8 oz (250 mL)
#230-13	*Sulfuric Acid, 5 N, 8 oz (250 mL) **UN2796**

Case:

#134-36-1	Knob, Red
#144-36	Kit, Multi-Purpose, Diagonal, Large
#163-27	Clip, Medium
#163-28	Clip, Large

Optional:

#168-00-SP	Spare Parts for One Year for #168-00
#168-00-1-SP	Spare Parts for One Year for #168-00-1

#168-00 Methylene Blue Test Kit

*Requires special handling for shipping.

CHLORIDE, ALKALINITY, AND WATER HARDNESS KIT IN STAINLESS STEEL CASE #144-80

Size: 10" × 11" × 11" (25 × 28 × 28 cm)
Weight: 13 lb 2 oz (6 kg)

#144-80 Chloride, Alkalinity, and Hardness Kit

Components:
#153-26 Titration Dish, Polyethylene
#153-28 Stirring Rod, Polyethylene
#153-34 Pipette, 1 mL × .01 mL, Glass
#153-40 Pipette, 10 mL × .1 mL, Glass
Reagents:
#205-02 Versenate® Hardness Indicator Solution, 2 oz (60 mL)
#205-04 *Versenate® Hardness Buffer Solution, 2 oz (60 mL) **UN2672**
#205-06 Versenate® Hardness Titration Solution, 1 mL = 2 EPM, 8 oz (250 mL)
#205-08 Versenate® Hardness Titration Solution, 1 mL = 20 EPM, 4 oz (120 mL)
#206-02 Deionized Water, 16 oz (500 mL)
#215-00 Potassium Chromate Indicator Solution, 2 oz (60 mL)
#220-00 Phenolphthalein Indicator Solution, 2 oz (60 mL)
#230-04 *Sulfuric Acid, 0.02 N, 16 oz (500 mL) **UN2796**
#245-00 Bromocresol Green-Methyl Red Indicator Solution, 2 oz (60 mL)
#265-00 Silver Nitrate, 0.001 g, 0.0282 N, 8 oz (250 mL)
#265-13 Silver Nitrate, 0.01 g, 0.282 N, 4 oz (120 mL)
#285-00 Precipitated Calcium Carbonate Powder, 35 g
Case:
#134-36-1 Knob, Red
#144-36 Kit, Multi-Purpose, Diagonal, Large

CHLORIDE AND ALKALINITY KIT IN STAINLESS STEEL CARRYING CASE #144-50

Size: 10" × 11" × 11" (25 × 28 × 28 cm)
Weight: 12 lb 14 oz (5.7 kg)

#144-50 Chloride and Alkalinity Test Kit

Components:
#153-26 Titration Dish, Polyethylene
#153-28 Stirring Rod, Polyethylene
#153-34 Pipette, 1 mL × .01 mL, Glass
#153-40 Pipette, 10 mL × .1 mL, Glass
Reagents:
#206-02 Deionized Water, 16 oz (500 mL)
#215-00 Potassium Chromate Solution, 2 oz (60 mL)
#220-00 Phenolphthalein Indicator Solution, 2 oz (60 mL)
#230-08 *Sulfuric Acid, 0.02 N, 8 oz (250 mL) **UN2796**
#245-00 Bromocresol Green-Methyl Red Indicator Solution, 2 oz (60 mL)
#265-00 Silver Nitrate, 0.001 g, 0.0282 N, 8 oz (250 mL)
#265-06 Silver Nitrate, 0.01 g, 0.282 N, 8 oz (250 mL)
#285-00 Precipitated Calcium Carbonate Powder, 35 g
Case:
#134-36-1 Knob, Red
#144-36 Kit, Multi-Purpose, Diagonal, Large

Did you know?

OFITE is happy to furnish specialty items upon request. Just give us a call!

*Requires special handling for shipping.

Filtrate Analysis Kits

CHLORIDE AND WATER HARDNESS KIT IN STAINLESS STEEL CASE #144-70

Size: 10" × 11" × 11" (25 × 28 × 28 cm)
Weight: 13 lb 2 oz (6 kg)

#144-70 Chloride and Water Hardness Kit

Components:
#153-26 Titration Dish, Polyethylene
#153-28 Stirring Rod, Polyethylene
#153-34 Pipette, 1 mL × .01 mL, Glass
#153-40 Pipette, 10 mL × .1 mL, Glass
Reagents:
#205-02 Versenate® Hardness Indicator Solution, 2 oz (60 mL)
#205-04 *Versenate® Hardness Buffer Solution, 2 oz (60 mL) **UN2672**
#205-06 Versenate® Hardness Titration Solution, 1 mL = 2 EPM, 8 oz (250 mL)
#205-10 Versenate® Hardness Titration Solution, 1 mL = 20 EPM, 8 oz (250 mL)
#206-01 Deionized Water, 8 oz (250 mL)
#215-00 Potassium Chromate Indicator Solution, 2 oz (60 mL)
#220-00 Phenolphthalein Indicator Solution, 2 oz (60 mL)
#230-17 *Sulfuric Acid, N/50, 4 oz (120 mL) **UN2796**
#265-00 Silver Nitrate, 0.001 g, 0.0282 N, 8 oz (250 mL)
#265-06 Silver Nitrate Solution, .01 g, 0.282 N, 8 oz (250 mL)
#285-00 Precipitated Calcium Carbonate Powder, 35 g
Case:
#134-36-1 Knob, Red
#144-36 Kit, Multi-Purpose, Diagonal, Large

CHLORIDE CONTENT KIT IN STAINLESS STEEL CARRYING CASE #144-40

Size: 6.25" × 11" × 11" (16 × 28 × 28 cm)
Weight: 10 lb 14 oz (4.9 kg)

#144-40 Chloride Content Kit

Components:
#153-26 Titration Dish, Polyethylene
#153-28 Stirring Rod, Polyethylene
#153-34 Pipette, 1 mL × .01 mL, Glass
#153-40 Pipette, 10 mL × .1 mL, Glass
Reagents:
#206-01 Deionized Water, 8 oz (250 mL)
#215-00 Potassium Chromate Solution, 2 oz (60 mL)
#220-00 Phenolphthalein Indicator Solution, 2 oz (60 mL)
#230-08 *Sulfuric Acid, 0.02 N, 8 oz (250 mL) **UN2796**
#265-02 Silver Nitrate, 0.001 g, 0.0282 N, 16 oz (500 mL)
#265-06 Silver Nitrate, 0.01 g, 0.282 N, 8 oz (250 mL)
#285-00 Calcium Carbonate Powder, Precipitated, 35 g
Case:
#134-36-1 Knob, Red
#144-35 Multi-Kit Case, Diagonal Design, Small, Stainless Steel

Did you know?

OFITE offers the most competitive labor rates in the industry!

*Requires special handling for shipping.

CALCIUM AND MAGNESIUM KIT #144-85

Size: 15" × 12" × 10.5" (38 × 31 × 27 cm)
Weight: 6 lb 5 oz (2.9 kg)

#144-85 Calcium and Magnesium Kit

Components:

#153-14	Graduated Cylinder, 50 mL × 1 mL, Glass
#153-18	Graduated Cylinder, 10 mL × .2 mL, Glass
#153-26	Titration Dish, Polyethylene
#153-34	Pipette, 1 mL × .01 mL, Glass
#153-38	Glass Pipette, 5 mL × .1 mL, Glass
#153-40	Pipette, 10 mL × .1 mL, Glass
#153-42	Pipette Filler, Fast Release, 10 mL
#153-51-4	Beaker, 100 mL, Glass
#154-62	Spatula, 123 mm, Porcelain
#154-63	Spatula with Flat Handle, Micro Spoon, 9"
#168-04	Stirring Rod, Glass

Reagents:

#205-04	*Versenate® Hardness Buffer Solution, 2 oz (60 mL) **UN2672**
#205-10	Versenate® Hardness Titration Solution, 1 mL = 20 EPM, 8 oz (250 mL)
#205-14	*Versenate® Calcium Buffer Solution, 2 oz (60 mL) **UN1824**
#205-22	Calcium Titration I, 2 oz (60 mL)
#205-23	*Calcium Titration II, 2 oz (60 mL) **UN3287**
#205-26	Calcon Powder, 40 g
#205-27	Manver Indicator Solution, 2 oz (60 mL)
#206-01	Deionized Water, 8 oz (250 mL)
#230-25	*Acetic Acid, Glacial, 8 oz (250 mL) **UN2789**
#260-07	*Sodium Hydroxide Solution, 8 N, 8 oz (250 mL) **UN1824**
#261-00	*Sodium Hypochlorite Solution, 8 oz (250 mL) **UN1791**

TOTAL HARDNESS TITRATION KIT #145-10

Size: 11.25" × 6.5" × 12" (29 × 17 × 31 cm)
Weight: 11 lb (5 kg)

#145-10 Total Hardness Titration Kit

Components:

#153-26	Titration Dish, Polyethylene
#153-28	Stirring Rod, Polyethylene
#153-34	Pipette, 1 mL × .01 mL, Glass
#153-40	Pipette, 10 mL × .1 mL, Glass

Reagents:

#205-02	Versenate® Hardness Indicator Solution, 2 oz (60 mL)
#205-04	*Versenate® Hardness Buffer Solution, 2 oz (60 mL) **UN2672**
#205-06	Versenate® Hardness Titration Solution, 1 mL = 2 EPM, 8 oz (250 mL)
#205-10	Versenate® Hardness Titration Solution, 1 mL = 20 EPM, 8 oz (250 mL)
#206-02	Deionized Water, 16 oz

Case:

#134-36-1	Red Knob
#144-35	Diagonal Design Multi-Kit Case, Stainless Steel

Optional:

#145-10-SP	Spare Parts for One Year for #145-10
#147-95	Sofchek Total Hardness Test Strips

*Requires special handling for shipping.

Filtrate Analysis Kits

GAUGE MODEL CALCIMETER #152-95

The OFITE Calcimeter accurately and quickly determines if scale build up is composed of calcium carbonate. The calcite to dolomite content of the unknown sample aids in determining which chemical treating program to implement. The entire test procedure requires 15 to 30 minutes for both calcite and dolomite determination.

Size: **13" × 8" × 2.5" (33 × 20 × 6 cm)**
Weight: **2 lb 7 oz (1.1 kg)**

Components:

#142-54	O-ring for Lid
#152-95-1	Gauge with Cover, 30 PSI, 4" Diameter
#152-95-2	Bleed-Off Screw
#152-95-3	Cell Cap
#152-95-4	Reaction Cell
#152-95-5	O-ring for Cell, 1⅜" × 1/16"
#152-95-6	Sample Cup

#152-95 and #152-96 Calcimeters

RECORDING CALCIMETER KIT #152-96

The Recording Calcimeter Kit includes a pressure transducer and a small strip chart recorder to replace the pressure gauge. The transducer and chart recorder automate the data recording process, saving the operator the time of doing it manually. This kit includes the Calcimeter plus all consumable items required.

Size: **4" × 3.5" × 13" (10 × 9 × 33 cm)**
Weight: **17 lb (7.7 kg)**

Components:

#141-17	Clip for Graduated Cylinder
#142-54	O-ring for Lid
#152-37	AC Power Cord, 3-Conductor
#152-95-2	Bleed-Off Screw
#152-95-3	Cell Cap
#152-95-4	Reaction Cell
#152-95-5	O-ring, 1⅜" × 1/16"
#152-95-6	Sample Cup
#152-96-2	Minigraph Recorder
#152-96-3	Case, Stainless Steel
#152-96-4	Chart Paper for Minigraph
#152-96-5	Pressure Transducer
#152-96-6	Mortar, 65 mL, Porcelain
#152-96-7	Pestle, Porcelain
#152-96-8	Gear Train, #30
#152-96-10	Power Supply
#152-96-11	Cable Jack, Female
#152-96-12	Cable Plug, Male
#152-96-13	Banana Plug, Insulated, Black
#152-96-14	Banana Plug, Insulated, Red
#153-02	Brush, Graduate, 1½" × 10¾"
#153-18	Graduated Cylinder 10 mL × .2 mL, Glass
#153-55	Stopcock Grease, 150 g Tube, Silicone
#166-03	Hand-held Balance, 0 - 320g (0.1g)
#275-03	*Hydrochloric Acid, 10%, 8 oz **UN1789**
#280-00	Wetting Agent, 1oz
#285-00-1	Calcium Carbonate Powder, Precipitated, 100 g

Optional:

#152-95-SP	Spare Parts for One Year for #152-95
#152-96-SP	Spare Parts for One Year for #152-96

Did you know?

We can repair equipment of almost any make and manufacturer!

*Requires special handling for shipping.

GARRETT GAS TRAIN WITH CASE #151-00

The Garrett Gas Train is the most widely used portable instrument for the determination of soluble sulfides and carbonate concentrations in drilling fluid. Soluble sulfides include H_2S and the sulfide (S^{-2}) and bisulfide (HS^-) ions. Total soluble carbonates include CO_2 and the carbonate (CO_3^{-2}) and bicarbonate (HCO_3) ions. Mud filtrate is acidified inside the gas train, converting all sulfides to H_2S or all carbonates to CO_2, depending upon the test. The gas train separates the gas from the liquid and an inert carrier gas transports the gasses through the separate chambers. In chamber three, the gas stream is passed through a Dräger-Tube™, which responds to H_2S or CO_2 by darkening along its length, with the stain length proportional to the amounts of concentrations in the filtrate. For qualitative H_2S analysis, lead acetate paper disks may be inserted to determine the presence or absence of sulfides. The OFITE Garrett Gas Train consists of a transparent train, pressure regulator assembly, CO_2 and N_2O cartridges, Dräger-Tubes™ for H_2S and carbonate detection, and a convenient carrying case. For determining active sulfides in oil-based fluids, OFITE offers a separate kit that analyzes whole mud samples.

Size: **18.75" × 14.5" × 8" (48 × 37 × 20 cm)**
Weight: **17 lb 5 oz (7.9 kg)**

#151-00 Garrett Gas Train

Components:

#142-39	Pipe Plug, ¼"
#143-00	Regulator, CONCOA/AIRCO
#143-02-10	CO_2 Puncture Head Assembly, OFITE
#143-03	Barrel for CO_2 Bulb
#144-13	Street Ell, ¼", Plated
#144-14	Hex Nipple, ⅛" × ⅛", Plated
#145-601	Hydrogen Sulfide Test Papers, Package of 100
#151-00-003	Binding-Head Machine Screw, 6-32" × 1/4", Nylon
#151-00-005	Washer, #10, Nylon
#151-05	Thumb Screw for Lid
#151-06	Gas Bag, 1 Liter
#151-07	2-Way Bore Stopcock with Teflon® Plug
#151-09	Hand Vacuum Pump, Dräger Model 31
#151-14	Hose, ¼" OD × 1/16" ID, 1' Length, Rubber
#151-14-1	Tube, 3" Length, Nylon
#151-15	Fitting for Filter Flow Tube, Nylon
#151-16	Septum for Injection, Rubber
#170-44	Rubber Foot, ½"
#171-90-14	Hose Barb, ⅛" NPT × ¼"

*Requires special handling for shipping.

Dräger-Tubes™:

#151-02	Dräger-Tube™, H_2S 100/a, Range 100 - 2,000 ppm, Package of 10
#151-03	Dräger-Tube™, H_2S 0.2%/A, Range 0.2 - 7 Vol.%, Package of 10
#151-04	Dräger-Tube™, CO_2 100/a, Range 100 - 3,000 ppm, Package of 10

Glassware:

#151-01	Dispersion Tube, Glass
#151-08	Flow Meter Tube, API
#153-34	Pipette, 1 mL × .01 mL, Glass
#153-40	Pipette, 10 mL × .1 mL, Glass
#153-63	Syringe with Needle, Disposable, 10 mL

O-rings:

#142-58	O-ring for Nylon Fitting
#143-02-13	O-ring for OFITE CO_2 Bulb Puncture Pin
#143-02-14	O-ring for Puncture Pin Holder Assembly
#151-10	O-ring for Dräger-Tube™ Pump
#151-11	O-ring for Flow Meter Tube Floating Ball
#151-12	O-ring for 2nd and 3rd Chamber
#151-13	O-ring for 1st Chamber

Reagents:

#151-17	Defoamer, Octanol/Octyl Alcohol, 2 oz (60 mL)
#230-15	*Sulfuric Acid, 5 N, 2 oz (60 mL) **UN2796**

Case:

#151-53	Case with Foam Insert

Note: **CO_2 and N_2O bulbs must be ordered separately.**

Optional:

#143-05	*CO_2 Bulbs, Package of 10 **UN1013**
#143-08	*N_2O Bulbs, Package of 10 **UN1070**
#151-00-SP	Spare Parts for One Year for #151-00

GARRETT GAS TRAIN ANALYSIS FOR ACTIVE SULFIDES - KIT FOR OIL-BASED DRILLING FLUIDS #151-20

#151-20 Active Sulfides Kit for Garrett Gas Train

Size: **6" × 6" × 6" (15 × 15 × 15 cm)**
Weight: **2 lb (900 g)**

Components:

#151-17	Defoamer, Octanol/Octyl Alcohol, 2 oz (60 mL)
#151-20-1	*Citric Acid, 2M, Demulsifier, IPA Solution, 16 oz (500 mL) **UN1219**
#151-20-2	Sample Injection Needle
#153-29	Syringe, 2 mL, Glass-Tip
#153-29-1	Syringe, 5 mL, Glass-Tip
#153-29-2	Syringe, 10 mL, Glass-Tip
#153-66	Syringe, Disposable, 20 mL

Filtrate Analysis Kits

SULFIDE ION (S^{-2}) TEST KIT #145-50

Sulfide ions in drilling fluid or water are generally indicated by a characteristic hydrogen sulfide odor (rotten eggs) and may be determined semi-quantitatively using this method. (1.06 ppm S = ppm H_2S).

#145-50 Sulfide Ion Test Kit

Size: **6" × 6" × 6" (15 × 15 × 15 cm)**
Weight: **1 lb (470 g)**

Components:

#153-15	Test Test, 125 mm × 15 mm, Glass
#153-43	Transfer Pipette, Disposable, 5 mL, Poly

Reagents:

#145-501	Sulfide Ion Solution "A", 2 oz (60 mL)
#145-502	*Sulfide Ion Solution "B", 2 oz (60 mL) **UN1789**
#145-503	Sulfide Ion Solution, "C", 2 oz (60 mL)
#206-03	Deionized Water, 2 oz (60 mL)

HYDROGEN SULFIDE (H_2S) DETECTION KIT #145-60

Soluble sulfides may be determined using mud filtrate. Total sulfides may be determined using whole mud.

Size: **5" × 6.25" × 3" (13 × 16 × 8 cm)**
Weight: **12 oz (0.3 kg)**

Components:

#145-601	Hydrogen Sulfide Test Papers, Package of 100
#145-602	Hydrogen Sulfide Test Bottle
#145-603	H_2S Test Color Chart with Instructions
#167-01	Carrying Case

Reagents:

#145-604	Alka-Seltzer® Tablets, Packet of 2
#151-17	Defoamer, Octanol/Octyl Alcohol, 2 oz (60 mL)
#230-15	*Sulfuric Acid, 5 N, 2 oz (60 mL) **UN2796**

#145-60 Hydrogen Sulfide Detection Kit

SULFIDE ION (S^{-2}) TEST KIT NO. 2 #145-55

Size: **6.5" × 8.5" × 10.5" (17 × 22 × 27 cm)**
Weight: **3 lb 2 oz (1.4 kg)**

Oilfield Brines, Range: 0.1 - 1,000 ppm

Components:

#153-12	Graduated Cylinder, 100 mL × 1 mL, Glass
#153-34	Pipette, 1 mL × .01 mL, Glass
#153-40	Pipette, 10 mL × .1 mL, Glass

Reagents:

#145-551	Starch Indicator Solution, 2 oz (60 mL)
#145-552	*Sulfide Buffer Solution, 2 oz (60 mL) **UN1789**
#145-553	Iodine Titrating Solution, 8 oz (250 mL)
#206-02	Deionized Water, 16 oz (500 mL)

*Requires special handling for shipping.

#145-55 Sulfide Ion Test Kit No. 2

SULFATE (SO_4) ION TEST KIT, 500 - 10,000 PPM #145-20

Size: **12" × 15" × 10.5" (30 × 38 × 27 cm)**
Weight: **6 lb 5 oz (2.9 kg)**

Components:

#153-26	Titration Dish, Polyethylene
#153-28	Stirring Rod, Polyethylene
#153-34	Pipette, 1 mL × .01 mL, Glass
#153-40	Pipette, 10 mL × .1 mL, Glass

Reagents:

#205-02	Versenate® Hardness Indicator Solution, 2 oz (60 mL)
#205-04	*Versenate® Hardness Buffer Solution, 2 oz (60 mL) **UN2672**
#205-12	Versenate® Hardness Titration Solution, 1 mL = 20 EPM, 16 oz (500 mL)
#275-04	Hydrochloric Acid, 0.02 N, 8 oz (250 mL)
#285-35	Standard Magnesium Chloride Solution, 8 oz (250 mL)
#285-36	Standard Barium Chloride Solution, 16 oz (500 mL)

Optional:

#153-10	Burette with Bottle and Bulb, Automatic, 10 mL
#168-01	Hot Plate, 115-Volt
#168-01-01	Hot Plate, 230-Volt

#145-20 Sulfate Ion Test Kit

SULFITE (SO_3) TEST KIT #145-70

Size: **6" × 10" × 5" (15 × 25 × 13 cm)**
Weight: **2 lb 1 oz (0.9 kg)**

Components:

#153-28	Stirring Rod
#153-43	Transfer Pipette, Disposable, 5 mL, Poly
#153-51	Beaker, 250 mL, Glass
#167-01	Carrying Case

Reagents:

#145-551	Starch Indicator Solution, 2 oz (60 mL)
#145-554	Potassium Iodide-Iodate Solution, 8 oz (250 mL)
#206-01	Deionized Water, 8 oz (250 mL)
#220-00	Phenolphthalein Indicator Solution, 2 oz (60 mL)
#275-00	*Hydrochloric Acid, 37%, Concentrated, 2 oz (60 mL) **UN1789**

*Requires special handling for shipping.

SODIUM CHROMATE TEST KIT #145-40

To determine the amount of Sodium Chromate (Na_2CrO_4) in a drilling fluid. Reported in parts per million (PPM).

Size: **5" × 3" × 6.25" (12 × 8 × 16 cm)**
Weight: **1 lb (0.5 kg)**

 # 145-40 Sodium Chromate Test Kit

Components:

#153-15	Test Tube, 125 mm × 15 mm, Glass
#153-43	Transfer Pipette, Disposable, 5 mL, Poly

Reagents:

#145-401	Sodium Chromate Solution “A”, 2 oz (60 mL)
#145-402	*Sodium Chromate Solution “B”, 2 oz (60 mL) **UN1789**
#145-403	Sodium Chromate Solution “C”, 2 oz (60 mL)
#206-03	Deionized Water, 2 oz (60 mL)

#145-70 Sulfite Test Kit

IRON (Fe^{+3}) COUNT TEST KIT
#161-70

Ferric iron concentration is determined in this procedure by the oxidation of iron to the ferric state at a pH value of 1 or less. The sample is then titrated with a standard EDTA solution in the presence of a salicylic acid indicator at a pH of approximately 2.4. Hydrogen sulfide interferes with the complexing action of both the EDTA solution and the salicylic acid. The hydrogen sulfide can be removed by boiling the sample with hydrochloric acid at a pH level below 1. Results are reported as ppm Fe^{+3} or as epm Fe^{+3}.

#161-70 Iron Count Test Kit

Components:

#147-50	pH Paper, pHydrion Dispenser, pH 2-10, 1-11
#153-10	Burette with Bottle and Bulb, Automatic, 10 mL
#153-12	Graduated Cylinder, 100 mL × 1 mL, Glass
#153-26	Titration Dish, Polyethylene
#153-28	Stirring Rod, Polyethylene
#153-34	Pipette, 1 mL × .01 mL, Glass

Reagents:

#200-10-1	Hydrogen Peroxide, 3% Solution, 2 oz (60 mL)
#205-00	Versenate® Hardness Titration Solution, 1 mL = 2 EPM, 16 oz (500 mL)
#205-12	Versenate® Hardness Titration Solution, 1 mL = 20 EPM, 16 oz (500 mL)
#270-00	*Nitric Acid, 3 N, 8 oz (250 mL) **UN2031**
#275-00	*Hydrochloric Acid, 37%, Concentrated, 2 oz (60 mL) **UN1789**
#285-37	Iron Indicator Solution, 2 oz (60 mL)
#285-40	Iron Buffer Solution, 2 oz (60 mL)

Optional:

#168-01	Hot Plate, 115-Volt
#168-01-1	Hot Plate, 230-Volt

PARAFORMALDEHYDE TEST KIT
#145-30 STANDARD
#145-31 WITH ANTI-FREEZE

Size: **6.25" × 5" × 3" (16 × 13 × 8 cm)**
Weight: **1 lb (0.5 kg)**

Most low pH fresh water and saltwater drilling fluids contain bacteria that attack starch material added to the drilling fluid for filtrate control. Paraformaldehyde is often added to destroy these bacteria, but it must be maintained within certain levels for best results. The Paraformaldehyde Kit contains all the apparatus and reagents required to measure the available preservative in pounds per barrel (lb/bbl).

Components:

#153-15	Test Tube, 125 mm × 15 mm, Glass
#153-43	Transfer Pipette, Disposable, 5 mL, Poly
#167-01	Carrying Case

Reagents for #145-30:

#145-301	Paraformaldehyde Solution “A”, 2 oz (60 mL)
#145-302	Paraformaldehyde Solution “B”, 2 oz (60 mL)
#145-303	Paraformaldehyde Solution “C”, 2 oz (60 mL)
#145-304	Paraformaldehyde Solution “D”, 2 oz (60 mL)

Reagents for #145-31:

#145-311	Paraformaldehyde Solution “A” **AF**, 2 oz (60 mL)
#145-312	Paraformaldehyde Solution “B” **AF**, 2 oz (60 mL)
#145-313	Paraformaldehyde Solution “C” **AF**, 2 oz (60 mL)
#145-314	Paraformaldehyde Solution “D” **AF**, 2 oz (60 mL)

AF = Anti Freeze

#145-30 Paraformaldehyde Test Kit

*Requires special handling for shipping.

Production casing and drilling tubulars occasionally suffer from severe corrosion as the result of bacterial action. Generally these micro-organisms are classified according to oxygen requirements with anaerobic referring to the absence of or low oxygen amounts, and aerobic meaning oxygen. In aerobic environments, the species Thiobacillus accounts for most of the corrosion and may convert sulfur to sulfuric acid, which then stimulates the attack. In anaerobic environments sulfate reducing bacteria convert sulfur to hydrogen sulfide, which is both corrosive and dangerous to rig personnel.

OFI Testing Equipment inventories all of the equipment necessary for field micro-biological testing.

AEROBIC AND ANAEROBIC BACTERIA TEST KIT #180-50

The procedure utilizes an extinction dilution procedure to identify and count the number of organisms present. A minimum of five vials and syringes are required for each test with a twenty-eight day incubation period for anaerobic and a minimum five day period for aerobic vials.

Size: **6.5" × 6.5" × 6.5" (17 × 17 × 17 cm)**
Weight: **13 oz (368 g)**

Components:
#153-61 Syringe with Needle, Disposable, 3 cc
#180-36 Phenol Red Vials (green), 10 cc, Aerobic Bacteria
#180-38 Sulfate Reducer Vials (silver), 10 cc, Anaerobic Bacteria

#180-50 Bacteria Testing Kit

Note: All bacteria cultures should be kept refrigerated for longer life.

RAPID CHECK II-SRB DETECTION SYSTEM, ANAEROBIC BACTERIA #180-60

OFITE also offers the Rapid Check II kit for testing sulfate reducing bacteria. The entire procedure takes only one hour, is not affected by chemical or salinity interferences, and has a range of 10^3 to 10^6 bacteria per milliliter.

If kept refrigerated and stored properly, shelf life is one year. Contents - 10 boxes (tests) per kit.

Size: **16" × 11" × 6" (41 × 28 × 15 cm)**
Weight: **6 lb (2.7 kg)**

#180-60 Rapid Check II - SRB Detection System

SANI CHECK AB KIT #110, AEROBIC BACTERIA #180-65

The Sani Check AB Kit #110 allows you to determine aerobic bacteria in aqueous and non-aqueous liquids. A saturated test paper strip is incubated for a period of 24-72 hours and then compared to a color chart to determine the bacterial count per square inch. Each kit is good for 25 tests.

Size: **4.5" × 4.25" × 2.7" (11 × 11 × 7 cm)**
Weight: **6 oz (170 g)**

#180-65 Sani Check AB Kit #110

Oilfield Polymers

A polymer is a chain of organic molecules formed by the union of two or more primary units, called monomers, of the same kind, linked end to end into another compound that has the same elements and proportions, but with a higher molecular weight and with different physical properties. Oil field polymers are added to clay-based and "no clay" drilling fluids for improved drill bit penetration rates, filtration, rheological properties, and wellbore lubricity. Another outstanding characteristic of long chain (high molecular weight) polymers is their ability to absorb on clay surfaces, which enables them to inhibit dispersion of drilled cuttings and stabilize water-sensitive shales.

A partially hydrolyzed polyacrylamide (PHPA) is the type of polymer most often used to provide all of these drilling fluid treatments. PHPA manufactured with acrylic acid is referred to as an organic polyelectrolyte because, like simple inorganic electrolytes, they dissociate into negatively charged species (Anionic) upon addition to water, which increases the conductivity of the solution. These polymers have molecular weights as high as 30 (10^6) that flocculate (link or enmesh) clay solids into a larger matrix. Unlike most oil field polymers, PHPA maintenance in a drilling fluid is based upon hole size, rate of penetration, dilution, electrolytes, and type of formation drilled. Maintenance checks should be frequent to ensure concentration of PHPA is at the proper level. Apparent performance failures have occurred because the PHPA was allowed to become excessively depleted.

OFITE provides several kits for determining the concentration of PHPA polymers used in drilling fluids. The test procedures are designed to prevent the operator from taking an extemporized approach in maintaining PHPA concentrations and to optimize the performance of the drilling fluid.

POLYMER TEST KIT - CLAPPER
#295-00 115-VOLT
#295-01 230-VOLT

This test determines the polymer concentration in mud filtrates. The test involves measurement of the rate of ammonia generation while the mud filtrate is heated in the presence of sodium hydroxide solution. The ammonia is removed from the reaction vessel with a slow air purge and detected with a Dräger-Tube™. The approximate concentration of polymer is determined by measuring the time required for the Dräger-Tube™ to turn blue. The procedure can be used to analyze all filtrates except those containing some types of lignosulfonates and polyacrylate filtration control additives.

Size: **17.5" × 13" × 10" (45 × 33 × 25 cm)**
Weight: **23 lb 10 oz (10.7 kg)**

Components:

#130-74	Transformer, 230 to 115 Volts, 1.10 Amps, 50 / 60 Hz (230-Volt Only)
#134-36-1	Knob, Red
#140-55	Filter Paper, 3½" (9.0 cm), Package of 100
#144-11	⅛" Street Ell
#151-18	Dräger-Tube™, Ammonia 5/a, Range 5 - 700 ppm
#153-02	Brush for Graduated Cylinder, 10¾" × 1½"
#153-14	Graduated Cylinder, 50 mL × 1 mL, Glass
#153-31	Wash Bottle, 500 mL, Polyethylene
#153-52-01	Hydrometer Cylinder, 250 mL, Glass
#153-66	Syringe, 20 mL, Plastic
#153-67	Syringe, 60 mL, Plastic
#153-73	Tubing, 3" × ¼" OD, Bent Glass
#153-77	Tubing, 3/16", Latex
#153-78	Tubing, ⅛", Plastic
#153-84	Stopper, No. 8, 2-Hole
#154-20	Thermometer with Metal Dial, 8", Dual-Scale: 50° - 500°F (0° - 250°C)
#155-25	Stopwatch, Digital
#163-26	Clip, Small
#163-28	Clip, Large
#165-40	Power Cable, 115-Volt
#165-47	Receptacle, 115-Volt
#168-01	Hot Plate with Thermostat, 325-Watt (115-Volt Only)
#168-01-1	Hot Plate with Thermostat, 325-Watt (230-Volt Only)
#170-32	Needle Valve, Male
#171-90-14	Hose Barb, ⅛" NPT × ¼"
#295-05	Flowmeter
#295-00-5	Street Tee, ⅛", Chromed
#285-33	*Sodium Hydroxide, 5 N (20%), 8 oz (250 mL) **UN1824**

Optional:

#153-52-02	Hydrometer Cylinder, 500 mL, Plastic
#295-00-SP	Spare Parts for One Year for #295-00 and #295-01

#295-00 Clapper Polymer Test Kit

*Requires special handling for shipping.

PHPA POLYMER CONCENTRATION KIT WITH CENTRIFUGE
#290-00

PHPA polymers are drilling fluid additives that help stabilize shales in the wellbore. Protective colloidal particles act as shale stabilizers, cuttings stabilizers, and wellbore stabilizers. By bonding on site, these colloids "inhibit" dispersion of formation solids into the drilling fluid system. The necessary supplies and reagents needed to determine the free polymer available to absorb into the wall of the hole is contained in this kit. The test procedure also provides a simple and effective way of determining the concentration of anionic (negative) polyacrylamide polymer in sludge dewatering effluent, water, and wastewater treatment.

Size: **15" × 12.5" × 10.5" (38 × 32 × 27 cm)**
Weight: **4 lb 8 oz (2 kg)**

#290-00 PHPA Polymer Concentration Kit

Components:

#153-16	Graduated Cylinder, 25 mL × .2 mL, Glass
#153-19	Centrifuge Tube, 15 mL, PYREX®
#153-25-15	Centrifuge, Portable, 2-Place, 2 -15 mL Shields, Approximately 1,750 RPM, 6-Amp, 115-Volt
#153-34	Pipette, 1 mL × .01 mL, Glass
#153-36	Pipette, 2 mL × .1 mL, Glass
#153-38	Pipette, 5 mL × .1 mL, Glass
#153-41	Pipette Safety Bulb
#153-51-4	Beaker, 100 mL, Glass
#168-04	Stirring Rod, 6", Glass

Reagents:

#260-08	Sodium Hydroxide, 0.2 N, 8 oz (250 mL)
#275-06	Hydrochloric Acid, 0.2 N, 8 oz (250 mL)
#290-02	Cresol Red Indicator Solution, 2 oz (60 mL)
#290-04	*Stannic Chloride, 10% Solution, 16 oz (500 mL) **UN3264**

Optional:

#153-25-2	Centrifuge for 15 mL Tubes, Hand-Crank, 4-Place
#153-25-12	Centrifuge, Portable, 2-Place, 12-Volt, 6-Amp, 2-15 mL Shields, Approximately 2,150 RPM
#151-50	Carrying Case
#290-00-SP	Spare Parts for One Year for #290-00

*Requires special handling for shipping.

**ANILINE POINT DETERMINATION KIT
#145-80 115-VOLT
#145-80-1 230-VOLT

The OFITE Aniline Kit determines the aniline point of oil used in drilling fluid. The aniline point indicates whether damage may occur to rubber parts of a drilling rig when oil is added to the drilling fluid. In general, oils with a high aromatic content are more detrimental to rubber products than those with a low aromatic content. The relative aromatic content of an oil is indicated by its aniline point. Oils with a high aromatic content have a low aniline point and vice versa. The higher the aniline point of the oil, the more desirable it is for drilling fluid usage. The aniline point of a diesel oil should be 140°F or above to minimize damage to rubber parts.

Size: **15" × 12" × 10.5" (38 × 30 × 27 cm)**
Weight: **11.75 lb (5.3 kg)**

#145-80 Aniline Point Kit with Optional Balance

Components:

#145-83	Utility Clamp
#152-48	Stirring Hot Plate (115-Volt Only)
#152-49	Stirring Hot Plate (230-Volt Only)
#152-48-1	Support Rod for Stirrer, ½" × 12"
#153-15-1	Test Tube, 20 × 1.2 × 150 mm, Glass
#153-15-2	Test Tube, 41 × 2.0 × 150 mm, Glass
#153-29-2	Syringe, 10 cc, Glass-Tip
#153-40	Pipette, 10 mL × .1 mL, Glass
#153-41	Pipette Aid, Rubber Section Bulb
#153-51-3	Beaker, 50 mL, Glass
#153-53-11	Stir Bar, ½" × 5⁄16"
#153-88	Cork for Thermometer, Size 8
#153-89	Cork for Test Tubes, Size 20
#154-26	Thermometer, Aniline Point, 77 - 221°F
#165-62	Filter for Syringe, 25 mm, 0.45 µm, PTFE

Reagents:

#130-78-25	Heater Bath Oil, 16 oz (500 mL)
#145-84	*Aniline Solution, 8 oz (250 mL) **UN1547**
#285-06	Calcium Sulfate, 58 grams

Optional:

#166-03	Balance, Portable, 0 - 320 × 0.1 gram
#144-90-07	Carrying Case

****WARNING: Aniline is extremely toxic.**

NITRATE (NO_3) ION TEST KIT WITH CASE #144-90

The OFITE Nitrate Ion Test Kit was specifically designed for reading the concentration of tracer nitrate ions in drilling fluids by people with extensive experience in oilfield research problems. The kit does not contain liquids and the reagent mixtures are in individually sealed plastic ampules where moisture, air, heat, and cold have the least possible effect on them. Results are available in ppm NITRATE rather than ppm NITROGEN, which is not as readily useful in tracer work. Elapsed time for a test is 13 minutes, exclusive of any filtering. The range for a direct sample is 0 - 10 ppm, and diluting 1 to 5 gives a 50 ppm range with a maximum dilution of 1 to 20 yielding a 0 - 200 ppm range. This is a very accurate field test for nitrate ions.

Size: **20" × 9" × 9" (57 × 23 × 23 cm)**
Weight: **6 lb 6 oz (2.9 kg)**

#144-90 Nitrate Test Kit

Components:

#140-56	Filter Paper, Whatman Grade 1, 12.5 cm, Package of 100
#144-90-03	Color Wheel and Comparator Box
#144-90-04	Test Tube Rack, 8 Tube Capacity
#144-90-05	Dropper Pipette, 2 mL, Polyethylene
#144-90-06	Test Tube with Rubber Stopper (150 × 18 mm)
#153-12	Graduated Cylinder, 100 mL × 1 mL, Glass
#153-18	Graduated Cylinder, 10 mL × .2 mL, Glass
#153-30	Funnel, 3", Polyethylene
#153-34	Pipette, 1 mL × .01 mL, Glass
#153-51	Beaker, 250 mL, Glass

Reagents:

#144-90-01	Calcium Hydroxide (Low Nitrate), ½ lb Jar
#144-91	NO_3^{-11} Nitrate Test Reagent, Package of 100
#144-92	NO_3^{-12} Nitrate Test Reagent, Package of 100

Case:

#144-90-07	Carrying Case

Optional:

#147-93	Nitrate Test Strips, 10 - 500 mg/L, Box of 100

*Requires special handling for shipping.

THIOCYANATE ION (SCN^-) TEST KIT #144-94

Thiocyanate Ion (SCN^-) is used as a tracer in water-based drilling fluids. This test kit provides all of the necessary supplies and reagents to determine thiocyanate ion in a drill stem test fluid or mud filtrate.

Size: **16.25" × 6.5" × 12" (29 × 17 × 31 cm)**
Weight: **13 lb (5.9 kg)**

#144-94 Thiocyanate Ion Test Kit

Components:

#153-14	Graduated Cylinder, 50 mL × 1 mL, Glass
#153-34	Pipette, 1 mL × .01 mL, Glass
#153-36	Pipette, 2 mL × .1 mL, Glass
#153-38	Pipette, 5 mL × .1 mL, Glass
#153-50-1	Erlenmeyer Flask, 125 mL, Glass
#153-60	Syringe, Disposable, 3 mL
#154-75	Scoop, Brass

Reagents:

#144-941	*Bromine Water, 16 oz (500 mL) **UN1744**
#144-942	*Orthophosphoric Acid Solution, 8 oz (250 mL) **UN1805**
#144-943	*Phenol Solution, 5%, 8 oz (250 mL) **UN2821**
#144-944	Potassium Iodide Crystals, 50 g
#145-551	Starch Indicator Solution, 2 oz (60 mL)
#206-01	Deionized Water, 8 oz (250 mL)
#262-05	Sodium Thiosulfate Solution, 0.01 N, 8 oz (250 mL)

Case:

#134-36-1	Knob, Red
#144-36	Kit, Multi-Purpose, Diagonal, Large
#163-28	Clip, Large

ZINC CARBONATE ($ZnCO_3$) TEST KIT #145-65

This is a field test procedure for determining zinc carbonate in a drilling fluid. Powdered zinc carbonate may be used to scavenge hydrogen sulfide from viscosified water-based drilling fluids. Hence, it may be necessary to monitor the available $ZnCO_3$ in the mud. The OFITE Zinc Carbonate Test Kit contains all of the required labware, supplies, and reagents for the analysis of zinc carbonate in a drilling fluid.

Size: **13" × 13" × 13" (33 × 33 × 33 cm)**
Weight: **11 lb 13 oz (5.4 kg)**

Components:

#147-54	pH Strips, Range 7.5 to 14
#153-12	Graduated Cylinder, 100 mL × 1 mL, Glass
#153-16	Graduated Cylinder, 25 mL × .2 mL, Glass
#153-18	Graduated Cylinder, 10 mL × .2 mL, Glass
#153-29-2	Syringe, 10 mL, Glass-Tip
#153-30	Funnel, 3", Polyethylene
#153-40	Pipette, 10 mL × .1 mL, Glass
#153-51	Beaker, 250 mL, Glass
#168-04	Stirring Rod, 6", Glass

Reagents:

#205-17	Versenate® Hardness Titration Solution, 1 mL = 20 EPM, 32 oz (1 L)
#205-24	Calcium Titration Solution I, 16 oz (500 mL)
#205-25	*Calcium Titration Solution II, 16 oz (500 mL) **UN3287**
#205-27	Manver (Triethanolamine) Indicator Solution, 2 oz (60 mL)
#206-02	Deionized Water, 16 oz (500 mL)
#211-00	*Ammonium Fluoride, 10% Solution, 32 oz (1 L) **UN3287**
#212-00	*Ammonium Hydroxide Concentrate, 16 oz (500 mL) **UN2672**
#213-00	*Formaldehyde, 4% Solution, 32 oz (1 L) **UN2209**
#230-25	*Acetic Acid, Glacial, 8 oz (250 mL) **UN2789**

#145-65 Zinc Carbonate Test Kit

ZINC (Zn) IN BRINES DETERMINATION KIT #145-66

Size: **12.5" × 15.5" × 10.5" (32 × 39 × 27 cm)**
Weight: **5 lb 12 oz (2.6 kg)**

Components:

#144-90-05	Dropper Pipette, 2 mL, Polyethylene
#153-34	Pipette, 1 mL × .01 mL, Glass
#153-38	Pipette, 5 mL × .1 mL, Glass
#153-40	Pipette, 10 mL × .1 mL, Glass
#153-50-1	Erlenmeyer Flask, 125 mL
#153-51-3	Beaker, 50 mL, Glass

Reagents:

#205-02	Versenate® Hardness Indicator Solution, 2 oz (60 mL)
#205-04	*Versenate® Hardness Buffer Solution, 2 oz, (60 mL) **UN2672**
#205-17-3	Versenate® Hardness Titration Solution (EDTA), 200 EPM, 16 oz (500 mL)
#206-02	Deionized Water, 16 oz (500 mL)
#262-00	Sodium Sulfide, 10% Solution, 8 oz (250 mL)
#270-01	*Nitric Acid, 1 N, 8 oz (250 mL) **UN2031**

#145-66 Zinc in Brines Kit

Did you know?

OFITE shipping specialists are certified for air flight transport of hazardous chemicals and they have been trained to build EU certified crates.

*Requires special handling for shipping.

POTASSIUM AND POTASSIUM CHLORIDE KIT (CENTRIFUGE METHOD) #285-09

Range: Clear Filtrates - Above 5,000 mg/L or 1% KCl.

Size: **18.75" × 8" × 15" (48 × 20 × 38 cm)**
Weight: **15 lb 11 oz (7.1 kg)**

#285-09 Potassium Kit with Hand-Crank Centrifuge

Components:
#153-21 Centrifuge Tube, Kolmer, 10 mL
#153-25-2 **Centrifuge with 4 Heads and Shields, Hand-Crank
#153-38 Pipette, 5 mL × .1 mL, Glass
Reagents:
#206-01 Deionized Water, 8 oz (250 mL)
#285-11 Potassium Chloride Standard, 4 oz (120 mL)
#285-13 *Sodium Perchlorate, 8 oz (250 mL) **UN3139**
Case:
#151-50 Carrying Case, Hi-Impact Plastic
#151-52 Pluck Foam Set

Other Centrifuge Models are available - See Pages 82 - 83.

POTASSIUM ION TEST KIT (TEST STRIP METHOD) #147-90

The OFITE Potassium (K^+) test is suitable as a rapid guiding test for potassium in water, drilling fluids, and extracts from soil samples. A particular advantage of the test is that potassium can be semi-quantitatively determined in the presence of 10 times its amount of sodium. The test strips have a color scale graduated as follows: Range: 0 - 300 - 700 -1,000 - 2,000 mg/L (ppm) K^+.

The test is a very simple procedure. Immerse the strip briefly in the sample solution, shake off excess moisture, immerse for 1 minute in 0.7% nitric acid, and compare the color with the color scale. The plastic box contains 100 test strips.

*Requires special handling for shipping.

POTASSIUM ION DETERMINATION KIT (TITRATION METHOD) #285-30

Range: Clear Filtrates - Below 5,000 mg/L or 1% KCl.

Size: **15.5" × 12.25" × 10.5" (39 × 31 × 27 cm)**
Weight: **6 lb 13 oz (3.1 kg)**

#285-30 Potassium Ion Determination Kit

Components:
#140-56 Filter Paper, Whatman Grade, 12.5 cm, Package of 100
#153-16 Graduated Cylinder, 25 mL × .2 mL, Glass
#153-26 Titration Dish, Polyethylene
#153-28 Stirring Rod, Polyethylene
#153-30 Funnel, 3", Polyethylene
#153-36 Pipette, 2 mL × .1 mL, Glass
#153-38 Pipette, 5 mL × .1 mL, Glass
#153-40 Pipette, 10 mL × .1 mL, Glass
#153-51 Beaker, 250 mL, Glass
#153-54 Volumetric Flask, 100 mL, Glass
Reagents:
#206-02 Deionized Water, 16 oz (500 mL)
#285-31 STPB Solution, 16 oz (500 mL)
#285-32 QAS Solution, 16 oz (500 mL)
#285-33 *Sodium Hydroxide, 5 N (20%), 8 oz (250 mL) **UN1824**
#285-34 Bromophenol Blue Indicator Solution, 2 oz (60 mL)

Optional:
#285-09-SP Spare Parts for One Year for #285-09
#285-30-SP Spare Parts for One Year for #285-30

#147-90 Potassium Ion Test Kit

Size: **6" × 1.5" × 5" (15 × 4 × 13 cm)**
Weight: **7 oz (0.2 kg)**

WATER ANALYSIS KIT IN STAINLESS STEEL CASE
#144-95

Size: **20" × 10.5" × 9.5" (51 × 27 × 24 cm)**
Weight: **28 lb 4 oz (12.8 kg)**

#144-95 Water Analysis Kit

Components:

#145-601	Hydrogen Sulfide Test Papers, Package of 100
#145-602	Test Bottle, Hydrogen Sulfide
#145-603	Color Chart, Hydrogen Sulfide
#145-604	Alka-Seltzer® Tablets
#147-50	pH Paper, pHydrion Dispenser, pH 2-10, 1-11
#153-12	Graduated Cylinder, 100 mL × 1 mL, Glass
#153-15	Test Tube, 15 mm × 125 mm
#153-26	Titration Dish, Polyethylene
#153-28	Stirring Rod, Polyethylene
#153-34	Pipette, 1 mL × .01 mL, Glass
#153-40	Glass Pipette, 10 mL × .1 mL, Glass
#153-75	Tubing, 3/16", Tygon®
#153-76	Tubing, 5/16", Tygon®
#153-83	Rubber Stopper, No. 3, One-Hole

Reagents:

#144-95-001	Burette, Auto Self-Zero
#145-551	Starch Indicator Solution, 2 oz (60 mL)
#145-552	*Sulfide Buffer Solution, 2 oz (60 mL) **UN1789**
#145-553	Iodine Titrating Solution, 8 oz (250 mL)
#147-30	Buffer Solution, pH 7, 16 oz (500 mL)
#200-10-1	Hydrogen Peroxide, 3% Solution, 2 oz (60 mL)
#205-02	Versenate® Hardness Indicator Solution, 2 oz (60 mL)
#205-04	*Versenate® Hardness Buffer Solution, 2 oz (60 mL) **UN2672**
#205-12	Versenate® Hardness Titration Solution, 1 mL = 20 EPM, 16 oz (500 mL)
#205-14	*Versenate® Calcium Buffer Solution, 2 oz (60 mL) **UN1824**
#206-04	Deionized Water, 32 oz (1 L)
#210-00	CalVer® II Indicator Powder, 10 gram
#215-00	Potassium Chromate Solution, 2 oz (60 mL)
#220-00	Phenolphthalein Indicator Solution, 2 oz (60 mL)
#230-04	*Sulfuric Acid, 0.02 N, 16 oz (500 mL) **UN2796**
#230-15	*Sulfuric Acid, 5 N, 2 oz (60 mL) **UN2796**
#240-04	Methyl Purple Indicator Solution, 2 oz (60 mL)
#250-00	Calcium Indicator Solution, 2 oz (60 mL)
#255-00	*Sulfate Indicator Solution, 2 oz (60 mL) **UN1789**
#265-08	Silver Nitrate, 0.01 g, 0.282 N, 16 oz (500 mL)
#275-00	*Hydrochloric Acid, 37%, Conc., 2 oz (60 mL) **UN1789**
#285-37	Iron Indicator Solution, 2 oz (60 mL)
#285-40	Iron Buffer Solution, 2 oz (60 mL)

Case:

#141-17	Clip for Graduated Cylinder
#144-96	Carrying Case, Stainless Steel
#163-26	Clip, Small
#163-27	Clip, Medium
#163-28	Clip, Large

*Requires special handling for shipping.

REVERSE PHASE EXTRACTION KIT
#165-65

The Reverse Phase Extraction Test Kit is used for the determination of crude or formation oil, or other petroleum oil contamination, in non-aqueous fluids used in oil and gas exploration. The test method is intended to be used as a positive/negative test to determine the presence of crude oil in NAF prior to discharging drill cuttings from offshore drilling and production platforms.

Size: **20.75" × 13.5" × 16.75" (53 × 34 × 43 cm)**
Weight: **23 lb (10.4 kg)**

#165-65 Reverse Phase Extraction Kit

Components:

#153-29-2	Syringe, 10 mL, Glass-Tip
#153-51-4	Beaker, 100 mL, Glass
#153-60-1	Syringe, 1 mL, Disposable
#153-64	Syringe, 5 mL, Disposable
#165-60-1	UV Lamp, 4W, 365 NM, 115-Volt
#165-60-2	UV Viewing Cabinet
#165-61	Sep-pak Plus C-18 Cartridges, Package of 10
#165-62	Filter for Syringe, 25 mm, 0.45 µm, PTFE
#165-63	Carrying Case, Plastic
#165-66	"Standard" Cartridge, 1% Crude
#165-67	Vials, 20 mL, Glass
#165-68	*Isopropyl Alcohol, 32 oz (1 L) **UN1219**
#165-69	Sharpie® Pen, Ultra Fine Point
#297-14	Boston Round Bottle with Cap, Natural, Poly, 16 oz (500 mL)

Optional:

#130-74	Transformer, 230 to 115 Volts, 1.10 Amps, 50 / 60 Hz

OFITE BRINE TEST KIT
#146-10

The OFITE Brine Test Kit is an accurate test to determine the weight percentage of calcium, zinc, bromide, and chloride in brine solutions. The specific gravity of the undiluted brine sample is required to calculate the results, so a mud balance or hydrometer set is required for the test (sold separately). The procedure is designed to test brines containing no undissolved solids, and if these are present, the solution must be filtered before it is analyzed. The test procedures are made with a 1:5 dilution of the original brine sample, and involve two separate procedures, one for calcium and zinc, and another procedure for chloride and bromide. Included is a procedure to check the analytical values obtained from the test procedures by comparing the moles of calcium and zinc verses the moles of bromide and chloride. This procedure verifies the calculations and is also useful to check for contamination by other salts such as sodium or potassium chlorides.

Components:

#147-53	pH Strips, 0 - 14, Package of 100
#153-30	Funnel, 3", Polyethylene
#153-31	Wash Bottle 500 mL
#153-34	Pipette, 1 mL × .01 mL, Glass
#153-38	Pipette, 5 mL × .1 mL, Glass
#153-50-1	Erlenmeyer Flask, 125 mL
#154-75	Scoop, Brass
#168-01	Hot Plate With Thermostat, 115-Volt
#296-06	Vial, 17 mm (1 Dram)
#296-07	Cap, 17 mm

Reagents:

#205-02	Versenate® Hardness Indicator Solution, 2 oz (60 mL)
#205-04	*Versenate® Hardness Buffer Solution, 2 oz (60 mL) **UN2672**
#205-12	Versenate® Hardness Titration Solution, 1 mL = 20 EPM, 16 oz (500 mL)
#206-02	Deionized Water, 16 oz (500 mL)
#214-00	*Ammonium Persulfate, 100 g **UN1444**
#215-00	Potassium Chromate Solution, 2 oz (60 mL)
#260-09	*Sodium Hydroxide, 15%, 4 oz **UN1824**
#265-14	Silver Nitrate, 0.141 N, 16 oz (500 mL)
#270-02	*Nitric Acid, 1 N, 1 oz (30 mL) **UN2031**
#270-05	Nitric Acid, .1 N, 8 oz (250 mL)

Case:

#130-10-13-3	Pluck Foam Set
#130-10-13-4	Carrying Case

Optional:

#115-00	Mud Balance with Case, OFITE 4-Scale
#140-30	Filter Press with CO_2 Assembly, Benchmount
#153-52	Hydrometer Set with Case, Range: 0.700 - 2.000 Specific Gravity
#153-52-02	Hydrometer Cylinder, 500 mL, Plastic
#168-01-1	Hot Plate With Thermostat, 230-Volt

STATIC SHEEN TEST KIT
#295-50

The Static Sheen Test is a very effective method of determining whether free oil is present in solutions. Detection of a “silvery” or “metallic” sheen, gloss, increased reflectivity, or an oil slick may indicate introduced contaminants in environmentally sensitive locations or may be indicative of a changing downhole environment. A wide variety of samples may be easily tested, such as drilling and well treating fluids, drill cuttings and produced sands. The test procedure requires a minimum of time and is easily performed.

Size: **19" × 18.5" × 12.5" (48 × 47 × 32 cm)**
Weight: **9 lb 13 oz (4.5 kg)**

#295-50 Static Sheen Test Kit

Components:

#153-12	Graduated Cylinder, 100 mL × 1 mL, Glass
#153-40-5	Pipette, Disposable, 25 mL
#153-51-5	Beaker, 1,000 mL, Glass
#153-51-6	Beaker, 1,000 mL, Polyethylene
#153-68	Weigh Boat, Disposable, Medium, 78 × 78 mm
#154-50	Spatula, 4"
#295-50-1	Dishpan, 18 qt
#295-50-2	Trashbag, 30 gal
#297-28	Pail with Lid, 5 Gallon, Plastic

Optional (But Necessary):

#153-53	Magnetic Stirrer with Stirring Bar, 115-Volt
#153-53-7	Magnetic Stirrer with Stirring Bar, 230-Volt
#166-06	Triple Beam Balance, 610 g × 0.1 g

*Requires special handling for shipping.

Today's drilling environment requires a safe and secure place to perform drilling fluid analysis. Wheel or skid-mounted trailers specially designed for laboratory testing help reduce overall drilling cost of the well, while increasing the safety of rig personnel. On-site testing means no downtime waiting for laboratory results, which may be many miles away. For rig personnel, this means greater accuracy, lower costs, and quicker response time.

Laboratories are available in many sizes designed to fit in the limited space available on platforms or workover rigs. The standard width is 8', with lengths of 10', 20', 30', and 40' available. Each size features plenty of workspace for performing tests and preparing reports. Laboratory units come with a 115-volt air compressor, a sink, ample counter space, electrical outlets, and a dorm-size refrigerator for samples. There is plenty of cabinet storage space for equipment and reagents. All labs are heated and cooled and may be pressurized upon request.

For on-site drilling fluid and cement testing, standard accessories include 100 feet of safety power cable, 50 feet of water hose, water and air connections, a drain hose, vent pipe, am/fm radio, a coffee pot, and an office chair. Special equipment required by the rig may be provided upon request. Laboratories are designed to meet Coast Guard and MMS Mobile Offshore Drilling Unit rules and regulations, and fully comply with marine inspection requirements for classified areas.

To request a quote, fill out the questionnaire on page 186 and send it to your OFITE sales representative.

Please specify all voltages required when placing orders.

Did you know?

OFITE offers a variety of payment options, including most major credit cards. If you are interested in a Net-30 day account, a credit application is available in the index.

Cement Testing Equipment

The goals of OFITE's Cement Testing Equipment Division are to manufacture superior instrumentation to evaluate the properties of well cements, develop new innovative products for the industry, and supply customer support to cement laboratories throughout the world.

OFITE offers a complete line of testing equipment for the cementing industry, including pressurized balances, constant-speed blenders, and consistometers. OFITE prides itself on innovative designs, such as our Ultrasonic Cement Analyzer. This unit uses acoustic signals to provide a non-destructive way of determining compressive strength. Our unique technology results in a cleaner signal than other models so transit times and data are more accurate.

Most of OFITE's engineers and technicians have been employed by other operators or service companies and have considerable experience in the field and laboratory environments. We know that when data is requested that it is frequently urgent and in many cases was needed "yesterday." When designing our equipment, the "urgent factor" is taken into consideration. Our products are engineered to provide reliability, ease of operation, and user-friendly maintenance to keep downtime to a minimum.

CEMENT TESTING EQUIPMENT

Part No.	Description	Page
#120-00	Consistometer, HTHP	130
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#120-57	Fluid Gas Migration Analyzer	136
#120-60	Constant Speed Blender	138
#120-70	Stirred Fluid Loss Tester	137
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OFITE MODEL 100 HTHP CONSISTOMETER, 25,000 PSI, 400°F, 230-VOLT

#120-00 SINGLE-CELL
#120-00-DAS SINGLE-CELL WITH DATA ACQUISITION SYSTEM
#120-05 DUAL-CELL
#120-05-DAS DUAL-CELL WITH DATA ACQUISITION SYSTEM

OFITE MODEL 120 HTHP CONSISTOMETER, 40,000 PSI, 600°F, 230-VOLT

#120-10 SINGLE-CELL
#120-10-DAS SINGLE-CELL WITH DATA ACQUISITION SYSTEM
#120-15 DUAL-CELL
#120-15-DAS DUAL-CELL WITH DATA ACQUISITION SYSTEM

Size: 66" × 36" × 32" (168 × 91 × 81 cm)
Weight: 1,400 lb (635.6 kg)

Crated Size: 74" × 44" × 40" (188 × 112 × 102 cm)
Crated Weight: 1,600 lb (726.4 kg)

During cementing operations, the time required for a cement slurry to set is of primary concern. Under an ideal situation, minimal time would be required to successfully pump the slurry, which immediately upon placement, begins to develop compressive strength. However, if insufficient time is allowed to fully pump the cement, it will be necessary to drill the cement remaining in the casing string. Remedial operations such as this are very costly. Conversely, cements that are successfully placed, but require considerable time to cure, consume valuable rig time, which is also quite costly. Laboratory tests should be conducted under simulated reservoir conditions to examine the actual thickening time of the slurry. The OFITE HTHP Consistometer was specifically engineered to determine the thickening time of well cements under simulated downhole pressures and temperatures.

Method of Operation:
A cement is mixed and poured into the slurry cup assembly. The slurry cup is placed into the test vessel and pressure is increased via an air-driven hydraulic pump. A PID temperature controller governs an internal heater, which maintains the necessary temperature profile, while a magnetic drive mechanism rotates the slurry cup assembly at 150 RPM. A potentiometer controls an output voltage, which is directly proportional to the amount of torque the cement exerts upon an API-approved paddle. A multi-channel, paperless graphic recorder registers cement consistency and temperature as a function of time. Temperature and consistency are digitally displayed on screen and saved to a disk for later analysis.

Features and Specifications:

- Maximum operating temperature of 600°F / 400°F
- Maximum pressure of 40,000 PSI / 25,000 PSI
- Digital temperature controller, 1° resolution
- 4,000-watt internal heater (5,000-watt available)
- Pressure indicator resolution is 100 PSI and incorporates high and low-pressure alarms
- Slurry cup rotational speed is 150 RPM
- Pressure generated via an air-driven hydraulic pump
- Slurry cup constructed of 316 stainless steel and incorporates an expansion chamber
- Drive table is rotated with a magnetic drive
- External cooling jacket aids cooling of test cell
- Electronic timer with alarm, elapsed 0.1 minute resolution
- Deadweight calibration unit included
- Temperature, pressure, and consistency alarms provide automatic shutdown
- Safety head with rupture disk are provided
- Unit is fully capable of testing cements in strict accordance to the guidelines as stated within API Specification 10

#120-00 HTHP Consistometer

Instrument Requirements:

- Air/Nitrogen supply (100 - 120 PSI)
- Water supply for cooling (40 PSI)
- Water drain
- 230-Volt, 50/60 Hz, 25-Amp electrical power supply

Components:

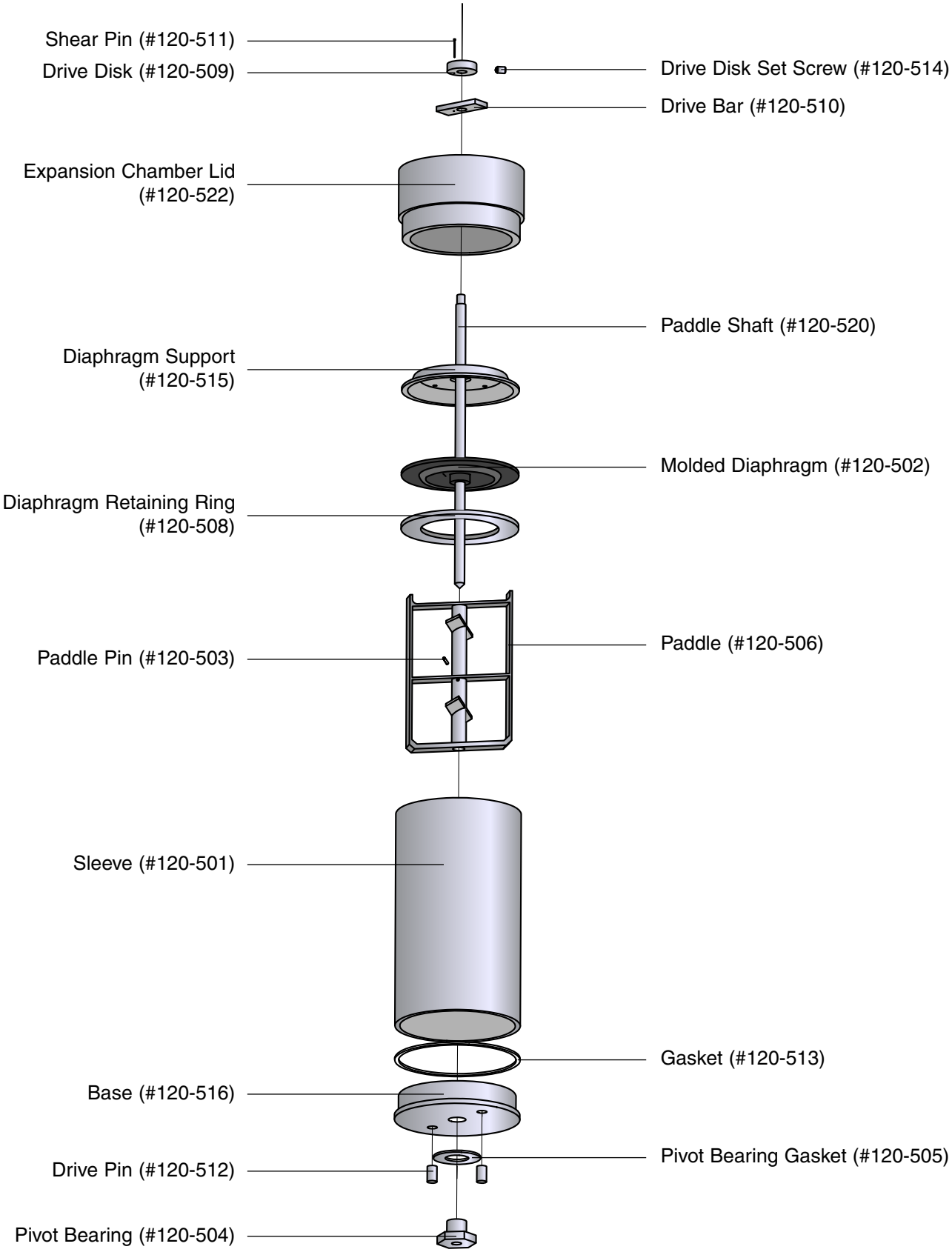
#120-00-01	Temperature Controller
#120-001	Mineral Oil, 1 gal
#120-00-5	Graphic Recorder
#120-101	Pressure Release Valve, 60,000 PSI (413.7 MPa)
#120-102	Rupture Disk, 28,000 PSI (193 MPa)
#120-105	Check Valve, High-Pressure
#120-106	Filter, High-Pressure
#120-147	Mag Drive
#120-25-01	Solid State Relay
#120-401	Metal O-rings
#120-75-10	Weight Set, Slotted
#120-75-3	Solenoid Valve, Water, 230-Volt
#120-75-7	Bushing for Pulley
#120-75-8	Pulley, Motor Timing
#120-75-9	Weight Hanger
#120-80-6	Motor
#122-079	Circuit Breaker
#130-79-26	Connector, Female, 3-Pin
#130-79-27	Connector, Male, 3-Pin
#130-79-38	Power Cord, 10/3
#170-34	Needle Valve, Male, ¼" × ¼" NPT
#171-44	Rubber Foot, ¾"
#174-14	Motor Controller

Optional:

#120-01	Spare Parts for One Year for #120-00
#120-02	Spare Parts for Two Years for #120-00
#120-11	Spare Parts for One Year for #120-10

#120-506 Paddle for HTHP Consistometers

#120-521 Slurry Cup Assembly



OFITE MODEL 130 HTHP BENCHTOP CONSISTOMETER, 230-VOLT
#120-90 STANDARD
#120-90-DAS WITH DATA ACQUISITION SYSTEM

One of the most important parameters in the design and performance of a cement slurry is the thickening time. The API defines the thickening time as the time period required for a slurry to reach 100 Bearden units of consistency (Bc) under simulated downhole conditions of pressure and temperature. The API defines 100 Bc as 2,080 gm-cm of torque. However, most cement slurries are too viscous to pump above 70 Bc and are usually inserted into the annulus prior to reaching this level. Operators and service companies can reduce overall well costs by formulating slurries that can be easily placed and then quickly develop the compressive strength necessary to continue operations. The OFITE Model 130 Benchtop Consistometer was specifically designed to assist the engineer in estimating the time required to successfully place the cement slurry into the annulus while minimizing the "waiting on cement" (WOC) time. Its compact, lightweight design makes the unit ideally suited for field use.

Method of Operation:
A cement slurry is mixed according to the guidelines set within the API Specification 10. The cement is then poured into the slurry cup assembly of the Model 130 and placed into the test cell. Pressure is increased by an air-driven hydraulic pump, while the temperature is increased by use of an internal heater controlled by a microprocessor. The slurry container is rotated at 150 RPM. Consistency is measured by the amount of torque the slurry exerts on an API-approved paddle. A potentiometer assembly controls an output voltage, which is directly proportional to the torque exerted upon the paddle. Consistency and temperature are measured and permanently recorded as a function of time on a multichannel, paperless graphic recorder.

Features and Specifications:
- Maximum operating temperature of 400°F (200°C)
- Maximum operating pressure of 16,000 PSI
- Digital programmable temperature controller
- Pressure displayed in PSI
- An electronic chronograph measures elapsed time
- Cooling jacket facilitates cool down
- A safety head with rupture disk is provided
- Compact size and light weight make the unit suitable for field work
- Unit is fully capable of testing well cements in strict accordance with the guidelines as stated within API Specification 10

Instrument Requirements:
- Air/Nitrogen supply of 100 PSI
- Cooling water at 40 PSI
- 230-Volt, 50/60 Hz, 15-Amp electrical power supply

Size: **25" × 16" × 20" (64 × 41 × 51 cm)**
Weight: **215 lb (97.6 kg)**

Crated Size: **30" × 20" × 24" (76 × 51 × 61 cm)**
Crated Weight: **255 lb (115.8 kg)**

Components:

#120-00-01	Temperature Controller
#120-001	Mineral Oil, 1 gal
#120-75-10	Weight Set, Slotted
#120-75-5	Contactor, 230-Volt
#120-75-9	Weight Hanger
#120-80-6	Motor
#120-90-001	Cable, 12-Wire, 18-Gauge
#120-90-11	Solid State Relay with Heat Sink
#120-90-5	Graphic Recorder
#120-104	Rupture Disk, 17,500 PSI (121 MPa)
#120-105	Check Valve, High-Pressure
#120-106	Filter, High-Pressure
#120-206	Heater, 2,500-Watt
#120-208-1	Thermocouple
#120-519	Slurry Cup Assembly, No Expansion Cap
#120-628	Potentiometer Assembly
#130-79-26	Connector, Female, 3-Pin
#130-79-27	Connector, Male, 3-Pin
#152-38	AC Power Cord, 3-Conductor, International (Continental European)
#164-32	Male Connector for Power Cable, 230-Volt
#170-34	Needle Valve, Male, ¼" × ¼" NPT
#170-44	Rubber Foot, ½"
#171-48-3	Plug Receptacle
#171-80	Needle Valve with Modified Stainless Steel Handle, Male, ¼"
#174-14	Motor Controller

Optional:

#120-91	Spare Parts for One Year for #120-90

#120-90 Model 130 Benchtop Consistometer

OFITE MODEL 80 RECORDING ATMOSPHERIC CONSISTOMETER

#120-80 115-VOLT
#120-80-1 230-VOLT

The Model 80 Recording Atmospheric Consistometer is utilized to condition cement slurries in accordance with API Specification 10. Determination of rheological properties, examination of free water content, and evaluation of the API fluid loss test all require that the cement slurry be conditioned by an atmospheric consistometer. The OFITE Model 80 incorporates the same features as our Model 60 Atmospheric Consistometer and additionally, measures and reports temperature and consistency as a function of time via a paperless graphic recorder.

Method of Operation:
A cement slurry is prepared according to the procedures outlined within API Specification 10 and then placed within the slurry containers of the Model 80 Recording Atmospheric Consistometer. The slurry is typically stirred at 150 RPM by an API-designed paddle and the temperature is increased to the desired level. The temperature is controlled by a microprocessor, which displays the process temperature via a digital indicator. Consistency, measured in Bearden Units (Bc), is determined by measuring the deflection of a calibrated spring. This deflection is created by the amount of torque that the cement slurry exerts upon the paddle and is a function of the consistency of the cement. A potentiometer mechanism generates an output voltage signal, which is directly proportional to the consistency of the cement. The graphic recorder transforms the output voltage signal into Bearden Units of consistency, which is digitally displayed and stored on disk for later analysis.

Features and Specifications:
- Operating temperatures to 200°F
- Multi-channel paperless graphic recorder measures temperature and consistency of each container
- Unit operates at atmospheric pressure
- Microprocessor temperature controller
- Digitally displays process temperature
- Heat transfer fluid is circulated
- Heater wattage is 1,500
- Slurry container rotational speed is 150 RPM
- Dual sample container design
- Two alarms indicate termination of the test
- Cooling coils
- Stainless steel temperature bath
- Deadweight calibration unit

Instrument Requirements:
- Water supply for cooling
- Water drain
- 115-Volt, 50/60 Hz, 20-Amp
- 230-Volt, 50 Hz, 10-Amp

Size: 30" × 16" × 18" (76 × 41 × 46 cm)
Weight: 105 lb (47.7 kg)

Crated Size: 23" × 20" × 22" (58 × 51 × 56 cm)
Crated Weight: 170 lb (77.2 kg)

Components:

#120-001	Mineral Oil
#120-75-10	Weight Set, Slotted
#120-75-2	Solenoid Valve, Water, 115-Volt
#120-75-3	Solenoid Valve, Water, 230-Volt
#120-75-5-1	Contactor, 115-Volt
#120-75-5	Contactor, 230-Volt
#120-75-7	Bushing for PUlley
#120-75-8	Pulley, Motor Timing
#120-75-9	Weight Hanger
#120-80-01	Drive Assembly
#120-80-4	Temperature Controller
#120-80-5	Graphic Recorder
#120-80-6	Motor
#121-001	O-ring for Container
#121-002	Retaining Ring
#121-007	Rotator Thrust Bearing
#121-008	Thermocouple
#121-009	Timing Belt
#121-010	Heater (115-Volt Only)
#121-010-1	Heater (230-Volt Only)
#130-79-26	Connector, Female, 3-Pin
#130-79-27	Connector, Male, 3-Pin
#152-37	AC Power Cord (115-Volt Only)
#152-38	AC Power Cord (230-Volt Only)
#170-44	Rubber Foot, ½"
#171-48-3	Plug Receptacle
#172-24	Solid State Relay, 25-Amp, 230-Volt
#174-14	Motor Controller

#120-80-1 Recording Atmospheric Consistometer

Optional:

#120-83	Spare Parts for One Year for #120-80-1

OFITE MODEL 60 ATMOSPHERIC CONSISTOMETER
#120-75 115-VOLT
#120-75-1 230-VOLT

The Model 60 Atmospheric Consistometer is used for conditioning cement slurries as specified within API Specification 10. Determination of rheological properties, examination of free water content, and evaluation of the API fluid loss test all require that the cement slurry be pre-conditioned by an atmospheric consistometer. The OFITE Model 60 was specifically developed to perform these duties.

Method of Operation:
A cement slurry is prepared according to the procedures as outlined within API Specification 10 and then placed within the slurry containers of the consistometer. The slurry is stirred at 150 RPM by an API-designed paddle while the temperature is increased to the desired level. The temperature is controlled by a micro-processor, which displays the process temperature via a digital indicator. Consistency, measured in Bearden Units (Bc), is determined by measuring the deflection of a calibrated spring. This deflection is created by the amount of torque the cement slurry exerts upon the paddle and is a function of the consistency of the cement. The API defines 100 Bc as 2,080 gm-cm of torque.

Features and Specifications:
- Maximum operating temperature of 200°F
- Unit is operated at atmospheric pressure
- Temperature is maintained via a PID controller
- Process temperature is displayed digitally
- Heat transfer fluid is continuously circulated
- Heater wattage is 1,500
- Slurry container rotational speed is 150 RPM
- Dual container design
- Cooling system included
- Stainless steel temperature bath
- Deadweight calibration unit

Instrument Requirements:
- Water supply for cooling
- Water drain
- 115-Volt, 50/60 Hz, 4.4 KVA power source
- 230-Volt, 50/60 Hz, 2.2 KVA power source

Size: **24" × 16" × 18" (61 × 41 × 46 cm)**
Weight: **95 lb (43.1 kg)**

Crated Size: **28" × 20" × 22" (71 × 51 × 56 cm)**
Crated Weight: **160 lb (72.6 kg)**

Components:

#120-001	Mineral Oil
#120-60-30	Rubing, ¼" OD × .035 Wall
#120-75-10	Weight Set, Slotted
#120-75-17	Drive Assembly
#120-75-2	Solenoid Valve, Water (115-Volt Only)
#120-75-5	Contactor (230-Volt Only)
#120-75-5-1	Contactor (115-Volt Only)
#120-75-6	Cabinet
#120-75-8	Motor Timing Pulley
#120-75-9	Weight Hanger
#120-80-4	Temperature Controller
#120-80-6	Motor
#121-001	Container O-ring
#121-002	Retaining Ring
#121-007	Rotator Thrust Bearing
#121-008	Thermocouple
#121-009	Timing Belt
#121-010	Heater (115-Volt Only)
#121-010-1	Heater (230-Volt Only)
#152-37	AC Power Cord, 3-Conductor
#165-01	On/Off Switch
#170-44	Rubber Foot, ½"
#171-44	Rubber Foot, ¾"
#171-48-3	Plug Receptacle
#172-24	Solid State Relay, 25-Amp, 230-Volt
#174-14	Motor Controller

#120-75 Model 60 Atmospheric Consistometer

Optional:

#120-76	Spare Parts for One Year for #120-75
#120-76-1	Spare Parts for One Year for #120-75-1
#120-77	Spare Parts for Two Years for #120-75

FLUID GAS MIGRATION ANALYZER, 230-VOLT #120-57

The problems of gas migration after cementing have been well documented. The costs associated with these problems, as well as more strict environmental regulations, have forced gas well operators to look for methods to minimize gas migration.

The OFITE Laboratory Gas Flow Model helps predict and overcome the potential for gas migration after cementing. This unit evaluates both the potential and severity of gas migration at downhole conditions with the recommended slurry. This allows for the design of the most economical and reliable cement slurry for a particular well.

Method of Operation:
A test cement slurry is prepared according to the API specification 10, poured into a test cell, and placed into a heating jacket. The test cell is fitted with a piston above the slurry and a screen below. A back pressure regulator below the test cell applies back flow pressure. Hydrostatic pressure is applied to the piston and nitrogen/gas pressure is applied through the piston tubing and onto the cement slurry. As the slurry hardens, if the cement is sufficiently permeable, the nitrogen pressure will force the gas through the back pressure regulator to be collected and measured. Both filtrate and gas volume are collected.

Size: **43" × 36" × 48" (109 × 91 × 122 cm)**
Weight: **469 lb (212.7 kg)**

Components:

#120-57-07	Pressure Sensor, 0 - 2,500 PSI
#130-76-03	Thermocouple
#130-79-21	Model LF Controller, 525F, Limit Switch, 230-Volt
#153-67	Syringe, Disposable, 60 cc
#154-63	Spatula with Flat Handle, Micro Spoon, 9"
#165-14-8	Thermocouple, Type “J”, ⅛" × 6"
#170-17	Valve Stem O-ring
#170-18	Screen, 325-Mesh with 60-Mesh Backup, Detachable

Optional:
#120-27-SP Spare Parts Kit

#120-57 Fluid Gas Migration Analyzer

Did you know?

OFITE has an engineering services department ready to help you with your next custom design project.

OFITE MODEL 40 STIRRED FLUID LOSS TESTER

#120-70 115-VOLT
#120-70-1 230-VOLT

Successfully cementing the casing string of an oil or gas well is highly dependent upon the characteristics of the cement slurry. Properties that should be considered include consistency, density, the ability to quickly develop compressive strength, rheological properties, and filtration control. Well cements that have poor filtration control can lead to a complete failure of the cementing operation. In addition, the invasion of filtrates into producing zones causes formation damage, which can greatly reduce the production potential of the reservoir. Developing cement slurries that have minimal filtration loss prevents expensive remedial cementing operations and reduces formation damage. The OFITE Stirred Fluid Loss Tester provides a reliable means of determining the fluid loss characteristics of a well cement.

Method of Operation:
A cement slurry is poured into the test cell, which is then placed into the heating jacket. The gear drive system is connected to the agitation paddle, which is dimensionally equivalent to an atmospheric consistometer paddle. The desired test temperature is maintained by a digital PID temperature controller, while the necessary pressure is applied to the cell to prevent evaporation of the liquid phase. When conditioning the cement in accordance to API Specification 10 guidelines, the paddle is rotated at 150 RPM for 20 minutes. Once the cement is conditioned, the test cell is rotated 180 degrees and the desired differential pressure is applied to the cell. The filtrate is collected in a back pressure receiver for 30 minutes. The API defines fluid loss as the volume (cc) of filtrate that is collected during this 30-minute interval.

Features and Specifications:
- Maximum pressure of 2,000 PSI
- Maximum temperature of 400°F
- Temperature is maintained by PID temperature controller
- Variable paddle rotation speed (5 to 200 RPM)
- Filtration portion of cell is dimensionally equivalent to an API approved HTHP test cell

Instrument Requirements:
- 115-Volt, 60 Hz, 18-Amp power source
- 230-Volt, 50 Hz, 10-Amp power source

Crated Size: 38" × 26" × 34" (97 × 66 × 86 cm)
Crated Weight: 220 lb (998 kg)

Components:

#120-503	Paddle Pin
#120-75-5	Contactor (230-Volt Only)
#120-75-5-1	Contactor (115-Volt Only)
#120-80-4	Temperature Controller
#120-80-6	Motor
#126-025	Packing Set
#126-036	Paddle
#130-76-03	Thermocouple
#130-79-20	Model LF Controller 525F, Limit Switch (115-Volt Only)
#130-79-21	Model LF Controller 525F, Limit Switch (230-Volt Only)
#152-37	AC Power Cord, 3-Conductor (115-Volt Only)
#152-38	AC Power Cord, 3-Conductor (230-Volt Only)
#153-14	Graduated Cylinder, 50 mL × 1 mL, Glass
#153-16	Graduated Cylinder, 25 mL × .2 mL, Glass
#165-14-8	Thermocouple, Type “J”, ⅛" × 6"
#165-44	Thread Lubricant, High-Temperature, 1 oz
#170-13	O-ring for Cell, Buna N
#170-16	Valve Stem
#170-17	O-ring for Valve Stem
#170-18	Screen, 325-Mesh with 60-Mesh Backup, Detachable
#170-20	Manifold Block
#170-35	Adjustable Wrench, 6"
#171-10	**Back Pressure Receiver, 100 mL:**
#170-32	Needle Valve, Male, ⅛" × ⅛" NPT
#171-11	O-ring for Receiver Body
#171-12	Receiver Body
#171-22	Retainer Pin
#171-22	Retainer Pin
#171-44	Rubber Foot, ¾"
#171-48-3	Plug Receptacle
#172-24	Solid State Relay, 25-Amp, 230-Volt
#174-14	Motor Controller

#120-70 Stirred Fluid Loss Tester

Optional:

#120-71	Spare Parts for One Year for #120-70

OFITE MODEL 20 CONSTANT SPEED BLENDER
#120-60 115-VOLT
#120-60-1 230-VOLT

The OFITE Model 20 Constant Speed Blender facilitates the preparation of oil well cements for testing according to the guidelines stated within API Specification 10. Research has demonstrated that the properties of well cements are highly dependent upon mixing procedures. When constant speed blenders/mixers are used, data obtained from thickening time tests has greater reproducibility and generally correlates better with data obtained from other laboratories. The OFITE Model 20 provides a means of consistently preparing cement slurries for testing purposes and can also be utilized to mix cements according to the procedures stated by the API.

Method of Operation:
The proper amount of mix water is carefully weighed and poured into the mixing container of the blender. The rotational speed is set to 4,000 RPM and allowed to stabilize. The "TEST" switch is pressed and the cement is immediately added to the mix water in less than 15 seconds. The rotational speed is automatically increased to 12,000 RPM and the slurry is mixed an additional 35 seconds. A microprocessor maintains the rotational speed and is independent of fluctuations in line voltage and the viscosity of the cement slurry.

Features and Specifications:
- Hardened stainless steel mixing blades
- Stainless steel 1 liter mixing container
- Two preset mixing speeds and variable speed
- Rotational speed is maintained at set point with microprocessor
- Timing relays automatically control mixing times at required RPM
- Digital instrumentation provides excellent readability
- Optional Torque Measuring Module tests crosslinking time for fracturing fluids

Instrument Requirements:
115-Volt, 60 Hz, or 230-Volt, 50 Hz
Each can be operated via a 1.25 KVA power supply.

Size: 45" × 32" × 12" (114 × 81 × 31 cm)
Weight: 75 lb (34.1 kg)

Crated Size: 24" × 19" × 39" (61 × 48 × 99 cm)
Crated Weight: 106 lb (48 kg)

Components:

#122-208-1	Exciter Gear for Waring Blender, Ten-Tooth
#122-209-1	Blender, Waring (230-Volt Only)
#122-210-1	Blender, Waring (115-Volt Only)
#122-210-2	Computer Plug
#122-210-3	DBA Connector, 9-Pin
#122-210-4	Connector Shield
#152-37	AC Power Cord, 3-Conductor (115-Volt Only)
#152-38	AC Power Cord, 3-Conductor, International (230-Volt Only)
#171-44	Rubber Foot, ¾"
#171-48-3	Plug Receptacle
#174-14	Motor Controller

Optional:

#120-60-018	Mag Pickup
#120-60-50	Torque Measuring Module
#120-61	Spare Parts for One Year for #120-60

#120-60 Model 20 Constant Speed Blender

CONSTANT SPEED BLENDER, 4 LITER
#120-65 115-VOLT
#120-65-1 230-VOLT

Components:

#122-208-2	Exciter Gear for Waring Blender, Ten-Tooth
#122-210-2	Computer Plug
#122-210-3	DBA Connector, 9-Pin
#122-210-4	Connector Shield
#152-37	AC Power Cord, 3-Conductor (115-Volt Only)
#152-38	AC Power Cord, 3-Conductor, International (230-Volt Only)
#171-44	Rubber Foot, ¾"
#171-48-3	Plug Receptacle

Optional:

#120-60-50	Torque Measuring Module
#120-66	Spare Parts for One Year for #120-65

#120-65 4-Liter Constant Speed Blender

OFITE ULTRASONIC CEMENT ANALYZER, 230-VOLT
#120-50 SINGLE CELL
#120-52 DUAL CELL

By measuring the change in velocity of an acoustic signal, the Ultrasonic Cement Analyzer provides a continuous non-destructive method of determining compressive strength as a function of time.

Method of Operation:
The cement slurry to be tested is placed in an autoclave unit with temperature and pressure adjusted to simulate downhole conditions. An acoustic signal is then transmitted through the cement sample. As the strength of the cement increases over time, the faster the acoustic signal travels through the sample.

A computer running customized Windows®-based software measures the transit times of the signal over time and interpolates the compressive strength values. This data is available in real time onscreen and is also stored in an Excel spreadsheet for easy graphical viewing and printing.

Features and Specifications:
- Cement samples are not destroyed at time intervals
- Can purchase additional autoclaves
- Temperature control (up to 400°F)
- Pressure control (up to 16,000 PSI)
- Data is available instantly onscreen and is automatically downloaded to an Excel spreadsheet

Size
Single: 15" × 24" × 18" (38 × 61 × 46 cm)
Dual: 15" × 40" × 18" (38 × 122 × 46 cm)

Weight
Single: 85 lb (39 kg)
Dual: 170 lb (78 kg)

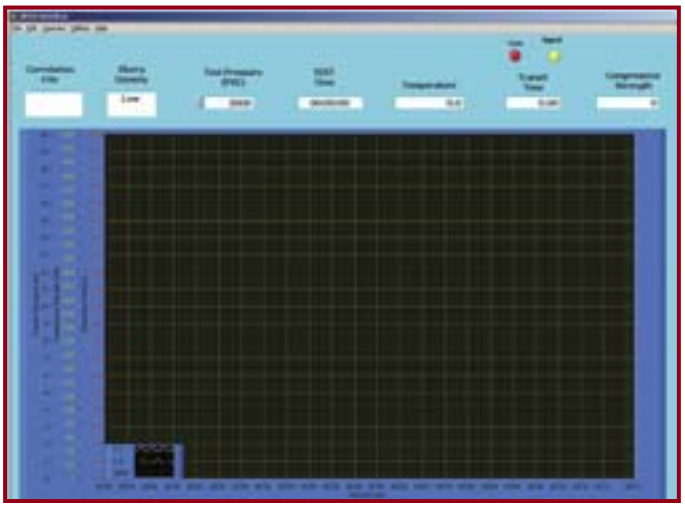
Components:

#120-00-001	Sonalert
#120-00-01	Temperature Controller (Single-Cell Only)
#120-00-053	Elbow Connector, ¼"
#120-104	Rupture Disk, 17,500 PSI (120.6 MPa)
#120-25-059	Contactor (Dual-Cell Only)
#120-50-001	Circuit Board, Version 2
#120-50-TR	Transducer, Set of 2
#120-51-001	Temperature Controller, Eurotherm Model 2408 P4 (Dual-Cell Only)
#120-75-5	Contactor, 230-Volt (Single-Cell Only)
#120-910-061	Union Elbow, ¼" Tube
#123-011	O-ring for Test Cell, 75 Durometer
#123-023	Acoustic Couplant, Low-Temperature, Up to 250°F (121°C)
#123-024	Acoustic Couplant, High-Temperature, Up to 600°F (315°C)
#130-75-71	Monitor
#130-75-74	Desktop Computer
#130-76-11	Terminal
#130-77-025	Leveling Leg
#130-77-054	Elbow, ⅛", Male
#130-78-045	Connector, Male, ¼" Tubing
#130-78-046	Tube Fitting, Swagelok Male Connector, ¼" Tube OD × ⅜" Male NPT, Stainless Steel
#130-79-14	Printer
#130-79-15	Serial Cable, OB9, M/F
#130-79-26	Connector, Female, 3-Pin
#130-79-27	Connector, Male, 3-Pin
#130-79-28	Connector, Wago, Female, 2-Pin
#130-79-29	Connector, Wago, Male, 2-Pin
#150-80-074	Quick-Connect Stem
#152-38	AC Power Cord, 3-Conductor, International
#171-48-3	Plug Receptacle
#172-24	Solid State Relay, 25-Amp, 230-Volt

Optional:
#123-011-1 O-ring for Test Cell, 90 Durometer

#120-50 Single Cell Ultrasonic Cement Analyzer

#120-52 Dual-Cell Ultrasonic Cement Analyzer



TWIN-CELL ULTRASONIC CEMENT ANALYZER #120-51

The OFITE Twin-Cell UCA is a more cost-efficient alternative to the standard Single-Cell or Dual-Cell UCA. The compact design make this model almost the same size as the Single-Cell UCA, while allowing two samples to be tested simultaneously.

Size: **13" × 24" × 22" (33 × 61 × 56 cm)**
Weight: **Approximately 100 lb (45 kg)**

Features and Specifications:

- Non-Destructive - Cement samples are not destroyed at time intervals.
- Economical - Lower maximum pressures (up to 5,000 psi) keep costs down, while easily meeting standards.
- Compact - Can be used with a laptop for complete portability.
- Accurate Data - Unique technology results in a cleaner signal, so transit times and data are more accurate.
- Computer-Controlled - Data is available instantly on-screen and is automatically downloaded to an Excel spreadsheet for easy analysis.

#120-51 Twin-Cell Ultrasonic Cement Analyzer

OFITE MODEL 200 HTHP CEMENT CURING CHAMBER, 230-VOLT

#120-20 SINGLE CELL, SINGLE DEEP
#120-25 SINGLE CELL, DOUBLE DEEP
#120-30 DUAL CELL, SINGLE DEEP

The Model 200 HTHP Curing Chamber is designed to prepare well cement specimens for compressive strength tests. It is necessary to determine the amount of time required for a cement to develop compressive strength so that drilling/production operations can be resumed as quickly as possible. The goal is to design a slurry that can quickly develop compressive strength so that the "waiting on cement" time may be minimized. The OFITE HTHP Curing Chambers provide a means of curing cement specimens under typical downhole temperatures and pressures.

Method of Operation:
Cement is poured into a special mold that produces specimens measuring 2" × 2" × 2". The mold is placed into the test cell and the pressure is increased via an air-driven hydraulic pump. Test temperature is governed by a PID temperature controller, which actuates the heater. After a predetermined amount of time, the temperature of the test cell is reduced by the cooling system. Specimens are removed and the compressive strength is determined as outlined in API Specification 10.

Model 200 Features and Specifications:
- Maximum operating temperature of 600°F
- Maximum operating pressure of 5,000 PSI
- Test cell cures 8-16 specimens
- Digital programmable temperature controller
- Digitally displays temperatures
- Electronic timer measures elapsed time and may be programmed to terminate test
- Coolant system quickly cools the test cell
- For safety, a pressure relief valve, as well as a safety head with rupture disk are provided
- Dual compression molds meet ASTM standard C-109
- Unit may be utilized to test well cements in accordance to API Specification 10

Instrument Requirements:
- Air supply of 100 PSI
- Cooling water at 40 PSI
- 230-Volt, 50/60 Hz, 20-Amp electrical power supply

Size: **33" × 30" × 60" (84 × 76 × 152 cm)**
Weight: **Approximately 1,100 lb (499 kg)**

Crated Size: **39" × 36" × 66" (99 × 91 × 168 cm)**
Crated Weight: **Approximately 1,300 lb (590 kg)**

Components:

#120-00-001	Sonalert
#120-00-01	Temperature Controller
#120-00-053	Elbow Connector, ¼"
#120-25-01	Solid State Relay
#120-25-059	Contactor
#120-75-3	Water Solenoid Valve, 230-Volt
#120-910-061	Union Elbow, ¼" Tube
#122-008	Heater
#122-034	Valve
#122-052	Rupture Disk, 5,500 PSI (37.9 MPa)
#122-083	Mold Assembly, 8-Specimen (Single Deep Only)
#122-085	Mold Assembly, 16-Specimen (Double Deep Only)

#130-78-045	Male Connector, ¼" Tubing
#130-78-046	Tube Fitting, Swagelok, Male Connector, ¼" Tube OD × ⅜" Male NPT, Stainless Steel
#130-79-26	Connector, Female, 3-Pin
#130-79-27	Connector, Male, 3-Pin
#130-79-38	Power Cord, 10/3 (Single Cell Only)

#120-30 Dual-Cell Cement Curing Chamber

Optional:

#120-21	Spare Parts for #120-20
#120-26	Spare Parts for #120-25
#120-31	Spare Parts for #120-30

Did you know?

You can download or print all of our Instruction Manuals on our web site at www.ofite.com.

OFITE BENCHTOP HTHP CURING CHAMBER, SINGLE-CELL, 5,000 PSI, 500°F, 230-VOLT #120-55

Size: **25" × 16" × 20" (64 × 41 × 51 cm)**
Weight: **215 lbs (94.6 kg)**

Crated Size: **30" × 20" × 24" (76 × 51 × 61 cm)**
Crated Weight: **255 lbs (115.8 kg)**

The OFITE Benchtop HTHP Curing Chamber is designed to prepare well cement specimens for compressive strength tests. It is necessary to determine the amount of time required for a cement to develop compressive strength so that drilling/production operations can be resumed as quickly as possible. The goal is to design a slurry that can quickly develop compressive strength so that the "waiting on cement" time may be minimized. The OFITE HTHP Curing Chambers provide a means of curing cement specimens under typical downhole temperatures and pressures.

Components:

#120-00-001	Sonalert
#120-00-01	Temperature Controller
#120-00-053	Elbow Connector, ¼"
#120-55-005	Filter, High-Pressure
#120-55-006	Heater, Thinband, 1,650-Watt, 230-Volt
#120-75-5	Contactor, 230-Volt
#120-90-001	Cable, 18-Gauge, 12-Wire
#120-90-11	Solid State Relay with Heat Sink
#120-910-061	Union Elbow, ¼" Tube
#122-034	Valve
#122-052	Rupture Disk, 5,500 PSI (37.9 MPa)
#130-77-025	Leveling Leg
#130-77-054	Elbow, Male, ⅛"
#130-78-045	Connector, Male, ¼" Tubing
#130-79-24	Connector, Female, 5-Pin
#130-79-25	Connector, Male, 5-Pin
#130-79-26	Connector, Female, 3-Pin
#130-79-27	Connector, Male, 3-Pin
#152-38	AC Power Cord, 3-Conductor, International (Continental European)
#171-48-3	Plug Receptacle

Optional:

#120-56	Spare Parts for #120-55

#120-55 Benchtop Curing Chamber

CARVER MODEL M LABORATORY PRESS WITH SAFETY SHIELD (25 TON CAP) #120-901

The Carver (Model M) is a twenty-five ton, manual, two-column hydraulic press. The daylight opening is fully adjustable. It is constructed of rigid cast iron and steel for precision and durability. The easy-to-read gauge is calibrated in pounds and metric tons.

Features and Specifications:
Clamping Force: 25 Tons (50,000 lb)
Platens: 9" × 9"
Ram Stroke: 6.5"
Daylight Opening: .75" - 16"
Footprint w × d: 19" × 24"

Height: **42" (107 cm)**
Weight: **350 lb (158.9 kg)**

THREE GANG CEMENT CUBE MOLD #120-902

Designed and manufactured in strict conformance to ASTM standards, the Three Gang Cement Cube Mold is used to form 2" (5.1 cm) cube samples for compressive strength testing of cement, motors, lime, gypsum, and capping compounds.

Features and Specifications:
Sample Size: Up to three 2" (50.8 mm) cubes
Construction: Forged bronze, three-gang with wide-flanged top and base, machines and ground finish
Mold Closure: Mechanical, "T" bolt screw clamps held in place by snap rings
Base Plate: Machined forged bronze with knurled hold-down screws

Size: **6" × 4" × 11" (15 × 10 × 28 cm)**
Weight: **12 lb (5.4 kg)**

#120-902 Three Gang Mold

BRASS CEMENT MOLD ASSEMBLY #122-083 8-SPECIMEN #122-085 16-SPECIMEN

The Brass Cement Mold Assemblies are used to form multiple 1" (5.1 cm) cube specimens for compressive strength tests. The 8-specimen assembly is used in the OFITE Single Deep Curing Chamber, while the 16-specimen assembly fits the OFITE Double Deep Curing Chamber. The 16-specimen assembly can also be used with the Chandler Models 7350 and 7355 Curing Chambers.

Size: **8:** **12" × 6.5" × 3" (31 × 17 × 84 cm)**
16: **22" × 6.5" × 3" (56 × 17 × 84 cm)**
Weight: **8:** **23 lb (10 kg)**
16: **45 lb (20 kg)**

#122-085 16-Specimen Cement Mold Assembly

Did you know?

Because OFITE is an independent manufacturer, you never have to worry about how your orders are prioritized. When we receive your order, we move fast.

COMPRESSIVE STRENGTH TESTER

#120-29 MANUAL
#120-28 AUTOMATIC, 115-VOLT
#120-28-1 AUTOMATIC, 230-VOLT

The OFITE Compressive Strength Tester accurately determines the compressive strength of a well cement. The most common means of determining the compressive strength of a cement involves applying a force to the sample at a constant rate until the sample fails. The maximum loading at which the cement fails is defined as the cement's compressive strength. Unfortunately, data obtained from this type of testing is typically inconsistent and widely varied because manually operated hydraulic presses have been used for testing purposes and maintaining a constant loading rate is very difficult, even for the most experienced operator. The OFITE Compressive Strength Tester incorporates an electronically actuated proportional control valve that automatically maintains the desired loading rate. Operator inconsistencies are virtually eliminated and data obtained with the OFITE Compressive Strength Tester is consistent and highly reproducible.

Method of Operation:
A cement slurry is prepared according to the guidelines outlined in API Specification 10 and placed into typical 2" × 2" × 2" cement molds. The molds are then placed into a curing chamber (autoclave) and allowed to cure at either simulated well conditions or at temperatures and pressures classified by a schedule within API Specification 10. The cement specimens are allowed to cure for a predetermined amount of time and then removed from the curing chamber. The sample is then placed onto the platen of the Compressive Strength Tester and the loading rate established by the API is programmed into the controller. Force is applied at the desired loading rate until the specimen fails.

#120-28 Automatic Compressive Strength Tester

Features and Specifications:
- Maximum press capacity of 40,000 lb
- Self-aligning hardened platens
- Microprocessor controller
- Loading rates variable from 200 to 4,000 PSI/min
- Safety head and rupture disk prevent over pressurization
- Digital-instrumentation incorporates high-pressure alarms
- Proportional control valve accurately controls load rate
- Safety shield protects operator
- Control stand remotely located from hydraulic press
- Dual switch procedure ensures operator safety

Instrument Requirements:
115-Volt, 50/60 Hz, requires 1 KVA
230-Volt, 50/60 Hz, requires 1 KVA

Size: **56" × 50" × 32" (142 × 127 × 81 cm)**
Weight: **Approximately 1,000 lb (454 kg)**

Crated Size: **37" × 29" × 49" (94 × 74 × 124 cm)**
Crated Weight: **440 lb (200 kg)**

#120-29 Manual Compressive Strength Tester

OFITE PERMEAMETER
#120-85 AIR PERMEAMETER
#120-87 CEMENT PERMEAMETER

Permeability is a measure of the ability of a fluid to flow through a porous media when subjected to a differential pressure and is mathematically equated by Darcy's Law.

The primary function of a well cement is to isolate/seal the casing from the well bore. This seal prevents the migration of fluids into the annulus and upwards to the surface. Therefore, it is imperative that a well cement exhibit very low permeability.

The permeability of a petroleum reservoir is one of the most influential factors governing the production capabilities of a producing formation.

$$k = \frac{2{,}000 \cdot P_O \cdot Q \cdot \mu \cdot L}{A(P_I^2 - P_O^2)}$$

Where:

- Q = Flowrate
- k = Permeability
- A = Cross Sectional Area
- P_O = Outlet Pressure
- P_I = Inlet Pressure
- μ = Viscosity
- L = Length

The OFITE Permeameter is utilized to measure the permeability of cement or core specimens one inch in diameter and one inch in length. The specimen is placed into a sleeve, which is then inserted into the "Modified Hassler" style test cell. Nitrogen at a constant flow rate is forced through the core and the differential pressure across the core is measured. The flowrate is measured with calibrated flowmeters. Viscosity is easily determined by the use of nitrogen property tables. These variables are incorporated into Darcy's law to calculate cement sample permeability.

Method of Operation:
A specimen is placed into a core sleeve which is then inserted into the "Modified Hassler" style test cell. Nitrogen is displaced through the specimen at various flowrates to determine the permeability.

Features and Specifications:
- "Modified Hassler" cell accommodates 1" diameter cores
- Core length is one inch
- Instrumentation gauge displays driving pressure
- All Hassler components fabricated from 316 Stainless Steel
- Nitrogen utilized as test fluid
- Unit conforms to API Specification 10 guidelines

Size: **22" × 18" × 24" (56 × 46 × 61 cm)**
Weight: **80 lb (36.3 kg)**

Components:

#122-222	Flowmeter, Low-Range
#122-223	Flowmeter, High-Range
#122-224	Valve
#171-44	Rubber Foot, ¾"

No 120-85 - Model 360 Air Permeameter

Did you know?

Unlike most other companies, we make repairs first priority (even repairs for equipment from other manufacturers).

HTHP FILTER PRESS FOR CEMENT TESTING, 500 ML, 2,000 PSI, DOUBLE-END CELL, N_2 MANIFOLD

#171-03 115-VOLT
#171-04 230-VOLT

Size: 10" × 18" × 42" (25 × 46 × 107 cm)
Weight: 53 lb (24.1 kg)

HTHP Filter Press, 500 mL

Assemblies:

#171-00 Heating Jacket (115-Volt Only)
#171-01 Heating Jacket (230-Volt Only)
- #164-32 Male Connector for Power Cable (230-Volt Only)
- #170-10 Pilot Light for Thermostat
- #170-11 Heating Element, 115-Volt, 200-Watt
- #171-00-1 Case, Stainless Steel
- #171-05 Location Pin for Cells
- #171-07 Heat Jacket
- #171-08 Base
- #171-09 Leg
- #171-32 Midget Knob
- #171-36 Thermostat Cover
- #171-44 Rubber Foot, ¾"
- #171-71 Thermostat
- #171-82 Power Cord with Male Plug, 8', (115-Volt Only)
- #171-94 Cell Rest Plunger Assembly

#171-10 Back Pressure Receiver, 100 mL
- #170-32 Needle Valve, Male, ⅛" × ⅛" NPT
- #171-11 O-ring for Receiver Body
- #171-12 Receiver Body
- #171-22 Retainer Pin

#171-19 Double-End Cell Assembly with Detachable Screens
- #170-13 O-ring for Cell, Buna N
- #170-16 Valve Stem
- #170-17 O-ring for Valve Stem, Viton®
- #170-18 Screen, 325-Mesh with 60-Mesh Backup, Detachable
- #170-24 End Cap for Detachable Screen, 2,000 PSI
- #170-26 Cap Locking Screw, Stainless Steel
- #170-27 Allen Wrench for Cap Locking Screw, 5/32"

#171-24 Dual Nitrogen Manifold, 1,350 and 750 PSI
- #170-20 Manifold Block
- #170-32 Needle Valve, Male, ⅛" × ⅛" NPT
- #171-22 Retainer Pin
- #171-24-001 Modified Regulator, Low-Pressure Side
- #171-24-002 Modified Regulator, High-Pressure Side
- #171-24-1 Nut, L.H., Regulator Inlet CGA-580
- #171-24-2 Nipple with Filter for Regulator Inlet 15-3SF
- #171-24-3 Union Elbow, Female, ¼" Flare × ⅛" FNPT
- #171-24-4 Pipe Plug, ¼" NPT, 316 Stainless Steel
- #171-24-5 Street Tee, ¼" NPT, 316 Stainless Steel
- #171-25-1 Relief Valve, 750 PSI (5.2 MPa)
- #171-25-2 Relief Valve, 1,350 PSI (9.3 MPa)
- #171-26 Hose, 3,000 PSI, 3/16" × 3'
- #171-28 Dual Manifold Body
- #171-38 1,000 PSI Gauge, 2½" Face, ¼" Bottom Connection
- #171-40 1,500 PSI Gauge, 2½" Face, ¼" Bottom Connection
- #171-42 3,000 PSI Gauge, 2½" Face, ¼" Bottom Connection
- #171-90-06 Reducing Bushing, 316 Stainless Steel
- #171-90-07 Hex Nipple, ¼" NPT, 316 Stainless Steel,
- #171-90-13 Adapter, ¼" Flare × ¼" Male NPT

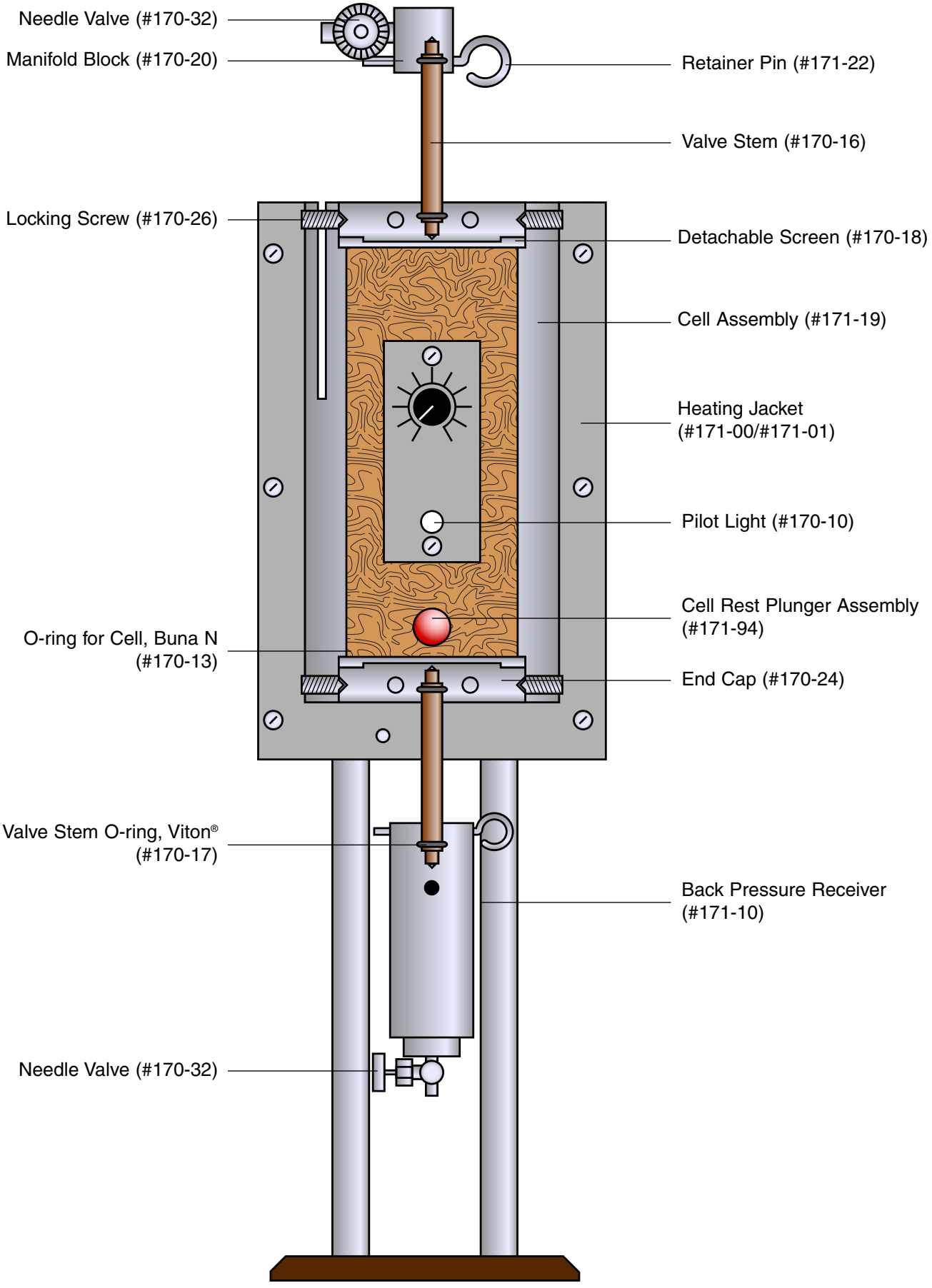
Components:
- #153-12 Graduated Cylinder, 100 mL × 1 mL, Glass
- #154-20 Thermometer with Metal Dial, 8" Stem, Dual-Scale: 50° - 500°F (0° - 250°C)
- #170-13 O-ring for Cell, Buna N
- #170-17 O-ring for Valve Stem
- #170-19 Filter Paper, 2½", Package of 100
- #170-26 Locking Screw for Cell Caps, Stainless Steel
- #170-35 Adjustable Wrench for Valve Stem, 6"

Optional:
- #170-37 Nitrogen Cylinder, 21" × 7", Right-Hand Thread

Did you know?

OFITE shipping specialists are certified for air flight transport of hazardous chemicals and they have been trained to build EU certified crates.

#171-03 - HTHP Filter Press with N_2 Pressure Manifold, 500 mL



HTHP FILTER PRESS FOR CEMENT TESTING, 175 ML, 2,000 PSI, DOUBLE-END CELL, N_2 MANIFOLD

#170-00-2 115-VOLT
#170-01-2 230-VOLT

Size: 7.5" × 11" × 23.5" (19 × 28 × 60 cm)
Weight: 27 lb (12.3 kg)

Assemblies:

#170-00-1 Heating Jacket (115-Volt Only)
#170-01-1 Heating Jacket (230-Volt Only)
- #130-10-52 Jam Nut, ⅜ - 24
- #164-32 Male Connector for Power Cable (230-Volt Only)
- #170-05 Thermostat, 50° - 500°F
- #170-09 Insulation Board
- #170-10 Pilot Light for Thermostat
- #170-11 Heating Element, 200-Watt, 115-Volt
- #170-15 Base
- #170-21 Support Rod for Heating Jacket
- #170-25 Aluminum Well for Heating Jacket
- #170-30 Thermostat Cover, Stainless Steel
- #170-44 Rubber Foot, ½"
- #171-32 Midget Knob
- #171-43-2 Fiberglass Sleeving, Wire Insulation
- #171-82 Power Cord with Male Plug, 8', 16/3 SJ; Round (115-Volt Only)

#170-06-1 Back Pressure Receiver, 15 mL Stainless Steel Tube
- #144-11 Street Ell, ⅛"
- #144-15 Bushing, ¼" NPT Male to ⅛" NPT Female, Plated Brass
- #170-07 O-ring for Receiver Body
- #170-28 Receiver Body
- #170-32 Needle Valve, Male, ⅛" × ⅛" NPT
- #171-22 Retainer Pin

#170-45 HTHP Double-End Cell Assembly, 2,000 PSI
- #170-13 O-ring for Cell, Buna N
- #170-16 Valve Stem
- #170-17 O-ring for Valve Stem, Viton®
- #170-18 Screen, 325-Mesh with 60-Mesh Backup, Detachable
- #170-24 End Cap for Detachable Screen, 2,000 PSI
- #170-26 Cap Locking Screw, Stainless Steel
- #170-27 Allen Wrench for Cap Locking Screw, 5/32"

#171-24 Dual Nitrogen Manifold, 1,350 and 750 PSI
- #170-20 Manifold Block
- #170-32 Needle Valve, Male, ⅛" × ⅛" NPT
- #171-22 Retainer Pin
- #171-24-001 Modified Regulator, Low-Pressure Side
- #171-24-002 Modified Regulator, High-Pressure Side
- #171-24-1 Nut, L.H., Regulator Inlet CGA-580
- #171-24-2 Nipple with Filter for Regulator Inlet 15-3SF
- #171-24-3 Union Elbow, Female, ¼" Flare × ⅛" FNPT
- #171-24-4 Pipe Plug, ¼" NPT, 316 Stainless Steel
- #171-24-5 Street Tee, ¼" NPT, 316 Stainless Steel
- #171-25-1 Relief Valve, 750 PSI (5,171 kPa)
- #171-25-2 Relief Valve, 1,350 PSI (9,308 kPa)
- #171-26 Hose, 3,000 PSI, 3/16" × 3'
- #171-28 Dual Manifold Body
- #171-38 Gauge, 1,000 PSI, 2½" Face, ¼" Bottom Connection
- #171-40 Gauge, 1,500 PSI, 2½" Face, ¼" Bottom Connection
- #171-42 Gauge, 3,000 PSI, 2½" Face, ¼" Bottom Connection
- #171-90-06 Reducing Bushing, 316 Stainless Steel
- #171-90-07 Hex Nipple, 316 Stainless Steel, ¼" NPT
- #171-90-13 Adapter, ¼" Flare × ¼" Male NPT

Components:
- #153-14 Graduated Cylinder, 50 mL × 1 mL, Glass
- #154-10 Thermometer with Metal Dial, 5" Stem, Dual-Scale: 50 - 500°F (0° - 250°C)
- #170-19 Filter Paper, 2½", Package of 100
- #170-35 Adjustable Wrench, 6"

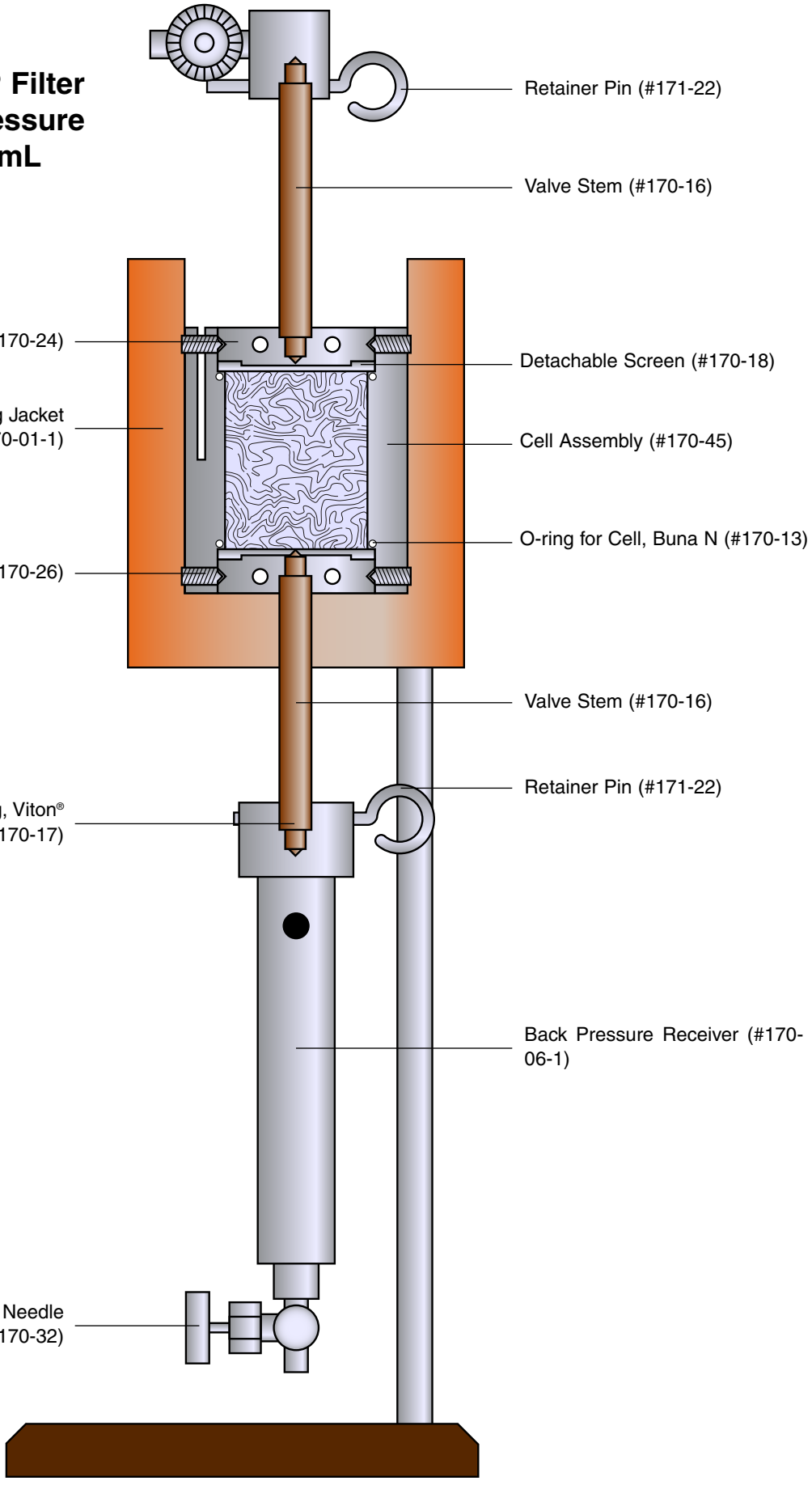
Optional:
- #171-31 Nitrogen Pressurization Assembly

HTHP Filter Press with N_2 Pressure Manifold, 175 mL

Did you know?

OFITE specializes in refurbishing older equipment. Be sure and call us for a custom quote.

#170-00-2 - HTHP Filter Press with N_2 Pressure Manifold, 175 mL



HTHP FILTER PRESS FOR CEMENT TESTING, 175 ML, 2,000 PSI, DOUBLE-END CELL, CO_2

#170-00-5 115-VOLT
#170-01-5 230-VOLT

Size: 7.5" × 11" × 23.5" (19 × 28 × 60 cm)
Weight: 27 lb (12.3 kg)

Assemblies:

#170-00-1 Heating Jacket (115-Volt Only)
#170-01-1 Heating Jacket (230-Volt Only)
- #130-10-52 Jam Nut, ⅜ - 24
- #164-32 Male Connector for Power Cable (230-Volt Only)
- #170-05 Thermostat, 50 - 500°F
- #170-09 Insulation Board
- #170-10 Pilot Light for Thermostat
- #170-11 Heating Element, 115-Volt, 200-Watt (2 each)
- #170-15 Base
- #170-21 Support Rod for Heating Jacket (2 each)
- #170-25 Aluminum Well for Heating Jacket
- #170-30 Thermostat Cover, Stainless Steel
- #170-44 Rubber Foot, ½"
- #171-32 Midget Knob
- #171-82 Power Cord with Male Plug, 16/3 SJ, Round, 8' (115-Volt Only)

#170-45 HTHP Double-End Cell Assembly, 2,000 PSI
- #170-13 O-ring for Cell, Buna N
- #170-16 Valve Stem
- #170-17 O-ring for Valve Stem, Viton®
- #170-18 Screen, 325-Mesh with 60-Mesh Backup, Detachable
- #170-24 End Cap for Detachable Screen, 2,000 PSI
- #170-26 Cap Locking Screw, Stainless Steel
- #170-27 Allen Wrench for Cap Locking Screw, 5/32"

Components:
- #153-14 Graduated Cylinder, 50 mL × 1 mL, Glass
- #154-10 Thermometer with Metal Dial, 5" Stem, Dual-Scale: 50 - 500°F (0° - 250°C)
- #170-19 Filter Paper, 2½", Package of 100
- #170-35 Adjustable Wrench, 6"

Pressurization:

#170-04 CO_2 Pressure Assembly
- #143-02-10 CO_2 Puncture Head Assembly
- #143-03 Barrel for CO_2 Bulb
- #170-08 Regulator, High-Pressure, CONCOA/AIRCO
- #170-20 Manifold Block
- #170-32 Needle Valve, Male, ⅛" × ⅛" NPT
- #171-22 Retainer Pin
- #171-34 Gauge, 1,500 PSI, 2" Face, ¼" NPT

#170-06 Back Pressure Receiver
- #143-00 Regulator, CONCOA/AIRCO
- #143-01 Gauge, 200 PSI, ⅛" Bottom Connection
- #143-02-10 CO_2 Puncture Head Assembly
- #143-03 Barrel for CO_2 Bulb
- #143-06 Safety Bleeder Valve, ¼" NPT
- #144-11 Street Ell, ⅛"
- #170-07 O-ring for Receiver
- #170-28 Receiver Body, Stainless Steel, 15 mL
- #170-32 Needle Valve, Male, ⅛" × ⅛" NPT
- #171-22 Retainer Pin

#170-00 Series HTHP Filter Press, 175 mL

Optional:
- #143-07 Repair Kit for Regulator
- #170-03 Carrying Case, Stainless Steel
- #170-33 Cell Cap Puller for HTHP Cells
- #170-40 Test Cell Removal and Carrying Tool

HALLIBURTON TRU-WATE™ PRESSURIZED FLUID DENSITY SCALE WITH CASE, STANDARD SCALE

#100-60 WITH CASE, STANDARD SCALE
#100-60-X WITH CASE, METRIC SCALE

See page 5.

MULTI-PURPOSE CIRCULATING WATER BATH, LINDBERG / BLUE M

#120-900-1 115-VOLT
#120-900 230-VOLT

Advanced general purpose circulating water baths offer a combination of contemporary cabinet design and advanced microprocessor control. An optional gable cover is recommended for temperatures above 75ºC. A digital temperature display simultaneously shows set-point and actual water temperature. An adjustable high limit control prevents over-temperature conditions at any point over the bath operating range. The cabinet construction, with 304 stainless steel interior tank, withstands the most critical applications in demanding laboratory environments.

Specifications:

- Chamber Capacity: 56 L
- Chamber Dimensions: 20" × 18" × 9.5" (51 × 46 × 24 cm)
- Temperature Range: Up to 70ºC
- Temp. Range w/Cover: Up to 100ºC
- Temperature Control: Digital/Micro

Size: 30" × 20" × 15" (76 × 51 × 38 cm)
Weight: 79 lb (35.9 kg)

Other sizes are available.

Optional:
#120-900-2 Gable Cover, Stainless Steel

#120-900 Multi-Purpose Circulating Water Bath

Did you know?

OFITE is happy to furnish specialty items upon request. Just give us a call!

PRECISION® GENERAL PURPOSE WATER BATH WITH ANALOG CONTROLS

#152-58-1 12 LITER, 115-VOLT
#152-58-2 12 LITER, 230-VOLT
#152-58 43 LITER, 115-VOLT
#152-58-3 43 LITER, 230-VOLT

These Precision® water baths are ideal for applications in which the temperature set points seldom change. These economically-priced baths feature a variable analog temperature control and an easily-maintained, seamless stainless steel interior chamber. Over-temperature safety circuitry prevents thermal runaway. A stainless steel gable is also available.

Specifications:

- Temperature Display: 0 - 100ºC
- Maximum Temperature: 99.9ºC
- Temperature Uniformity: ± 0.2º @ 37ºC
- Temperature Sensitivity: ± 0.1º @ 37ºC
- Chamber Size:
  - 12 L: 11.5" × 12.5" × 6" (29 × 32 × 15 cm)
  - 43 L: 16" × 28" × 6.5" (41 × 71 × 17 cm)

Size:
12 L: 16.2" × 14.75" × 9.75" (41 × 38 × 25 cm)
43 L: 21.6" × 31.5" × 9.75" (55 × 80 × 25 cm)
Weight:
12 L: 20 lb (9.1 kg)
43 L: 40 lb (18.1 kg)

Other sizes are available.

#152-58 General Purpose Water Bath

OFITE provides a variety of core testing equipment. All of the equipment found in this section was especially designed by our engineering department at the request of our customers. We encourage you to come to us with any specific needs that you have.

MODEL 340 AUTOMATED RESERVOIR PERMEABILITY TESTER #700-100

The permeability of a petroleum reservoir is one of the most influential parameters in determining the production capabilities of a producing formation. Permeability is a measure of the ability of a fluid to flow through a porous media when subjected to a differential pressure and is mathematically equated by Darcy's law. In equation form:

$$Q = kAdp/(\mu L)$$

Where:

- Q = Flowrate
- k = Permeability
- A = Cross Sectional Area
- dp = Differential Pressure
- μ = Viscosity
- L = Length

Cross sectional area and length are governed by the reservoir geometry and cannot be changed. Fortunately, reservoir pressure, fluid viscosity, and permeability may be modified by petroleum operations. To improve the production potential of a reservoir, differential pressure may be increased by water flooding and/or fluid viscosity may be reduced chemically. Similarly, reservoir permeability may be enhanced by acidizing techniques, or even more significantly, reduced during drilling, cementing, and workover operations. Any fluid that comes in contact with the producing formation may significantly reduce the permeability and greatly affect the production capabilities of the reservoir. Studies are typically conducted on core specimens to determine how drilling, cementing, and workover fluids affect the permeability of the formation. The Reservoir Permeability Tester was developed to evaluate how fluids affect the permeability of a core specimen. In addition, the unit may be used to evaluate acidizing techniques and to develop typical Acid Response Curves (ARCs).

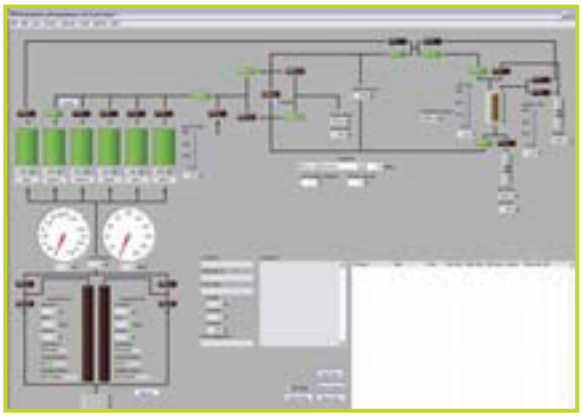
Method of Operation:
A core specimen is placed into the Viton® core sleeve and then inserted into the "Hassler" test cell. Confining pressure is placed on the sleeve via an air-driven hydraulic pump. Accumulators are filled with the desired test fluids and the necessary back pressure, dependent upon the test temperature, is placed upon the system. The temperature controller is set appropriately and the test cell is allowed to reach temperature. Valves are positioned in such a manner that the test fluid is driven through the core in the forward direction and the fluid delivery pump is activated. Differential pressure across the length of the core is measured via a pressure transducer and documented via the Data Acquisition System. If desired, the test fluid may be driven in the reverse direction by adjusting the control valves. Other test fluids are quickly and easily accessible from other accumulators. Nitrogen may be used for gas testing.

A typical test sequence could involve: establishing effective permeability and 100 percent saturation with a brine, reversing flow direction with oil to establish an irreducible water saturation, contaminating the core in the forward direction with possibly a drilling filtrate, and finally reversing the flow direction with oil to examine the return permeability. Several sequences could be performed to simulate a producing reservoir during each phase/stage of production.

A Digital Acquisition System (DAS) is included with the Model 340. The PC connects to the Reservoir Permeability Tester and records the test data in real time.

Features:
Each Reservoir Permeability Tester is built-to-order. Features and specifications vary with each unit. Contact an OFITE sales representative for a customized quote. Standard features include:

- "Hassler" test cell accepts variable-length cores
- Duplex pump delivers constant drive pressure
- Flow direction of test fluid easily reversed by use of valves
- All wetted components constructed of Hastelloy® or 316 Stainless Steel



#700-100 Automated Reservoir Permeability Tester

MODEL 340 MANUAL RESERVOIR PERMEABILITY TESTER #127-00

The permeability of a petroleum reservoir is one of the most influential parameters in determining the production capabilities of a producing formation. Permeability is a measure of the ability of a fluid to flow through a porous media when subjected to a differential pressure and is mathematically equated by Darcy's law.

The Reservoir Permeability Tester was developed to evaluate how fluids affect the permeability of a core specimen. In addition, the unit may be used to evaluate acidizing techniques and to develop typical Acid Response Curves (ARCs).

Features:
Each Reservoir Permeability Tester is built-to-order. Features and specifications vary with each unit. Contact an OFITE sales representative for a customized quote. Standard features include:

- "Hassler" test cell accepts variable-length cores
- Duplex pump delivers constant drive pressure
- Flow direction of test fluid easily reversed by use of valves
- All wetted components constructed of Hastelloy® or 316 Stainless Steel
- Multiple accumulators with piston
- Cell temperature maintained via internal heaters

Size: **44" × 20" × 45.5" (112 × 51 × 116 cm)**
Weight: **519 lb (235 kg)**

Crated Size: **51" × 31" × 60" (130 × 79 × 152 cm)**
Crated Weight: **726 lb (329 kg)**

Components:

#100-60-26	Knob, Red, Plastic
#120-00-053	Elbow Connector, ¼"
#120-27-019	Band Heater for Hassler Test Cell
#120-70-1-052	Hose, 18"
#120-80-4	Temperature Controller
#120-910-056	Regulator Bracket
#120-910-061	Union Elbow, ¼" Tube
#127-00-003	Regulator
#127-00-205	O-ring for Accumulator Cap and Piston
#127-00-210	Rod for Hassler Cell Cap
#127-00-212	O-ring for Hassler Cell Cap
#127-00-213	O-ring for Hassler Insert
#127-00-217	Knob for Hassler Cell Cap
#127-00-235	Core Boot for Hassler Cell, 1.5" Diameter × 1.5" ID × 0.125" Wall × 7" Length, Viton®
#127-00-240	Ball Valve, Three-Way, 83 Series, ¼", Stainless Steel
#127-00-241	Compression Fittings for Ball Valve, Three-Way, ¼", Stainless Steel
#127-00-242	Compression Fittings for Ball Valve, Two-Way, ¼", Stainless Steel
#127-00-243	Crossover Valve, 40 Series, ¼", ⅛" FNPT
#127-00-244	Ball Valve, 40 Series, ¼", ¼" Compression
#127-00-245	Compression Elbow, ⅛" MNPT to ⅛"
#127-00-246	Compression Adapter, ½" FNPT to ¼"
#127-00-247	Sample Cylinder with ¼" FNPT Ports, 75 mL
#127-00-248	Compression Fitting for Bulkhead, ⅛"
#127-00-249	Blind VCO Nut
#127-00-250	Compression Fitting Gland, ¼" VCO
#127-00-252	Compression VCO Body, ¼"
#127-00-253	Blind VCO Body, ¼"
#127-00-254	Reducing Union, ⅛" to 1/16"
#127-00-255	Clamp Rod
#127-00-256	Bearing Plate
#127-00-300	Heat Exchanger
#127-00-301	Cartridge Heater for Heat Exchanger
#127-00-305	Gauge with Back Connection, 5,000 PSI, 4.5"
#127-00-306	Gauge with Back Connection, 1,000 PSI, 4.5"
#127-00-307	Panel Mounting Kit for 4.5" Gauge
#127-00-310	Fill Pump for Accumulator, 230-Volt
#127-00-320	Bearing for Hassler Pivot, ¾"
#130-75-71	Monitor
#130-75-74	Desktop Computer
#130-76-03	Thermocouple
#130-76-44	Thermocouple Jack
#130-76-48	Power Supply
#130-77-025	Leveling Leg
#130-78-017	Terminal Block
#130-78-045	Connector, Male, ¼" Tubing
#130-78-046	Tube Fitting, Male Connector, ¼" Tube OD × ⅜" Male NPT, Stainless Steel
#130-79-14	Printer
#130-79-15	Serial Cable, OB9 M/F
#130-79-16	USB Cable
#130-79-24	Connector, Female, 5-Pin
#130-79-25	Connector, Male, 5-Pin
#130-79-26	Connector, Female, 3-Pin
#130-79-27	Connector, Male, 3-Pin
#130-81-036	Tube Fitting, Male Elbow, ⅛" Tube OD × ¼" Male NPT, Stainless Steel
#152-38	AC Power Cord, 3-Conductor, International (Continental European)
#166-05	Plug Adapter, European, 230-Volt
#172-24	Solid State Relay, 25-Amp, 230-Volt
#900-184	Tube Fitting, Male Connector, ⅛" Tube OD × ¼" Male NPT, Stainless Steel

Optional:

#127-02	Spare Parts for Two Years for #127-00

#127-00 Reservoir Permeability Tester

MODEL 380 CORE SAW
#127-60

The Model 380 Core Saw is used to trim core specimens to the necessary length. In addition, it helps ensure that the faces of the core are parallel and uniform. The Model 380 Core Saw is easy to operate and incorporates a water cooling system to promote efficient cutting. The Core Saw provides an easy method to prepare core specimens for permeability and other tests frequently performed at petroleum reservoir research centers.

Features and Specifications:
- High torque electrical motor
- Diamond impregnated blade
- Sliding table
- Floor-mounted design
- Water cooling system
- Safety guard

Instrument Requirements:
- Water supply of 40 PSI recommended
- Drain to expend cooling water
- 230-Volt, Single Phase, 50 Hz, 6-Amp power supply

Size: **38" × 19" × 27" (96 × 41 × 67 cm)**
Weight: **225 lb (102 kg)**

#127-60 - Core Saw

Did you know?

We can repair equipment of almost any make and manufacturer!

MODEL 370 CORE DRILL
#127-40

The Model 370 Core Drill is used to cut smaller core specimens from whole cores taken from the well bore. OFITE provides a variety of core drill bits, which allows the user to prepare core specimens varying from 0.75" to 2" in diameter. The floor-mounted press is easy to operate and utilizes a water cooling system to permit rapid and efficient cutting. The Model 370 permits a simple and reliable method to prepare core specimens for permeability and other tests frequently conducted in petroleum reservoir research facilities.

Features and Specifications:
- Floor-mounted design
- Water cooling system
- Moveable vise to facilitate holding the specimen
- Can be used to cut cores 1" in diameter and up to 6" length
- Other core drill sizes available upon request

Instrument Requirements:
- Water supply of 40 PSI recommended
- Drain to expend cooling water
- 230-Volt, Single Phase, 50 Hz electrical power supply rated at 5-Amperes

Size: **34" × 28" × 26" (86 × 71 × 66 cm)**
Weight: **235 lb (106.6 kg)**

#127-40 - Core Drill

MODEL 350 CORE POROSIMETER
#127-20

OFITE's Core Porosimeter was designed to rapidly and accurately measure the effective porosity of a core sample. Porosity is defined as the percentage of void within a solid media. Effective porosity is the percentage of void within a solid media in which the pore spaces are interconnected. It is imperative to accurately determine the effective porosity of a petroleum reservoir when estimating the total amount of recoverable hydrocarbons within a producing formation. OFITE's Model 350 Core Porosimeter was designed to precisely measure the effective porosity of a core sample.

Method of Operation:
A sample is placed into the air-tight core holder and pressure is applied to a reservoir of known volume. After the pressure has stabilized, a valve is opened, which permits the gas within the reservoir to expand into the core holder. After equilibrium is reached, the new pressure of the system is measured and recorded. The effective porosity of the core specimen may be calculated by the use of Boyle's Law ($P_1V_1 = P_2V_2$) in conjunction with the bulk volume of the sample. The variables V_1 and V_2 are constants that are dependent upon the geometry of the unit and the effective porosity of the core.

Features and Specifications:
- Precision regulator for accurate pressure control
- Digital display of pressure
- Vacuum gauge and connection port for evacuation
- Lock in feature allows for rapid measurement of samples
- Unit is compact and virtually maintenance free
- Calibration sample included with unit
- Air relief valve prevents over pressurization
- Can test core samples 1.5" in diameter by 2" long

Instrument Requirements:
- Helium or Nitrogen source (200 PSI minimum)
- 115-Volt, 50/60 Hz, 4-Amp Power Source
- 230-Volt, 50/60 Hz, 2-Amp Power Source

Size: **24" × 22" × 20" (61 × 56 × 51 cm)**
Weight: **150 lb (68.1 kg)**

Crated Size: **29" × 28" × 30" (74 × 71 × 76 cm)**
Crated Weight: **200 lb (91 kg)**

#127-20 - Core Porosimeter

Did you know?

OFITE offers a variety of payment options, including most major credit cards. If you are interested in a Net-30 day account, a credit application is available in the index.

PORTABLE TURBIDITY METER #299-10

The Portable Turbidity Meter combines laboratory accuracy and reliability in an extremely compact, portable instrument for turbidity measurement. It is the ideal choice for regulatory monitoring, process water testing, and environmental water analysis in the field or laboratory. With a wide range of 0 - 4,000 NTUs (Nephelometric Turbidity Units), a microprocessor enables full scale auto-ranging. The direct digital readout has a resolution of 0.01 for the lowest range, with an accuracy of ±2% (0 - 100 NTU) or ±3% (> 100 NTU). A multi-detector optical configuration assures long term stability and minimizes stray light and color interferences. All readings are determined by the process of signal averaging over a 5-second period. This process minimizes fluctuations in readings attributed to large particles and enables rapid, highly repeatable measurements. The unit is supplied with a 9-volt alkaline battery, an AC power adapter, four optically selected sample vials with screw caps, a standardization package of 1.0 NTU and 10.0 NTU standards, and a sturdy carrying case. An RS-232 port is provided to interface with a datalogger or computer. An optional filter assembly is also available. The calibration procedure is simple and involves activating the up or down keys until the reading matches the standard. The microprocessor adjusts the factory programmed calibration curve accordingly. Line operation is 115-volt / 60 Hz or 230-volt / 50 Hz, 100 mA with included adapter.

Size: **3.4" × 6.4" × 2.6" (9 × 16 × 7 cm)**
Weight: **13 lb (5.9 kg)**

#299-10 Turbidity Meter

Components:

#299-10-1	Turbidity Standard, 1.0 NTU, 60 mL
#299-10-2	Turbidity Standard, 10 NTU, 60 mL
#299-10-3	Turbidity Standard, 100 NTU, 60 mL
#299-10-4	Turbidity Tubes, Set of 4

HYDROMETER SET WITH CARRYING CASE #153-52

The Hydrometer Kit measures the true specific gravity of liquids in the range of 0.700 to 2.000 specific gravity. The kit consists of eight 10.5" (265 mm) glass hydrometers and a thermometer range -30 to 120°F in 1° divisions, all packed in a protective foam-lined carrying case. The hydrometer scale is standardized at 60°F. For maximum efficiency, special hydrometer cylinders are available in 250 mL and 500 mL sizes. Other specific gravity ranges and types of hydrometers are available upon request.

See page 6 for more information.

ZINC (Zn) IN BRINES-DETERMINATION KIT #145-66

See page 125.

OFITE THERMOCUP WITH REMOVABLE STAINLESS STEEL CUP

#130-38-4 115-VOLT
#130-38-6 230-VOLT

See page 18.

MODEL 1100 PRESSURIZED VISCOMETER WITH ORCADA™ SOFTWARE AND HASTELLOY®-WETTED PARTS, 500°F (260°C), 1,000 PSI (6.9 MPA)

#130-81-A WITH DESKTOP PC, 115-VOLT
#130-81-B WITH LAPTOP PC, 115-VOLT
#130-81-C WITH LAPTOP PC AND PADDED CARRYING CASE, 115-VOLT
#130-81-1-A WITH DESKTOP PC, 230-VOLT
#130-81-1-B WITH LAPTOP PC, 230-VOLT
#130-81-1-C WITH LAPTOP PC AND PADDED CARRYING CASE, 230-VOLT

The OFITE Pressurized Viscometer is a fully-automated system that accurately determines the flow characteristics of completion fluids and drilling fluids in terms of shear stress, shear rate, time and temperature at pressures up to 1,000 PSI (6.9 MPa). It is suitable for both field and laboratory use. An optional waterproof case with wheels makes the unit completely portable.

See page 9 for more information.

IRON (Fe^{+3}) COUNT TEST KIT
#161-70

Ferric iron concentration is determined in this procedure by the oxidation of iron to the ferric state at a pH value of 1 or less. The sample is then titrated with a standard EDTA solution in the presence of a salicylic acid indicator at a pH of approximately 2.4. Hydrogen sulfide interferes with the complexing action of both the EDTA solution and the salicylic acid. The hydrogen sulfide can be removed by boiling the sample with hydrochloric acid at a pH level below 1. Results are reported as ppm Fe^{+3} or as epm Fe^{+3}.

See page 120.

OFITE RESISTIVITY METER WITH BATTERY AND CASE
#130-85 ANALOG
#130-87 DIGITAL

The OFITE Resistivity Meter is a portable measuring instrument designed to give a quick, reliable measurement of the resistivity from a small sample, expressed in Ohm-Meters. This transistorized meter accurately measures the resistivity of fluids, slurries, and semi-solids with resistivities from 0.01 to 10 Ohm-Meter^2/Meter. This Ohm-Meter reading can also be converted into parts per million Sodium Chloride.

See page 86.

CON 410 WATERPROOF CONDUCTIVITY/TDS/TEMPERATURE METER
#130-86

The CON 410 contains a highly advanced microprocessor that allows the user to switch between conductivity and TDS with a press of a button, while storing up to 50 readings, including temperature. Superior waterproof and dustproof housing allows the CON 410 to be utilized in dirty and wet applications. The cell for the CON 410 is unique and has proven very effective in obtaining conductivity measurements from cake samples generated by oil and gas drilling operations. The cell incorporates a two-band platinum sensor, removable probe guard, built-in temperature sensor, epoxy body (K = 1.0), and 3' (0.9 m) of cable.

Accuracy of Range:	± 1% (conductivity and TDS)
Calibration Points:	up to 5 points (1 point per range)
Temp Compensation:	Automatic or Manual (selectable)
Operating Temp:	32 to 122°F (0 to 50°C)
Temp Coefficient:	Adjustable 0 to 10% per °C or °F
Cell Constant (K):	1.0, 0.1, or 10 selectable
Real Time Clock:	Stamps calibration data and stored data with time and date (month and day)
Power:	4 × 1.5-Volt AAA batteries (included)
Memory:	50 sets

Size: **7.5" × 3.75" × 2.25" (19 × 10 × 6 cm)**
Weight: **1 lb (.5 kg)**

Components:

#130-86-02 Calibration Kit Contains Four Each of TDS "Singles" Calibration Pouches 447 µS, 1413 µS, 2764 µS, and 15.0 µS and Four Rinse Water Pouches, All in a Hard Plastic Carrying Case with Room for the CON 410 Meter

CALCIMETER
#152-95 WITH GAUGE ONLY
#152-96 WITH CHART RECORDER

The OFITE Calcimeter accurately and quickly determines if scale build up is composed of calcium carbonate. The calcite to dolomite content of the unknown sample aids in determining which chemical treating program to implement. The entire test procedure requires 15 to 30 minutes for both calcite and dolomite determination.

See page 116.

#152-95 and #152-96 Calcimeters

Did you know?

When you send something to us for repair, we know you are without a critical piece of equipment. That's why we make your repairs first priority (even equipment from other manufacturers!).

MILLIPORE MEMBRANE FILTER TESTER #145-00-10

The makeup water for a completion fluid can be studied effectively using a membrane filter tester. The apparatus provides information on biological contaminants, chemical composition, and filtration rates of water and other liquids. The main body of this unique filtering device is a 3200 mL, 5.75" by 10.5" transparent cylinder, which has been graduated for instantaneous readings. Pressurization is provided by optional manifold assemblies that attach to the top of the filtering chamber and allow for pressurization with either carbon dioxide or nitrogen. A carrying case (#145-00-21) is recommended.

Components:

#142-39	Pipe Plug, ¼" (0704-0009)
#143-01-2	Gauge, 30 PSI, ⅛" Bottom Connection
#144-15	Bushing, Plated Brass
#145-00-10-1	Cylinder
#145-00-10-3	Bottom
#145-00-12	Membrane Filters, 0.45 µm, Package of 100
#145-00-13	Filter Holder, Swinnex #47
#145-00-14	O-ring for Filter Holder, Silicone
#145-00-15	O-ring for Top and Bottom Lids for Membrane Tank
#145-00-16	Relief Valve, 30 PSI, ¼" MNPT
#145-00-17	Coupler Plug, ¼" MNPT
#145-00-18	Labcock Valve, ¼" MT × T Male Thread × Female Thread, PVC
#145-00-19	Labcock Valve, ¼" MT × H, PVC
#145-00-20	PU Tubing, 3⁄16" ID × ¼" OD
#153-09-2	Graduated Cylinder, 1,000 mL
#155-25	Stopwatch, Digital

Optional:

#145-00-21	Carrying Case with Pluck Foam

#145-00-10 Membrane Filter Tester with #145-00-11 Pressure Assembly

CO_2 PRESSURE ASSEMBLY FOR #145-00-10 #145-00-11

Components:

#143-00	Regulator, CONCOA/AIRCO 805-1179
#143-02-10	CO_2 Puncture Head Assembly
#143-03	Barrel for CO_2 Bulb
#143-05	*CO_2 Bulbs, Package of 10 **UN1013**
#143-06	Safety Bleeder Valve, ¼" NPT
#144-16	Coupling, Female, ¼", Plated
#145-00-23	Speed Coupler, ¼" FNPT
#170-34	Needle Valve, Male, ¼" × ¼" NPT

N_2 PRESSURE ASSEMBLY FOR #145-00-10 #145-00-22

Components:

#141-15	Air Hose, Low-Pressure, 6'
#141-19	Air Hose Adapter
#142-39	Pipe Plug, ¼"
#143-06	Safety Bleeder Valve, ¼" NPT
#145-00-23	Speed Coupler, ¼" FNPT
#170-36	Regulator for Nitrogen Pressure
#170-37	Nitrogen Cylinder, 21" × 7", Right-Hand Thread

*May require special handling for shipping.

OFITE provides a complete line of frac/stimulation testing equipment. From our Constant Speed Blenders to our exclusive computer-controlled High-Temperature Viscometer, these products are designed to withstand rigorous testing with extreme accuracy and are ideally suited for both laboratory and field operations. OFITE prides itself on paying attention to the details, such as designing our equipment to be easily maintained and to operate on electrical power systems throughout the world. Much of the equipment found in this section was specially designed by our engineering department at the request of our customers. We encourage you to come to us with any specific needs that you have.

MODEL 330 FOAMED FLUID PIPE RHEOMETER

In many cases, fracturing treatments must be performed on low permeability formations that are extremely sensitive to most fracturing fluids. If conventional fracturing fluids are used during the treatment, reservoir permeability may be significantly reduced, which could completely nullify the fracturing treatment. Frequently, foamed fracturing fluids are used when performing stimulation treatments on sensitive formations. These fluids are composed primarily of gas (commonly CO_2 or N_2) and have very low residue, which greatly reduces the possibility of damaging these sensitive formations. Like conventional fracturing fluids, a foamed fluid fracturing treatment's degree of success is highly dependent upon the foam's rheological properties. Proper fluid design ensures complete proppant transport with minimal parasitic frictional losses. Foamed fluids are extremely shear and temperature sensitive and require elaborate instrumentation to study under simulated treatment conditions.

The Model 330 Foamed Fluid Pipe Rheometer was designed to examine the rheological properties of foamed fracturing fluids under typical well conditions. Utilizing a properly designed fluid can greatly improve the success of foamed fluid fracturing treatments.

Method of Operation:
A polymer (HPG or guar gum) is mixed at a relatively low loading in the mixing tank and a foaming agent is added to the liquefied polymer. The required back pressure is placed upon the closed loop system and the test fluid is added to the pipe rheometers via a triplex pump. The temperature control is programmed to the desired temperature profile and the fluid mixture is displaced through the system with the circulation pump. As the fluid flows through the foam generator, nitrogen or carbon dioxide is added at an extremely high shear rate, which creates the foamed fluid. This addition of gas increases the system pressure. However, the back pressure regulator releases fluid from the system and maintains the proper test pressure. Gas is added to the system until the desired foam quality is achieved. Foam quality is measured via a densimeter and the flow rate is measured via a Doppler-style flow meter. The differential pressures across each of the three pipe rheometers are measured with pressure transducers and all necessary data is displayed and stored on a PC.

Features and Specifications:
- Variable speed controller for circulation motor
- Progressive cavity pump with maximum flow rate of 40 gpm
- Temperature (350°F max) maintained via PID controller
- Process temperature displayed digitally
- Three 316 Stainless Steel pipe viscometers (0.25", 0.5", 0.75")
- Temperature of each pipe rheometer measured via thermocouple
- Differential pressure transducers measure Delta P
- Computer data acquisition
- Triplex pump (variable speed) pressurizes system to 2,500 PSI
- Doppler-style flow meter measures the flow rate
- Densimeter measures fluid density (quality)
- All wetted components manufactured from 316 Stainless Steel
- All necessary tools and calibration equipment included

Options:
A Data Acquisition System (DAS) is available for OFITE's Foamed Fluid Pipe Rheometer. This option uses a PC with printer to measure, record, display, and print all necessary data. In addition, measured variables are graphically displayed and the included software calculates all important parameters and permits professional presentation of results.

A dynamic fluid loss cell is also available, which measures the amount of fluid leakoff across a cylindrical rock core specimen.

Instrument Requirements:
- Nitrogen, 2,500 PSI
- 230-Volt, 50/60 Hz, 20 KVA power source

MODEL 320 PIPE RHEOMETER

A successful fracturing treatment is highly dependent upon the rheological properties of the fracturing fluid. Fluids with insufficient viscosity will not completely transport the proppant into the formation, thus favoring a poor fracturing treatment. In the design of the treatment, it is imperative to accurately predict the frictional pressure losses. These estimates are highly dependent upon laboratory data. Cross-linked polymers with high apparent viscosities are commonly used as fracturing fluids and the magnitude of the viscosity makes it difficult to measure the shear stress with a conventional rotational rheometer. Research engineers have determined that the best method to measure the rheological properties of a fracturing fluid is by the utilization of a pipe rheometer. Shear stress and shear rate may be calculated by measuring the frictional pressure loss created by flowing a fluid at a constant flow rate through a pipe of known length and diameter. These mathematical relationships follow:

$$\text{Shear Rate} = \frac{8 \times V}{D}$$

$$\text{Shear Stress} = \frac{D \times dP}{4 \times L}$$

Where:

V = Flow Rate
D = Diameter of Pipe
L = Length of Pipe
dP = Differential Pressure Across Pipe

Naturally, in the application of dimensional similitude analysis, the closer the scale model to the actual application, the more accurate the test results. Unfortunately, constructing a full scale model of a well would be cost prohibitive and impractical. OFITE developed the Model 320 Pipe Rheometer to provide a means for engineers to accurately determine the rheological properties of fracturing fluids. Applying precise data with a minimal scaleup factor makes it possible to achieve more reliable frictional pressure loss estimates and improved fracturing treatments.

Method of Operation:
A polymer, usually either HPG or guar, is mixed in the 500 gallon tank with the lightening mixer. The crosslinker is poured into the 30-gallon reservoir and the metering pump is adjusted to the required crosslinker loading. The progressive cavity fluid delivery pump is regulated to the desired flow rate. The heating system is set to the desired temperature and allowed to reach test temperature. The crosslinker additive pump is started and the crosslinker is added to the polymer fluid just before the fluids enter a static mixer, which ensures that the polymer and crosslinker are thoroughly mixed. The fluid mixture is normally pumped through the shearing coil before testing the fluids in the pipe rheometers. However, valves are installed so that the fluid may be diverted directly to the pipe rheometers. The differential pressure is measured across the length of each pipe rheometer (20 feet) via pressure transducers. The temperature is measured via thermocouples. Valves may be adjusted so that the fluid may be disposed of or re-circulated for further investigation. All measured variables are digitally displayed and recorded on a multi-channel, paper graphic recorder. An optional data acquisition system is available, which utilizes a personal computer to measure and record data.

Features and Specifications:
- Powerful 10 horsepower motor
- Variable-speed controller for motor
- Progressive cavity pump with maximum flow rate of 40 gpm
- Temperature (350°F max) maintained via PID controller
- Process temperatures displayed digitally
- Three 316 Stainless Steel pipe viscometers (0.25", 0.5", 1.00")
- Temperature measured via thermocouple
- Differential pressure transducers measure Delta P
- Multi-channel, paperless graphic recorder displays and stores data for later analysis
- Precision metering pump delivers crosslinker
- Meters measure flow rate of each viscometer tube, 0.5" diameter, 200 ft shear history coil
- All wetted components manufactured from 316 Stainless Steel
- All necessary tools and calibration equipment included

Options:
A Data Acquisition System (DAS) is available for OFITE's Pipe Rheometer. This option includes a PC and printer to measure, record, display, and print all necessary data. In addition, measured variables are graphically displayed and the included software calculates all important parameters to permit for professional presentation of results.

Instrument Requirements:
- 40 PSI 10 gpm water supply
- Water drain
- 230-Volt, 50 / 60 Hz, 20 KVA power source

Did you know?

OFITE has an engineering services department ready to help you with your next custom design project.

MODEL 270 API FRACTURE CONDUCTIVITY TESTER

MODEL 280 SIMULATED FRACTURE CONDUCTIVITY TESTER

Examining the properties of commercially manufactured proppants is vital to ensuring a successful fracturing treatment. Proppants that crush fairly easily under pressure generate fines that can significantly reduce the conductivity of the propped fracture and decrease the economic potential of the well. Conversely, proppants with a very high crush resistance can embed into the face of a formation, which reduces the thickness of the fracture and impedes flow into the induced fracture. Both OFITE Conductivity Testers were designed to examine the strength of proppants subjected to simulated downhole conditions of temperature and pressure.

Method of Operation:
The proppant is weighed and carefully placed into the "Cooke" cell using the supplied leveling tool. The cell is placed onto the platens of the hydraulic press and the flow lines are connected. A degassed fluid (commonly 2% KCl) is pumped into the accumulators and the plumbing system is evacuated using a vacuum pump. Pressure is placed upon the proppant with the hydraulic press and the thickness of the proppant pack is determined with a rectilinear position transducer. Heat is applied to the cell via an internal heater activated by a temperature controller. Test fluid is driven through the proppant pack with a chromatographic pump and the differential pressure across the length of the pack is measured via a differential pressure transducer. The known variables of: differential pressure, proppant pack length, cross sectional area, fluid viscosity, and flow rate permit the calculation of conductivity via Darcy's equation.

Model 270 Features and Specifications:
- "Cooke" cell manufactured from 316 stainless steel
- Hydraulic press incorporates heated platens
- Temperature (400°F max) maintained via PID controller
- Process temperature is displayed digitally
- Temperature measured via thermocouple
- Transducer measures proppant pack thickness
- Differential pressure transducer measures Delta P
- Multi-channel, paperless graphic recorder displays and stores data for later analysis
- Test fluid displaced with chromatographic pump
- Vacuum pump utilized for system evacuation
- Two 1,500 cc 316 stainless steel accumulators
- Cooling system included
- Stainless steel temperature bath
- Internal differential pressure calibration unit
- Dome-loaded back pressure regulator for single phase flow
- Proppants tested in accordance to API guidelines

Model 280 Features and Specifications:
The primary use of the Model 270 is for quality control and API testing, while the Model 280 is utilized to examine conductivity under simulated downhole conditions. The Model 280 utilizes a modified "Cooke" cell, which permits the proppant to be crushed between two rock core specimens. Realistically, this provides a more accurate means of estimating the conductivity of a proppant pack in an induced fracture. In addition, observation/degree of proppant embodiment can be visually determined.

Options:
A Data Acquisition System (DAS) is available for both the Model 270 and 280. This option includes a PC and printer to measure, record, display, and print all necessary data. In addition, measured variables are graphically displayed and the included software calculates conductivity and permits for professional presentation of results.

Instrument Requirements:
- 40 PSI 10 gpm water supply for cooling
- 230-Volt, 50/60 Hz, 7.5 KVA power source

MODEL 1100 PRESSURIZED VISCOMETER WITH ORCADA™ SOFTWARE AND HASTELLOY®-WETTED PARTS, 500°F (260°C), 1,000 PSI (6.9 MPA)

#130-81-A	**WITH DESKTOP PC, 115-VOLT**
#130-81-B	**WITH LAPTOP PC, 115-VOLT**
#130-81-C	**WITH LAPTOP PC AND PADDED CARRYING CASE, 115-VOLT**
#130-81-1-A	**WITH DESKTOP PC, 230-VOLT**
#130-81-1-B	**WITH LAPTOP PC, 230-VOLT**
#130-81-1-C	**WITH LAPTOP PC AND PADDED CARRYING CASE, 230-VOLT**

The OFITE Pressurized Viscometer is a fully-automated system that accurately determines the flow characteristics of completion fluids and drilling fluids in terms of shear stress, shear rate, time and temperature at pressures up to 1,000 PSI (6.9 MPa). It is suitable for both field and laboratory use. An optional waterproof case with wheels makes the unit completely portable.

See page 9 for more information.

OFITE Model 1100 Pressurized Viscometer

MODEL 300 SHEAR HISTORY SIMULATOR

The rheology of a fracturing fluid is highly dependent upon the composition/concentration of the polymer and crosslinker, temperature, pH, the magnitude of shear, and the duration of shear. To minimize parasitic frictional pressure losses, an optimal fracturing fluid would have only sufficient viscosity to fully transport the proppant from the well head, through the tubulars and perforations, and into the formation. This proves difficult because during fracturing operations, fluid temperature increases, magnitude of shear varies, and duration of shear increases. Fortunately, the use of delayed crosslinkers makes it possible to control the rheology of a fracturing fluid as a function of time and/or shear. Under ideal circumstances, the polymer would fully crosslink just before entering the perforations of the well. A fluid of this design would minimize parasitic frictional pressure losses within the tubular goods, while ensuring that maximum viscosity would be achieved at the perforations of the well. This increase in viscosity allows the fluid to effectively transport the proppant though the perforations and into the formation. OFITE's Shear History Simulator makes it possible to analyze the effects of shear, duration of shear, and temperature upon a fracturing fluid and is an invaluable tool in the optimization of fluid design.

Method of Operation:
The polymer is mixed and pumped into one of the accumulators of the apparatus. Water, which is used to displace the test fluid, is pumped into the other accumulator. The syringe pump is filled with the crosslinker and the flow rate is adjusted accordingly. The temperature baths on each of the capillary coils are adjusted to set point and allowed to reach temperature. The flow rate of the polymer delivery pump is adjusted to achieve the same rate of shear as that anticipated during the actual fracturing treatment. The fluid delivery pump and crosslinker pump are started simultaneously and the fluids are thoroughly blended via an inline static mixer. Once the fluid is homogenized, it is pumped through either one, two, or all three of the capillary coils depending upon the well depth of the fracturing operation. Differential pressure and temperature of each coil is documented on a multi-channel, paperless graphic recorder. The sheared fluid may then be directly injected into the rotor of an HTHP Viscometer for further studies.

Features and Specifications:
- All wetted components manufactured from 316 Stainless Steel
- Three temperature baths for custom temperature gradients
- Temperature (400°F max) maintained via PID controllers
- Process temperature is displayed digitally
- Temperature measured via thermocouple
- Triplex metering pump drives polymer fluid
- Syringe pump accurately delivers crosslinker
- Differential pressure transducers measure Delta P
- Multi-channel, paperless graphic recorder displays and stores data for later analysis
- Two 1,500 cc 316 stainless steel accumulators
- Three 75', 316 stainless steel capillary coils

Instrument Requirements:
- 40 PSI 10 gpm water source
- 230-Volt, 50/60 Hz, 6 KVA power source

OFITE MODEL 20 CONSTANT SPEED BLENDER

#120-60 1 LITER, 115-VOLT, 50/60 HZ
#120-60-1 1 LITER, 230-VOLT, 50/60 HZ
#120-65 4 LITER, 115-VOLT, 50/60 HZ
#120-65-1 4 LITER, 230-VOLT, 50/60 HZ

The OFITE Model 20 Constant Speed Blender facilitates the preparation of frac fluids for testing according to API specifications. Research has demonstrated that the properties of well cements are highly dependent upon mixing procedures. When constant speed blenders/mixers are used, data obtained from thickening time tests has greater reproducibility and generally correlates better with data obtained from other laboratories. The OFITE Model 20 provides a means of consistently preparing cement slurries for testing purposes and can also be utilized to mix cements according to the procedures stated by the API.

See page 138 for more information.

Did you know?

We want to make ordering easy for you! You can email us at sales@ofite.com, call us at 1-877-TEST-MUD (1-877-837-8683) or 713-880-9885, fax us at 713-880-9886, or shop online at www.ofite.com.

#120-60 Model 20 Constant Speed Blender

CAPILLARY SUCTION TIMER (CST) #294-50

The Capillary Suction Timer (CST) principle was developed at the Water Pollution Research Laboratory in Stevenage, England, for studying the filterability of sewage sludge and for evaluating the effects of pre-treatment chemicals and process conditions of sewage treatment. It has been widely used to study the colloidal properties of clay suspensions. The petroleum industry uses the CST to characterize shales and to optimize the electrolyte concentration in drilling fluids for minimizing its effect on shale formations.

CST studies of filtration characteristics of aqueous systems utilize the capillary suction pressure of a porous paper to affect filtration. When a suspension is filtered under the influence of this suction pressure, the rate at which filtrate spreads away from the suspension is controlled predominately by the filterability of the suspension. The CST automatically measures the time for the filtrate to advance between radially separated electrodes when a fixed area of special filter paper is exposed to the suspension.

The CST consists of two separate components - the acrylic filtration unit with the electrodes and a timer. The method is rapid and easy to use. A sample of the aqueous system to be tested is placed in the sample cylinder and the suction pressure of the filter paper beneath the sample draws out the filtrate. The filtrate progresses radially in an essentially elliptical pattern with the timer starting when the liquid reaches the first pair of electrodes. When the liquid reaches the third electrode, the timing ceases, the finish lamp comes on, and an audible signal is sounded. The CST reading is indicated on a 6-digit LCD counter indicating to tenths of a second.

The complete instrument consists of a timer case, test head, and stainless steel cylinder (1 cm diameter on one end and 1.8 cm on the other). It is powered by a 9-volt battery and features a “Low Battery” indicator light. Other components include an on/off switch and a reset button for resetting the circuits. The instrument uses Whatman No. 17, chromatography grade filter paper (#294-01, sold separately).

The following are non-exclusive examples of a variety of industrial processes where the CST instrument is used to evaluate chemicals (e.g. polymers):

Wastewater Treatment
- Mechanical dewatering of thickened slurries from sedimentation basins and filter backwash
- Conditioning of surface and subterranean water in potable water
- Clarification of filter backwash water and thickening of hydroxide slurries from sedimentation basins

Sewage Plants
- Dewatering of raw sludge, digested sludge, and waste-activated sludge on drying beds, rotary vacuum filters, vacuum belt filters, decanter centrifuges, and plate/frame filter presses
- Thickening of biological sludge prior to addition of primary sludge
- Thickening of sludge in Dissolved Air Flotation (DAF) systems
- Improving separation efficiency in mechanical pre-clarification processes

Petroleum Industry
- Borehole stabilization to determine the best electrolyte and polymer to use for maximum shale swelling inhibition
- Evaluating colloidal shale properties to study the reduction of permeability of the formation around the wellbore
- Evaluating the effects of soluble salts and polymers on cuttings

There are many other uses for this versatile instrument in minerals processing, the coal mining and quarrying industries, and the potash, metal, paper, and sugar industries.

Size: **10" × 4.75" × 2" (25 × 12 × 5 cm)**
Weight: **1 lb 8 oz (.68 kg)**

Components:

#294-50-004	Spacer, Nylon
#294-50-006	Cable Connector
#294-50-007	Battery Connector
#294-50-008	Push-Button Switch, Red
#294-50-009	Case
#294-50-010	Upper Block
#294-50-011	Lower Block
#294-50-012	Electrode
#294-50-013	Support Rod
#294-50-014	Terminal Cover
#294-50-015	Power Supply

#294-50 Capillary Suction Timer (CST)

#294-01 WHATMAN NO. 17 CHROMATOGRAPHY GRADE CST PAPER, 150/BOX, 7 × 9 CM

#294-05 SPECIAL CST PAPER, 300/BOX

Recommended for very viscous or slow filtering systems.

DIFFUSED AIR / DISSOLVED AIR FLOTATION TEST APPARATUS (DADAFTA), 115-VOLT #298-00

Flotation is a unit operation used to separate solids or liquid particles from a liquid phase. Separation is brought about by the introduction of fine gas (usually air) bubbles into the liquid phase. The bubbles attach to the particulate matter, and the buoyant force of the combined particle and gas bubbles is great enough to cause the particle to rise to the surface.

Air bubbles are added or caused to form by one of the following methods:

1. Diffused Air Flotation - Aeration produced by passing air through a porous media.
2. Dissolved Air Flotation - Injection of air while the liquid is under pressure, followed by the release of the pressure.

In water/wastewater treatment, flotation is mainly used to remove suspended matter and to concentrate biological sludges. The principal advantage of flotation over sedimentation is that very small or light particles that settle slowly can be removed more completely and in a shorter time.

Applications of the Diffused Air - Dissolved Air Flotation apparatus in the field of water/wastewater treatment include:

1. Separation of flocculated matter in the clarification of surface water.
2. Separation of flocculated or non-flocculated oil in wastewater from refineries, airports, and steelworks.
3. Separation of metallic hydroxides or pigments in the treatment.
4. Thickening of the activated sludge (or mixed sludge and primary sludge) from organic wastewater treatment plants.

Chemical flotation aids are often used to enhance the Diffused Air - Dissolved Air Flotation (DADAFTA) process. The most effective chemicals used are moderate weight polyamines or very high molecular weight cationic polyacrylamide polymers. Polymers can increase solid recovery in the floated sludge from 85% to 98% and can also reduce the suspended solids in the subnatant.

The OFITE DADAFTA allows the user to simulate a flotation process on a small scale. The DADAFTA can be used to measure the floatability of a particular sludge in designing treatment plants and to evaluate chemical flotation aids.

A few of the DADAFTA features include:

- Clear, unibody pressure cell withstands pressures up to 125 PSI (8.6 bar).
- Oil-less 115-volt piston air compressor for high efficiency and constant performance.
- Permeable ceramic disk used for the diffuser can be removed, cleaned, and reused.
- Chemical flotation aid inlet with septum.
- Stainless steel paddle for additional mixing capabilities.
- Easy-to-read flow meter and pressure gauge.
- Quick disconnect fittings.

Components:

#135-04	Retainer Ring, External
#141-22	Filter, Felt
#143-01-1	Gauge, 200 PSI, ⅛" Back Connection
#153-09-2	Graduated Cylinder, Nalgene®, 1,000 mL, PMP
#171-90-04	Cross, ¼" NPT, 316 Stainless Steel
#171-90-12	Elbow, Male, ¼" NPT, 316 Stainless Steel
#298-01	Stand, Stainless Steel
#298-02	Filter Housing with ⅜" Connection, Clear, 10"
#298-03	Insert, Barbed
#298-04	Flowmeter, 0 - 30 SCFH, 50 mm
#298-06	Coupling, Straight, ¼", Nylon
#298-07	Reducer Bushing, ¼" × ⅛"
#298-08	Elbow, ¼" Female-Male, Nylon
#298-09	Septum, 8 mm
#298-10	Connector, Straight, Liquidtight
#298-11	Reducer Bushing, ⅜" Male × ⅛" Female
#298-12	Dura Clamp
#298-13	Poly Pak Seal
#298-15	Quick Disconnect Coupling, Barbed Female, 1/16" ID Hose × ⅛"
#298-16	Quick Disconnect Coupling, Barbed Male, 1/16" × ⅛"
#298-17	Quick Disconnect Coupling, Threaded Male
#298-18	Quick Disconnect Coupling, Straight Comp Fit, ⅜" × 0.250
#298-19	Pinch Valve, Plastic
#298-20	Stopper, O Size, Rubber
#298-21	Pressure Relief Valve, 100 PSI (689.5 kPa)
#298-22	Piston Air Pump, 100 PSI (689.5 kPa), 115-Volt
#298-23	Reducing Bushing, ⅜" × ¼"
#298-24	Straight Adapter, Male Pipe, 5/16" × ¼"
#298-25	Pipe Adapter, Elbow, Male, 5/16" × ¼"
#298-26	Check Valve, ¼" Female × ¼" Female, Acetal
#298-27	Stopcock Valve, ¼" Male × Female
#298-28	Tubing, 3/16" ID × 5/16" OD, Polyethylene
#298-29	Tubing, Flexible, Polyurethane
#298-30	Hose Barb, In-Line, 1/16" ID
#298-31	Hose Adapter, 1/16" × ⅛"
#298-32	Gauge, Glycerine Filled, 100 PSI, 2½" Face, ¼" Back Connection, Stainless Steel
#298-33	Air Diffuser, 1.5" Long × 0.75" Wide, 3/16" OD Barb, 4 mm, ABS

Optional:
#130-74 Transformer, 230 to 115 Volts, 1.10 Amps, 50 / 60 Hz

#298-00 Diffused Air - Dissolved Air Flotation Test Apparatus (DADAFTA)

POLY PREP "N" FLOC TEST KIT #291-00

The Poly Prep "N" Floc Test Kit allows field personnel to properly prepare water soluble flocculants/coagulants and observe their effects on the type of fluid or sludge in use. The Poly Prep "N" Floc is ideal for quickly selecting the proper polymer and dosage for sludge dewatering and water/wastewater treatment. The test kit includes a balance and low shear stirrer to accurately weigh and dissolve polymers. A stainless steel rack contains four transparent cylinders and stoppers to observe floc characteristics and water clarity after each dose and inversion.

Components:

#130-41	Beaker, Nalgene®, 400 mL, Polypropylene
#153-01	Brush, Bottle, 3" × 12"
#153-09	Graduated Cylinder, Nalgene®, 250 mL, PMP
#153-09-2	Graduated Cylinder, Nalgene®, 1,000 mL, PMP
#153-53-8	Stir Bar, Spin Wedge, 1¾" × ½"
#153-53-9	Stirrer, Magnetic, 1,500 RPM, 115-Volt
#153-60	Syringe, Disposable, 3 cc
#153-60-1	Syringe, Disposable, 1 mL
#153-62	Syringe, Disposable, 10 cc
#166-03	Balance, Hand-Held, 0 - 320 g × 0.1 g
#291-01	Rack for 4 Acrylic Cylinders, Stainless Steel
#291-06	Cylinder, 3" OD × 2.75" ID × 11" H, 1 L, Acrylic
#291-07	Stopper, Solid, No. 13½, Neoprene
#297-08	Bottle, Boston Round, Natural, 4 fl oz, Poly
#297-10	Bottle with Cap, Boston Round, Natural, 8 fl oz, Poly

Optional:
#155-25 Stopwatch, Digital

#291-00 Poly Prep "N" Floc Test Kit

AMB MOISTURE BALANCE, 50 GRAM CAPACITY, 0.001 GRAM / 0.01% READABILITY

#166-25 115-VOLT
#166-25-1 230-VOLT

The AMB moisture balance is a precision device for the determination of moisture content in small samples of materials by drying the sample with halogen heaters. Features include 7 preset drying modes; large LED display showing percentage moisture or percentage solid, plus temperature and time; automatic termination when drying is complete or after a user selected time; bi-direction RS-232 interface; and 2 quartz halogen heaters for improved drying distribution.

See page 72.

CON 410 WATERPROOF CONDUCTIVITY/TDS/TEMP. METER #130-86

The CON 410 contains a highly advanced microprocessor that allows the user to switch between conductivity and TDS with a press of a button, while storing up to 50 readings, including temperature. Superior waterproof and dustproof housing allows the CON 410 to be utilized in dirty and wet applications. The cell for the CON 410 is unique and has proven very effective in obtaining conductivity measurements from cake samples generated by oil and gas drilling operations. The cell incorporates a two-band platinum sensor, removable probe guard, built-in temperature sensor, epoxy body (K = 1.0), and 3' (0.9 m) of cable.

See page 156.

Did you know?

As with all of our equipment, our test kits may be custom fitted to meet specific requirements.

PORTABLE TURBIDITY METER #299-10

The Portable Turbidity Meter combines laboratory accuracy and reliability in an extremely compact, portable instrument for turbidity measurement. It is the ideal choice for regulatory monitoring, process water testing, and environmental water analysis in the field or laboratory. With a wide range of 0 - 4,000 NTUs (Nephelometric Turbidity Units), a microprocessor enables full scale auto-ranging. The direct digital readout has a resolution of 0.01 for the lowest range, with an accuracy of ±2% (0 - 100 NTU) or ±3% (> 100 NTU). A multi-detector optical configuration assures long term stability and minimizes stray light and color interferences. All readings are determined by the process of signal averaging over a 5-second period. This process minimizes fluctuations in readings attributed to large particles and enables rapid, highly repeatable measurements. The unit is supplied with a 9-volt alkaline battery, an AC power adapter, four optically selected sample vials with screw caps, a standardization package of 1.0 NTU and 10.0 NTU standards, and a sturdy carrying case. An RS-232 port is provided to interface with a datalogger or computer. An optional filter assembly is also available. The calibration procedure is simple and involves activating the up or down keys until the reading matches the standard. The microprocessor adjusts the factory programmed calibration curve accordingly. Line operation is 115-Volt / 60 Hz or 220-Volt / 50 Hz, 100 mA with included adapter.

See page 155.

#299-10 Turbidity Meter

HYGROMASTER HYGROMETER WITH HYGROSTICK SENSOR AND CASE #153-59

Since water intrusion into a formation can decrease borehole stability, the affinity for water of a shale on a drilling fluid is a major concern. The Hygrometer, or Activity Meter, as it is sometimes called, provides a measurement of relative humidity in a closed space above an emulsified fluid and relates the humidity to the activity of the water. Activity is defined as the chemical potential or the reaction availability of water. Water loss to the formation from an oil-based fluid may be lowered by dissolving salt in the emulsified water, thereby lowering its activity. The HygroMaster instrument measures relative humidity (*%rh*, range 20 - 100 %rh), ambient temperature (*Ta*, range 0 - 50°C or 30 - 120°F) and dew point temperature (*Tp*) of environments and equilibrium relative humidity (*ERH*) values of materials. The probe or Hygrostick (#153-59-3) has been designed as an interchangeable and easily replaceable item that does not require regular re-calibration. However, the calibration may be checked periodically against a reliable reference solution.

Size: **7.75" × 3.9" × 1.75" (20 × 10 × 4 cm)**
Weight: **8 oz (0.2 kg)**

#153-59 HygroMaster Hygrometer

Optional:

#153-59-1	Extension Lead for Hygrostick
#153-59-3	Hygrostick Probe, Tip Only
#153-71	Fleaker with Grommet
#153-72	Fleaker without Grommet

#153-71 Fleaker with Grommet

WATER ANALYSIS KIT IN STAINLESS STEEL CASE
#144-95

Size: **20" × 10.5" × 9.5" (51 × 27 × 24 cm)**
Weight: **28 lb 4 oz (12.8 kg)**

#144-95 Water Analysis Kit

Components:

#145-601	Hydrogen Sulfide Test Papers, Package of 100
#145-602	Test Bottle, Hydrogen Sulfide
#145-603	Color Chart, Hydrogen Sulfide
#145-604	Alka-Seltzer® Tablets
#147-50	pH Paper, pHydrion Dispenser, pH 2-10, 1-11
#153-12	Graduated Cylinder, 100 mL × 1 mL, Glass
#153-15	Test Tube, 15 mm × 125 mm
#153-26	Titration Dish, Polyethylene
#153-28	Stirring Rod, Polyethylene
#153-34	Pipette, 1 mL × .01 mL, Glass
#153-40	Glass Pipette, 10 mL × .1 mL, Glass
#153-75	Tubing, 3/16", Tygon®
#153-76	Tubing, 5/16", Tygon®
#153-83	Rubber Stopper, No. 3, One-Hole

Reagents:

#144-95-001	Burette, Auto Self-Zero
#145-551	Starch Indicator Solution, 2 oz (60 mL)
#145-552	*Sulfide Buffer Solution, 2 oz (60 mL) **UN1789**
#145-553	Iodine Titrating Solution, 8 oz (250 mL)
#147-30	Buffer Solution, pH 7, 16 oz (500 mL)
#200-10-1	Hydrogen Peroxide, 3% Solution, 2 oz (60 mL)
#205-02	Versenate® Hardness Indicator Solution, 2 oz (60 mL)
#205-04	*Versenate® Hardness Buffer Solution, 2 oz (60 mL) **UN2672**
#205-12	Versenate® Hardness Titration Solution, 1 mL = 20 EPM, 16 oz (500 mL)
#205-14	*Versenate® Calcium Buffer Solution, 2 oz (60 mL) **UN1824**
#206-04	Deionized Water, 32 oz (1 L)
#210-00	CalVer® II Indicator Powder, 10 gram
#215-00	Potassium Chromate Solution, 2 oz (60 mL)
#220-00	Phenolphthalein Indicator Solution, 2 oz (60 mL)
#230-04	*Sulfuric Acid, 0.02 N, 16 oz (500 mL) **UN2796**
#230-15	*Sulfuric Acid, 5 N, 2 oz (60 mL) **UN2796**
#240-04	Methyl Purple Indicator Solution, 2 oz (60 mL)
#250-00	Calcium Indicator Solution, 2 oz (60 mL)
#255-00	*Sulfate Indicator Solution, 2 oz (60 mL) **UN1789**
#265-08	Silver Nitrate, 0.01 g, 0.282 N, 16 oz (500 mL)
#275-00	*Hydrochloric Acid, 37%, Conc., 2 oz (60 mL) **UN1789**
#285-37	Iron Indicator Solution, 2 oz (60 mL)
#285-40	Iron Buffer Solution, 2 oz (60 mL)

Case:

#141-17	Clip for Graduated Cylinder
#144-96	Carrying Case, Stainless Steel
#163-26	Clip, Small
#163-27	Clip, Medium
#163-28	Clip, Large

MILLIPORE MEMBRANE FILTER TESTER
#145-00-10

The makeup water for a completion fluid can be studied effectively using a membrane filter tester. The apparatus provides information on biological contaminants, chemical composition, and filtration rates of water and other liquids. The main body of this unique filtering device is a 3200 mL, 5.75" by 10.5" transparent cylinder, which has been graduated for instantaneous readings. Pressurization is provided by optional manifold assemblies that attach to the top of the filtering chamber and allow for pressurization with either carbon dioxide or nitrogen. A carrying case (#145-00-21) is recommended.

See page 157.

#145-00-10 Membrane Filter Tester with #145-00-11 Pressure Assembly

OFI Testing Equipment maintains a large inventory of reagents, consumable supplies and various plastic and glass labware, which fully conform to API Specifications. Please let us know if you have any requirements that are not listed in our catalog, as we are happy to furnish specialty items and "one of a kind" products upon request. Information concerning safety and health risks and proper precautions with respect to particular materials and conditions are provided where necessary.

BALANCE ACCESSORIES

#153-68 Weigh Boat, Disposable, Medium, 78 × 78 mm
#153-69 Weigh Boat, Disposable, Large, 124 × 124 mm
#166-02 Weight Set, 10 mg - 50 g
#166-07 Attachment Weight Set for Triple Beam Balance

BATTERIES

#147-02 Battery for pH and Resistivity Meters and #131-50 Emulsion Tester, 9-Volt
#147-02-1 AAA Battery
#147-17 Batteries for 147-16-1 and 147-16-3, 1.5-Volt, Set of 3

BEAKERS

#153-51-3 50 mL, Glass
#153-51-4 100 mL, Glass
#153-51-8 150 mL, Glass
#153-51 250 mL, Glass
#153-51-1 400 mL, Glass
#130-41 Nalgene®, 400 mL, Polypropylene
#153-51-2 600 mL, Glass
#130-55 Nalgene®, 600 mL, Polypropylene
#166-08-1 600 mL, Stainless Steel
#153-51-5 1,000 mL, Glass
#153-51-6 1,000 mL, Polypropylene
#153-51-7 2,000 mL, Glass
#120-910-054 2,000 mL, Plastic

BOOKS AND LITERATURE

#190-15 "Fluid Facts Engineering Handbook" by Baker Hughes
#190-20 "Drilling Fluids Technology Manual" by Mud Tech
#190-90 OFI Testing Equipment, Inc. Product Catalog

BOTTLES, GLASS

#297-00 1 oz (30 mL), French Square with Cap
#297-01 2 oz (60 mL), French Square with Cap
#297-03 8 oz (250 mL), Amber Round with Cap
#297-04 8 oz (250 mL), Clear Paragon with Cap
#297-05 16 oz (500 mL), Mason Jar with Cap

BOTTLES, POLY

#297-06 1.25 oz (35 mL), White Oval Dropper with Insert
#296-49 1 oz (30 mL), Natural Boston Round Dropper with White Cap and Natural Tip
#297-07 2 oz (60 mL), Natural Oval Dropper with Insert
#297-09 4 oz (125 mL), Amber Boston Round with Cap
#297-08 4 oz (125 mL), Natural Boston Round with Cap
#297-04-1 4 oz (125 mL), Natural Wide Mouth with Cap
#162-77 4 oz (125 mL), Sample Bottle, Polypropylene
#297-12 8 oz (250 mL), Amber Boston Round with Cap
#297-10 8 oz (250 mL), Natural Boston Round with Cap
#297-13 8 oz (250 mL), Natural Wide Mouth with Cap
#297-11 8 oz (250 mL), White Modified Bottle with Cap
#297-15 16 oz (500 mL), Amber Boston Round with Cap
#297-14 16 oz (500 mL), Natural Boston Round with Cap
#297-16 16 oz (500 mL), Natural Wide Mouth with Cap
#297-18 32 oz (1 L), Amber Boston Round with Cap
#297-17 32 oz (1 L), Natural Boston Round with Cap
#297-19 32 oz (1 L), Natural Wide Mouth with Cap
#297-21 1 gal (4 L), Amber Jug with Cap
#297-20 1 gal (4 L), Natural Jug with Cap

BOTTLES, WASH, POLYETHYLENE

#153-31-1 8 oz (250 mL)
#153-31 16 oz (500 mL)

Did you know?

OFITE shipping specialists are certified for air flight transport of hazardous chemicals and they have been trained to build EU certified crates.

BRUSHES

#153-01	Brush, Bottle, Wood Handle, 3" × 12"
#153-05	Brush, Mini, 7½" × 3" Curved, Stainless Steel
#153-00	Brush for Centrifuge and Sand Content Tubes
#153-02	Brush for Graduated Cylinder, 1½" × 10¾"
#153-03	Brush for Graduated Cylinder or Pipette, ½" × 8"
#153-04	Brush for Pipette, 10 mL, ½" × 3" Bristles, 24", Wire
#153-06	Brush for Receiver Tube, 10 mL
#153-07	Brush for Receiver Tube, 20 mL
#153-08	Brush for Receiver Tube, 50 mL
#153-05-1	Brush for Retort Chamber, 1" Diameter, Stainless Steel

CABLES

#130-38-5	Power Cord for Thermocup
#130-42	Cable for 2-Speed Viscometer, 12-Volt
#131-24	Cable for Heater to Adapter on Ministill
#131-25	Direct Cable for Heater to Wall on Ministill
#131-26	Cable for Adapter to Wall on Ministill
#135-33	Cable for 6-Speed Viscometers, 6'
#152-37	Power Cord, 3-Conductor, NEMA 575, IEC C13
#152-38	AC Power Cord, 3-Conductor International (Continental European)
#165-40	Cable for 115-Volt Retort
#165-40-1	Cable for 230-Volt Retort and Portable Oven
#165-40-2	Cable, 3-Conductor, SJ00W, 18 Gauge (230-Volt Only)
#170-29	Flat Power Cord with Male Plug Only, 6'
#171-82	Round Power Cord with Male Plug Only, 8'

CASES (ALPHABETICAL ORDER)

#160-02	Airplane Kit, Stainless Steel
#111-01	EP-Lubricity Tester, Digital
#170-52	Filter Press, Dynamic HTHP, Stainless Steel
#170-03	Filter Press, HTHP, 175 mL, Stainless Steel
#171-81	Filter Press, HTHP, Model MB, Stainless Steel
#142-53-8	Filter Press, MB, with CO_2 Assembly
#151-50	Garrett Gas Train
#153-16-1	Graduate Cylinder Case, 25 mL, Polycarbonate
#132-06	Hand-Crank Rheometer
#161-06	HDD Case, Executive-Style
#153-52-13	Hydrometer Set
#162-01-1	International Kit, Molded Plastic
#162-72	METEOR Kit
#100-55	Mud Balance, Fann®, Hi-Impact Plastic
#100-40	Mud Balance, OFITE, Hi-Impact Plastic
#100-60-02	Mud Balance, Tru-Wate™
#161-60	Mud Laboratory, MES Design, Stainless Steel
#144-35	Multi-Kit, Diagonal Design, Stainless Steel
#144-90-07	Nitrate Test Kit, Plastic
#161-02	Offshore Kit, Stainless Steel
#162-61	Oil Mud Laboratory
#163-02	Pilot Test Kit, Stainless Steel
#153-35	Pipette Case (1, 2 and 5 mL), Polycarbonate
#153-39	Pipette Case (10 mL), Polycarbonate
#165-63	Plastic Carrying Case
#151-50	Potassium-Potassium Chloride Kit
#130-85-07	Resistivity Meter
#165-25	Retort Kit, 10 mL, Stainless Steel
#165-89	Retort Kit, 20 mL, Electronic, Stainless Steel
#165-87	Retort Kit, 20 mL, Standard, Stainless Steel
#165-14-4	Retort Kit, 50 mL, Electronic, Stainless Steel
#165-14-6	Retort Kit, 50 mL, Standard, Stainless Steel
#164-01	Retort, Removable, 10 mL
#144-21	Rig Laboratory Cabinet without Sink
#162-76	Tackle Box, Plastic, Plano 3780
#163-21	Tool Box, Plastic, 13" × 6½" × 5½"
#163-22	Tool Box, Plastic, 19¾" × 8½" × 8¾"
#163-23	Tool Box, Plastic, 16 ¼" × 9" × 12½"
#130-10-13	Viscometer, Model 800 8-Speed
#144-96	Water Analysis Kit, Stainless Steel

CENTRIFUGE TUBES

#153-19	12 cm, Glass	
	0 - 15 mL	0.1 mL
#153-21	Tube, Kolmer, 10 mL, Glass, 12.5 cm	
	0 - 2 mL	0.1 mL
	2 - 10 mL	0.2 mL
#153-22	12.5 mL, API, 100%, Glass, 12 cm	
	0 - 3%	0.2%
	3 - 10%	0.5%
	10 - 50%	1.0%
	50 - 100%	50%
#153-23	100 mL, ASTM	
	0 - 2 mL	0.2 mL
	2 - 10 mL	1.0 mL
	10 - 25 mL	5.0 mL
	25 - 100 mL	50 mL
#153-24	100 mL, Pear Shaped, Glass Stoppered	
	0 - 0.2 mL	0.01 mL
	0.2 - 100 mL	25 mL, 50 mL, 100 mL
#153-25-20	100 mL, Short Cone, for Oil	
	0.0 - 0.5 mL	0.05 mL
	0.5 - 2.0 mL	0.1 mL
	2.0 - 3.0 mL	0.2 mL
	3.0 - 5.0 mL	0.5 mL
	5.0 - 10.0 mL	1.0 mL
	10.0 - 25.0 mL	5.0 mL
	25.0 - 100.0 mL	25.0 mL

CERAMIC FILTER DISKS, 2½" × ¼"

Part #	Mean Pore Throat (µm)		Permeability	
	New	Old	New	Old
#170-55	10	3	775 mD	400 mD
#170-53-2	12	5	850 mD	750 mD
#170-53-3	20	10	3 D	2 D
#170-51	40	20	8 D	5 D
#170-53	50	35	15 D	10 D
#170-53-1	55	60	20 D	20 D
#170-53-4	120	90	40 D	100 D
#170-53-5	--	150	--	180 D
#170-53-6	--	190	--	--

CHARGERS

#143-05 *CO_2 Bulbs, Package of 10 **UN1013**
#143-08 *N_2O Bulbs, Package of 10 **UN1070**
#170-37 *Nitrogen Cylinder, 21" × 7", Right-Hand Thread

Nitrous oxide cartridges should not be used as pressure sources for high-temperature, high-pressure (HTHP) filtration. Under temperature and pressure, nitrous oxide can detonate in the presence of grease, oil, or carbonaceous materials. Nitrous oxide cartridges are to be used only for Garrett Gas Train carbonate analysis.

Carbon dioxide and nitrous oxide cartridges are pressurized to approximately 900 PSI at 1 atmosphere (sea level). Therefore, they should never be placed on airplanes without proper packaging, due to the possibility of cabin de-pressurization, which may result in an explosion.

CONTAINERS

#297-24 Cubitainer with Carton and Valve, 5 gal (20 L)
#297-25 Pail with Lid, 1 gal (4 L)
#297-26 Pail with Lid, 2 gal (8 L)
#297-27 Pail with Lid, 3.5 gal (10.9 L)
#297-28 Pail with Lid, 5 gal (30 L)
#297-22 Solvent Can with Cap, 16 oz (500 mL), Metal
#297-23 Solvent Can with Cap, 1 gal (4 L), Metal

CUPS

#110-20 Measuring Cup, Beige, 1,000 mL, Plastic
#110-30 Measuring Cup, 500 mL, Stainless Steel
#110-40 Measuring Cup, 1,000 mL, Stainless Steel
#110-50 Measuring Cup, 2,000 mL, Stainless Steel
#130-21 Sample Cup for 8-Speed Viscometer, Stainless Steel
#130-41 Beaker for Hand-Crank Rheometer, 400 mL, Polypropylene
#130-54 Sample Cup for 6-Speed Viscometers, 350 mL, Stainless Steel Scribed
#130-55 Sample Cup for 6-Speed Viscometers, 600 mL, Poly
#131-12 Sample Cup for Ministill
#165-16-2 Mud Sample Chamber for 50 mL Retort
#165-31-1 Mud Sample Cup for 10 mL Retort
#165-83-2 Mud Sample Cup for 20 mL Retort
#169-01 Spray Cup for #169-00 Particle Size Analyzer

*Requires special handling for shipping.

DRÄGER-TUBES™

#151-18 Ammonia 5/a, Range 5 - 700 ppm
#151-04 CO_2 100/a, Range 100 - 3,000 ppm
#151-03 H_2S 0.2%/A, Range 0.2 - 7 Vol.%
#151-02 H_2S 100/a, Range 100 - 2,000 ppm
#151-09-1 Dräger-Tube™ Opener

FILTERS

#170-19 Filter Paper, 2½" (6.3 cm), 2.7µm, Package of 100
#140-55 Filter Paper, 3½" (9 cm), 2.7 µm, Package of 100
#140-56 Filter Paper, Whatman #1, 12.5 cm, 11 µm, Box of 100
#140-56-1 Filter Paper, Whatman #40, 9 cm, 8 µm, Box of 100
#140-56-2 Filter Paper, Whatman #42, 9 cm, 2.5 µm, Box of 100
#141-22 Filter for Regulators, Felt
#165-62 Filter for Syringe, 25 mm, 0.45 µm, PTFE
#170-19-1 Filter, Dynalloy®, 2½", Stainless Steel
#145-00-12 Filter, Millipore, 47 mm, 0.45 µm, Package of 25
#170-18 Screen, 325-Mesh with 60-Mesh Backup, Detachable
#170-19-2 Glass Fiber Paper, 2½", Box of 50

FLASKS, ERLENMEYER

Part#	Capacity (mL)	Subdivisions (mL)	Stopper
#153-50-4	25	5	0
#153-50-3	50	10	1
#153-50-1	125	25	5
#153-50	250	25	6
#153-50-2	500	50	7

FLASKS, OTHER

#153-49 Le Chatelier with Glass Stopper for Specific Gravity, 250 mL Body, Neck Graduated 18 - 24 × 0.1 mL, Lid 2" OD × 3.5" OD Base
#153-54 Volumetric, 100 mL, Glass
#153-54-1 Volumetric, 250 mL, Glass

FUNNELS

#110-10 Marsh Funnel Viscometer, Plastic
#153-30 Funnel, 3" Diameter, Polyethylene
#295-00-007 Funnel, 6" Stem, Glass
#167-20 Funnel for Sand Content Kit

FUSES

#172-01 ½-Amp, For Oven Temp Controller, Box of 5
#165-14-10 1-Amp, Box of 5
#172-05 2-Amp, For Roller Oven, Box of 5
#172-07 5-Amp, For Roller Oven, Box of 5
#172-09 10-Amp, For Roller Oven, Box of 5
#171-54 Thermal Fuse, 464°F (240°C)

GAUGES

#143-01-2 30 PSI, ⅛" Bottom Connection, 1½" Face
#169-03 60 PSI, ¼" Bottom Connection, 2" Face
#143-01-1 200 PSI, ⅛" Back Connection, 1½" Face
#143-01 200 PSI, ⅛" Bottom Connection, 1½" Face
#142-61 200 PSI, ¼" Bottom Connection, 2" Face
#171-73-1 1,000 PSI, ⅛" Bottom Connection, 1½" Face
#171-38 1,000 PSI, ¼" Bottom Connection, 2½" Face
#127-00-306 1,000 PSI, 4.5" Face
#171-34 1,500 PSI, ¼" Bottom Connection, 2" Face
#171-40 1,500 PSI, ¼" Bottom Connection, 2½" Face
#171-74-1 2,000 PSI, ⅛" Bottom Connection, 1½" Face
#171-42 3,000 PSI, ¼" Bottom Connection, 2½" Face
#171-41 5,000 PSI, ¼" Bottom Connection, 2½" Face
#127-00-305 5,000 PSI, 4.5" Face

GRADUATED CYLINDERS

#153-20 5 mL × .1 mL, TD, Glass,
#153-18 10 mL × .1 mL, TC, Glass
#153-18-1 10 mL × .2 mL, TD, Glass
#153-09-3 10 mL × .2 mL, PMP, Nalgene®
#153-16 25 mL × .2 mL, TC, Glass
#153-09-4 25 mL × .5 mL, PMP, Nalgene®
#153-14 50 mL × 1 mL, TC, Glass
#153-09-5 50 mL × 1 mL, PMP, Nalgene®
#153-12 100 mL × 1 mL, TC, Glass
#153-09 250 mL × 2 mL, PMP, Nalgene®
#153-09-1 500 mL × 5 mL, PMP, Nalgene®
#153-09-2 1,000 mL × 10 mL, PMP, Nalgene®

LUBRICANTS

#100-60-32 Grease, Multi-Purpose, Mystik JT-6
#153-55 Stopcock Grease, 150 g, Silicone
#153-56 Stopcock Grease, Lubriseal, 75 g Tube
#165-44 Thread Lubricant, High-Temperature, 1 oz

MIXER ACCESSORIES

#152-01 Armature for Hamilton Beach® Mixer, 115-Volt
#152-02 Armature for Hamilton Beach® Mixer, 230-Volt
#152-35 Powerstat for Variable Mixing Speeds, 115-Volt
#152-36 Powerstat for Variable Mixing Speeds, 230-Volt
#152-40 Container for Hamilton Beach® Mixers, Stainless Steel
#152-41 Upper Agitator Button for Hamilton Beach® 1 and 3 Spindle Mixers
#152-42 Lower Agitator Button for Hamilton Beach® 1 and 3 Spindle Mixers
#152-43 Impeller Blade for Multi-Mixer
#152-44 Screw for Hamilton Beach® Lower Agitator Button
#152-51 Sound Resistant Case for Multi-Mixer, Stainless Steel

O-RINGS AND GASKETS

Aging Cells
#175-04 Gasket for Old-Style Inner Caps, Teflon®
#175-09 O-ring for OFITE-Style Aging Cell, Inside, Viton®
#175-09-1 O-ring for OFITE-Style Aging Cell, Inside, Teflon®
#175-46 O-ring for Old-Style Aging Cell, Outside, Teflon®
#175-54 O-ring for Old-Style Aging Cell, Outside, Buna N
#175-62 O-ring for Teflon® Liner Plug, Viton®
#175-63 O-ring for Teflon® Liner Lid (Piston), Viton®
#170-17 O-ring for Valve Stem

Differential Sticking Tester
#150-52 Gasket for Sticking Tester, Neoprene
#150-53 Gasket for Sticking Tester, Plastic
#150-56 O-ring for Test Cell
#170-13 O-ring for Test Cell, Buna N
#142-56 O-ring for Torque Plate
#170-17 O-ring for Valve Stem

Filter Press, API
#141-05 Gasket, 3/32" Thick, Neoprene
#141-05-1 Gasket, 1/16" Thick, Neoprene
#140-60-09 Gasket for Half-Area Filter Press
#142-58 Gasket for MB T-Fitting and CO_2 Head
#142-54 O-ring for 12B T-Fitting
#142-60 O-ring for 12B and MB Filter Press Cell
#140-60-01 O-ring for Bleeder Valve
#140-71 O-ring for Deadweight Hydraulic Assembly
#142-56 O-ring for Model MB and 12B Cell Coupling

Filter Press, HTHP
#170-07 O-ring for Back Pressure Receiver, 15-mL
#171-11 O-ring for Back Pressure Receiver, 100-mL
#140-60-01 O-ring for Bleeder Valve
#170-13-2 O-ring for Dynamic Filter Press Test Cell
#170-64 O-ring for Dynamic Filter Press Water Swivel
#170-13 O-ring for HTHP Test Cell, Buna N
#170-13-1 O-ring for HTHP Test Cell, Teflon®
#142-58 O-ring for Model MB Coupling
#171-52 O-ring for Model MB Test Cell
#171-99 O-ring for Piston on PPT
#170-77 O-ring for Spacer on Ceramic Filters
#170-17 O-ring for Valve Stem

Garrett Gas Train
#151-13 O-ring for 1st Chamber
#151-12 O-ring for 2nd and 3rd Chamber
#142-58 O-ring for Fitting
#151-11 O-ring for Flow Meter Tube
#151-10 O-ring for Dräger-Tube™

Mud Balance, Pressurized
#142-56 O-ring for Bottom Check Valve
#100-60-01 O-ring for Lid
#170-07 O-ring for Plunger Assembly
#142-54 O-ring for Top Check Valve

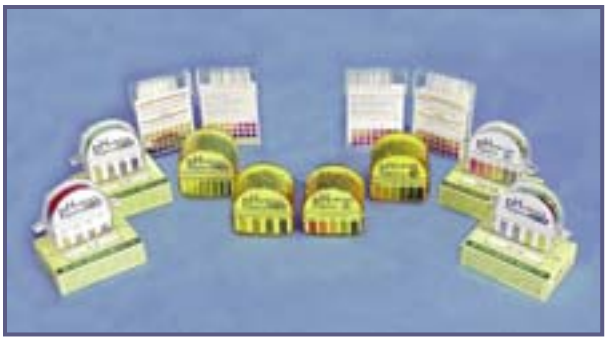
Regulators
#143-00-9 O-ring for CONCOA/AIRCO Regulator
#143-02-13 O-ring for Puncture Head Assembly, CO_2 Bulb
#143-02-14 O-ring for Puncture Head Assembly, Holder
#143-22 Gasket for Puncturing Pin

Retorts
#165-15-4 O-ring for Ultra-Torr Fitting

Steam Still, Reflux
#152-90-03 O-ring for Chamber Top
#152-90-01 O-ring for Tube, ¾" Diameter
#152-90-02 O-ring for Tube, ⅝" Diameter

PH PAPER

#147-50 pHydrion Dispenser pH Paper, pH 2-10, 1-11
#147-51 pHydrion "A" pH Refill, pH 2-10, Box of 5 rolls
#147-52 pHydrion "B" pH Refill, pH 1-11, Box of 5 rolls
#147-53 pH Sticks, 0 - 14, Box of 100
#147-54 pH Sticks, 7.5 - 14, Box of 100
#147-60 pHydrion Dispenser pH Paper, pH 6-8, 8-9.5
#147-61 pHydrion pH Refill, pH 6-8, Box of 5 rolls
#147-63 pHydrion pH Refill, pH 6-11, Box of 5 rolls
#147-70 pHydrion Dispenser pH Paper, pH 10-12, 12.5-14
#147-80 pHydrion Dispenser pH Paper, pH 8-9.5, 10-12



PIPETTES

OFITE Pipettes are designated "TD" (To Deliver) and are calibrated by measuring the volume of distilled water that will flow from them by gravity alone. A small amount of liquid remains inside the tip and is not to be blown out.

#153-32 .1 mL × .01 mL, PYREX®
#153-34 1 mL × .01 mL, KIMAX
#153-34-1 1 mL × .01 mL, Plastic
#153-36 2 mL × .1 mL, KIMAX
#153-38 5 mL × .1 mL, KIMAX
#153-40 10 mL × .1 mL, KIMAX
#153-40-5 25 mL × .2 mL, Disposable
#153-10 Burette with Bottle and Bulb, Automatic, 10 mL
#144-90-05 Dropper Pipette, 2 mL, Nalgene®
#296-14 Eppendorf Variable Pipette, 10 - 100 µL × .1 µL
#296-15 Eppendorf Variable Pipette, 100 - 1,000 µL × 1 µL
#296-16 Pipette Tips, 1 - 200 µL Range
#296-17 Pipette Tips, 200 - 1,000 µL Range
#153-41 Pipette Aid (Safety Bulb)
#153-42 Pipette Filler, up to 10 mL, Fast Release
#153-43 Transfer Pipette, Not Graduated, 5 mL, Polyethylene

REGULATORS AND ASSEMBLIES

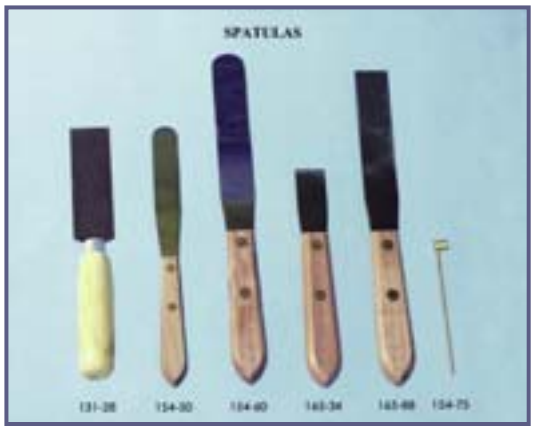
#140-70 Dead Weight Hydraulic Assembly for Filter Press
#142-00 CO_2 Pressure Assembly with Top Cap, CONCOA/AIRCO
#142-10 CO_2 Pressure Assembly, CONCOA/AIRCO Low-Pressure
#170-04 CO_2 Pressure Assembly, CONCOA/AIRCO High-Pressure
#171-57 CO_2 Pressure Assembly, Victor, High-Pressure
#170-41 Dual N_2 Manifold, Palm-Sized
#171-24 Dual N_2 Manifold, 1,350 and 750 PSI
#143-00 Regulator, CONCOA/AIRCO, Low-Pressure
#170-08 Regulator, CONCOA/AIRCO, High-Pressure
#142-37 Regulator, Victor, Low-Pressure
#171-53 Regulator, Victor, High-Pressure
#170-36 Regulator, Victor, N_2, 200 and 3,000 PSI Gauges
#143-07 Repair Kit, CONCOA/AIRCO
#143-19 Repair Kit, Victor, Low-Pressure
#143-20 Repair Kit, Victor, High-Pressure

RETORT RECEIVERS, VERIFIED

#165-05 10 mL, 0 - 100%
#165-06 20 mL, 0 - 100%
#165-07 50 mL, 0 - 100%

SPATULAS

#154-75 Brass Scoop, 4" Length
#154-63 Spatula, Micro-Spoon, 9" Flat Handle
#154-62 Spatula, Porcelain, 123 mm
#165-34 Spatula for 10 mL Retort, 2" × ⅞" Blade
#165-88 Spatula for 20 mL Retort, 5¼" × 1⅛" Blade
#131-28 Spatula for 50 mL Retort and Ministill, 3.75" × 1⅛"
#154-50 Spatula with Rounded-Tip Blade, 4" × ¾"
#154-60 Spatula with Rounded-Tip Blade, 6" × 1"



SIEVES

Sieve, Brass Frame, 3" Diameter, 1" Deep		
Part#	Mesh	Mesh Size
#167-21	4	4.75 mm (0.187")
#167-22	5	3.55 mm (0.157")
#167-23	6	3.35 mm (0.132")
#167-24	7	2.80 mm (0.111")
#167-25	8	2.36 mm (0.0937")
#167-26	10	2.00 mm (0.0787")
#167-27	12	1.70 mm (0.0661")
#167-28	14	1.40 mm (0.0555")
#167-29	16	1.18 mm (0.0469")
#167-31	18	1.00 mm (0.0394")
#167-31-1	20	850 µm (0.0331")
#167-32	25	710 µm (0.0280")
#167-32-1	30	600 µm (0.0232")
#167-33	35	500 µm (0.0197")
#167-34	40	425 µm (0.0165")
#167-35	45	355 µm (0.0138")
#167-36	50	300 µm (0.0117")
#167-37	60	250 µm (0.0098")
#167-38	70	212 µm (0.0083")
#167-39	80	180 µm (0.0070")
#167-40	100	150 µm (0.0059")
#167-41	120	125 µm (0.0049")
#167-41-1	140	106 µm (0.0041")
#167-41-2	170	90 µm (0.0035")
#167-42	200	75 µm (0.0029")
#167-42-1	230	63 µm (0.0024")
#167-43	270	53 µm (0.0021")
#167-43-1	325	45 µm (0.0017")
#167-44	400	38 µm (0.0015")

U.S. Standard 3" Diameter Sieves

Sieve Shaker:

#167-86 Ro-Tap, for Six 8" Diameter Sieves, 1,750 RPM, 115-Volt, 60 Hz

#167-87 Ro-Tap, for Six 8" Diameter Sieves, 1,450 RPM, 230-Volt, 50 Hz

Sieve, Brass Frame, 8" Diameter, 2" Deep		
Part#	Mesh	Mesh Size
#167-48	1	25.4 mm (1.0")
#167-49	⅞	22.2 mm (0.875")
#167-50	¾	19.1 mm (0.750")
#167-51	⅝	15.9 mm (0.625")
#167-52	½	12.7 mm (0.500")
#167-53	⅜	9.5 mm (0.375")
#167-54	¼	6.3 mm (0.250")
#167-55	4	4.75 mm (0.187")
#167-56	5	3.55 mm (0.157")
#167-57	6	3.35 mm (0.132")
#167-58	7	2.80 mm (0.111")
#167-59	8	2.36 mm (0.0937")
#167-60	10	2.00 mm (0.0787")
#167-61	12	1.70 mm (0.0661")
#167-62	14	1.40 mm (0.0555")
#167-63	16	1.18 mm (0.0469")
#167-64	18	1.00 mm (0.0394")
#167-65	20	850 µm (0.0331")
#167-66	25	710 µm (0.0280")
#167-67	30	600 µm (0.0232")
#167-68	35	500 µm (0.0197")
#167-69	40	425 µm (0.0165")
#167-70	45	355 µm (0.0138")
#167-71	50	300 µm (0.0117")
#167-72	60	250 µm (0.0098")
#167-73	70	212 µm (0.0083")
#167-74	80	180 µm (0.0070")
#167-75	100	150 µm (0.0059")
#167-76	120	125 µm (0.0049")
#167-77	140	106 µm (0.0041")
#167-78	170	90 µm (0.0035")
#167-79	200	75 µm (0.0029")
#167-80	230	63 µm (0.0024")
#167-81	270	53 µm (0.0021")
#167-82	325	45 µm (0.0017")
#167-83	400	38 µm (0.0015")

US Sieve No.	Mesh per Linear Inch	Opening (in)	Opening (µm*)
50	52.38	0.117	297
70	72.45	0.0083	210
100	101.01	0.0059	149
140	142.85	0.0041	105
200	200.00	0.0029	74
270	270.26	0.0021	53
325	323.00	0.0017	44

***1 Micron (µm) = 1/25,400" or 1/1,000 mm**

STIRRING BARS

#153-53-11	Magnetic, ½" × 5/16"
#153-53-6	Magnetic, ⅞" × 5/16"
#153-53-1	Magnetic, 1" × 5/16"
#153-53-4	Magnetic, 1½" × 5/16"
#153-53-5	Magnetic, 2" × 5/16"
#153-53-8	Spinwedge, 1¾" × ½"

STIRRING RODS

#153-28	4", Polyethylene,
#168-04	6", Glass
#168-05	10¾", Polyethylene

SYRINGES

Needles must be destroyed before discarding by bending back or cutting off the needle tip. Syringes should be destroyed by breaking or shattering the barrel. Disposable syringes are plastic.

#153-60-1	1 mL, Disposable, Luer-Lok™ Tip
#153-29	2 mL, Glass-Tip
#153-60	3 mL, Disposable, Luer-Lok™ Tip
#153-61	3 mL, Disposable with 20 g Needle
#153-64	5 mL, Disposable, Luer-Lok™ Tip
#153-65	5 mL, Disposable with 20 g Needle
#153-29-1	5 mL, Glass-Tip
#153-62	10 mL, Luer-Lok™ Tip, Disposable
#153-63	10 mL, Disposable, with 20 g Needle
#153-29-2	10 mL, Glass-Tip
#168-02	10 mL, Veterinary
#153-66	20 mL, Disposable without Needle
#153-67	60 mL, Disposable without Needle
#165-64	BD Precision Glide Disposable Needle
#165-62	Filter for Syringe, 25 mm, 0.45 µm, PTFE
#151-20-2	Sample Injection Needle

TEST TUBES

#153-15	15 × 125 mm, ~16 mL, Glass
#144-90-06-1	18 × 150 mm, ~28 mL, Glass
#144-90-06	18 × 150 mm, ~29 mL, Glass with Rubber Stopper
#153-15-1	25 × 150 mm, Glass
#153-15-2	41 × 2.0 × 150 mm, Glass
#144-90-04	Rack for 8 Test Tubes, Poly

THERMOMETERS

#154-24	ASTM 90C, Glass, 0° - 30°C × 0.1°C
#154-26	ASTM 34F, Glass, 77° - 221°F × 0.5°F
#154-04	Digital, NIST Traceable, 8" Stem, -58° - 302°F (-50° - 150°C)
#154-05	Digital, 4" Probe, 14° - 392°F (-10 - 200°C)
#154-06	Traceable, Full-Scale, Battery-Powered, -58 - 500°F (-50° - 250°C)
#154-01	5" Stem, Metal Dial, 0° - 220°F (-10° - 100°C)
#154-10	5" Stem, Metal Dial, 50 - 500°F (0° - 250°C)
#154-15	4" Stem, Metal Dial, 50° - 500°F (0° - 250°C)
#154-20	8" Stem, Metal Dial, 50° - 500°F (0° - 250°C)
#154-23	General Purpose, Total Immersion, Mercury-Filled, Glass, 0° - 230°F
#154-22	Pocket, 5" Stem, 1" Dial, 0° - 220°F
#154-00	5" Stem, Metal Dial, 0 - 220°F
#147-03	Spirit-Filled (Non-Mercury), -20° - 105°C
#154-25	Type K, Digital, -50° - 1999°F (-50° - 1300°C) *Separate probe required.* *See page 88 for more information.*

TIMERS

#155-05	Electronic, Battery (AAA) Powered
#155-10	30 Minute Interval
#155-20	60 Minute Interval
#155-25	Stopwatch, Digital
#155-26	Stopwatch, Bodytronics
#172-15-1	Timer for Oven, Electronic, 7 Day, 115 / 230-Volt

TITRATION DISHES

#153-26	Polyethylene
#153-26-1	Casserole, 140 mL Handle, Porcelain

TRANSFORMERS AND CONVERTERS

#111-15	Transformer for EP-Lube Tester, 230/115-Volt
#130-43	Powerpak, 230/115 to 12-Volt
#130-74	Transformer for 6-Speed VG-Meter, 230 to 115-Volts, 1.10 Amps, 50 / 60 Hz
#152-32	Transformer with Russian Plugs, 300-Watt, 230 to 115-Volts
#152-33	Transformer with Russian Plugs, 200-Watt, 230 to 115-Volts
#152-35	Powerstat, 115-Volt
#152-36	Powerstat, 230-Volt
#159-10	Auto Control Panel
#174-21	115/230-Volt Voltage Converter Switch

TUBES, MISCELLANEOUS

#151-08	Flow Meter Tube for Garrett Gas Train
#151-01	Dispersion Tube for Garrett Gas Train, Glass
#165-05	Receiver Tube with Certificate, 0 - 100% × 0.1%, 0 - 10 mL × 0.1 mL, 10 mL
#165-06	Receiver Tube with Certificate, 0 - 100% × 0.1%, 0 - 20 mL × 0.1 mL, with Certificate, 20 mL
#165-07	Receiver Tube with Certificate, 0 - 100% × 0.5%, 0 - 50 mL × 0.25 mL, 50 mL
#167-30	Sand Content Tube, Graduated to 20%, Glass
#166-12	Shearometer Tube, 5 g, Aluminum
#166-10	Shearometer Tube with Weight Support, 20 g, Stainless Steel
#299-10-4	Turbidity Tubes, Set of 4

VALVES

#171-97	Ball Valve for PPT Cell Outlet, ⅛" NPT
#171-98	Ball Valve for PPT Inlet Pressure Line, ¼" NPT
#170-32	Needle Valve, Male, ⅛" × ⅛" NPT
#170-34	Needle Valve, Male, ¼" × ¼" NPT
#171-80	Needle Valve with Modified Handle, Male, ¼" × ¼" NPT
#171-25	Relief Valve for N_2 Manifold, 750 PSI or 1,200 PSI
#143-06	Safety Bleeder Valve, ¼" NPT
#171-92	Safety Relief Valve for PPT Inlet, 2,000 PSI, ¼" NPT
#171-92-1	Safety Relief Valve for PPT Inlet, 4,000 PSI
#175-16	Valve Stem for Aging Cells
#170-16	Valve Stem for HTHP Test Cells
#171-90-08	Valve Stem for PPT Cell Hydraulics Entry
#171-90-09	Valve Stem for PPT Cell Filtrate Outlet
#171-90-10	Valve Stem for PPT Receiver Entry and Pressurization

Beakers

#153-51-3	50 mL, Glass
#153-51-4	100 mL, Glass
#153-51-8	150 mL, Glass
#153-51	250 mL, Glass
#153-51-1	400 mL, Glass
#130-41	Nalgene®, 400 mL, Polypropylene
#153-51-2	600 mL, Glass
#130-55	Nalgene®, 600 mL, Polypropylene
#166-08-1	600 mL, Stainless Steel
#153-51-5	1,000 mL, Glass
#153-51-6	1,000 mL, Polypropylene
#153-51-7	2,000 mL, Glass
#120-910-054	2,000 mL, Plastic

Brushes

#153-01	Bottle Brush, Wood Handle, 3" × 12"
#153-05	Mini-Brush, 7½" × 3" Curved, Stainless Steel
#153-00	For Centrifuge and Sand Content Tubes
#153-02	For Graduated Cylinder, 1½" × 10¾"
#153-03	For Graduated Cylinder or Pipette, ½" × 8"
#153-04	For Pipette, 10 mL, ½" × 3" Bristles, 24", Wire
#153-06	For Receiver Tube, 10 mL
#153-07	For Receiver Tube, 20 mL
#153-08	For Receiver Tube, 50 mL
#153-05-1	For Retort Chamber, 1" Diameter, Stainless Steel

Centrifuge Tubes

#153-19	12 cm, Glass
#153-21	Kolmer, 12.5 cm, 10 mL, Glass
#153-22	API, 12 cm, 12.5 mL, 100%, Glass
#153-23	ASTM, 100 mL
#153-24	Pear-Shaped, 100 mL, Glass Stoppered
#153-25-20	Short Cone, for Oil, 100 mL

Flasks, Erlenmeyer

#153-50-4	Erlenmeyer, 25 × 5 mL, 0 Stopper
#153-50-3	Erlenmeyer, 50 × 10 mL, 1 Stopper
#153-50-1	Erlenmeyer, 125 × 25 mL, 5 Stopper
#153-50	Erlenmeyer, 250 × 25 mL, 6 Stopper
#153-50-2	Erlenmeyer, 500 × 50 mL, 7 Stopper
#153-49	Le Chatelier with Glass Stopper for Specific Gravity, 250 mL Body, Neck Graduated 18 - 24 × 0.1 mL, Lid 2" OD × 3.5" OD Base
#153-54	Volumetric, 100 mL, Glass
#153-54-1	Volumetric, 250 mL, Glass

Graduated Cylinders

#153-20	5 mL × .1 mL, TD, Glass,
#153-18	10 mL × .1 mL, TC, Glass
#153-18-1	10 mL × .2 mL, TD, Glass
#153-09-3	10 mL × .2 mL, PMP, Nalgene®
#153-16	25 mL × .2 mL, TC, Glass
#153-09-4	25 mL × .5 mL, PMP, Nalgene®
#153-14	50 mL × 1 mL, TC, Glass
#153-09-5	50 mL × 1 mL, PMP, Nalgene®
#153-12	100 mL × 1 mL, TC, Glass
#153-09	250 mL × 2 mL, PMP, Nalgene®
#153-09-1	500 mL × 5 mL, PMP, Nalgene®
#153-09-2	1,000 mL × 10 mL, PMP, Nalgene®

Pipettes

#153-32	.1 mL × .01 mL, PYREX®
#153-34	1 mL × .01 mL, KIMAX
#153-34-1	1 mL × .01 mL, Plastic
#153-36	2 mL × .1 mL, KIMAX
#153-38	5 mL × .1 mL, KIMAX
#153-40	10 mL × .1 mL, KIMAX
#153-40-5	25 mL × .2 mL, Disposable
#153-10	Burette with Bottle and Bulb, Automatic, 10 mL
#144-90-05	Dropper Pipette, Nalgene®, 2 mL
#296-14	Eppendorf Variable Pipette, 10 - 100 µL × .1 µL
#296-15	Eppendorf Variable Pipette, 100 - 1,000 µL × 1 µL
#296-16	Pipette Tips, 1 - 200 µL Range
#296-17	Pipette Tips, 200 - 1,000 µL Range
#153-41	Pipette Aid (Safety Bulb)
#153-42	Pipette Filler, up to 10 mL, Fast Release
#153-43	Transfer Pipette, Not Graduated, 5 mL, Polyethylene

Spatulas

#154-75	Brass Scoop, 4" Length
#154-63	Spatula, Micro-Spoon, 9" Flat Handle
#154-62	Spatula, Porcelain, 123 mm
#165-34	Spatula for 10 mL Retort, 2" × ⅞" Blade
#165-88	Spatula for 20 mL Retort, 5¼" × 1 1/16" Blade
#131-28	Spatula for 50 mL Retort and Ministill, 3.75" × 1⅛"
#154-50	Spatula with Rounded-Tip Blade, 4" × ¾"
#154-60	Spatula with Rounded-Tip Blade, 6" × 1"

Stirring Rods

#153-28	4", Polyethylene,
#168-04	6", Glass
#168-05	10¾", Polyethylene

Syringes

#153-60-1	1 mL, Disposable, Luer-Lok™ Tip
#153-29	2 mL, Glass-Tip
#153-60	3 mL, Disposable, Luer-Lok™ Tip
#153-61	3 mL, Disposable with 20 g Needle
#153-64	5 mL, Disposable, Luer-Lok™ Tip
#153-65	5 mL, Disposable with 20 g Needle
#153-29-1	5 mL, Glass-Tip
#153-62	10 mL, Luer-Lok™ Tip, Disposable
#153-63	10 mL, Disposable, with 20 g Needle
#153-29-2	10 mL, Glass-Tip
#168-02	10 mL, Veterinary
#153-66	20 mL, Disposable without Needle
#153-67	60 mL, Disposable without Needle
#165-64	BD Precision Glide Disposable Needle
#165-62	Filter for Syringe, 25 mm, 0.45 µm, PTFE
#151-20-2	Sample Injection Needle

Test Tubes

#153-15	15 × 125 mm, ~16 mL, Glass
#144-90-06-1	18 × 150 mm, ~28 mL, Glass
#144-90-06	18 × 150 mm, ~29 mL, Glass with Rubber Stopper
#153-15-1	25 × 150 mm, Glass
#153-15-2	41 × 2.0 × 150 mm, Glass
#144-90-04	Rack for 8 Test Tubes, Poly

Thermometers

#154-24	ASTM 90C, Glass, 0° - 30°C × 0.1°C
#154-26	ASTM 34F, Glass, 77° - 221°F × 0.5°F
#154-04	Digital, NIST Traceable, 8" Stem, -58° - 302°F (-50° - 150°C)
#154-05	Digital, 4" Probe, 14° - 392°F (-10 - 200°C)
#154-06	Traceable, Full-Scale, Battery-Powered, -58 - 500°F (-50° - 250°C)
#154-01	5" Stem, Metal Dial, 0° - 220°F (-10° - 100°C)
#154-10	5" Stem, Metal Dial, 50 - 500°F (0° - 250°C)
#154-15	4" Stem, Metal Dial, 50° - 500°F (0° - 250°C)
#154-20	8" Stem, Metal Dial, 50° - 500°F (0° - 250°C)
#154-23	General Purpose, Total Immersion, Mercury-Filled, Glass, 0° - 230°F
#154-22	Pocket, 5" Stem, 1" Dial, 0° - 220°F
#154-00	5" Stem, Metal Dial, 0 - 220°F
#147-03	Spirit-Filled (Non-Mercury), -20° - 105°C
#154-25	Type K, Digital, -50° - 1999°F (-50° - 1300°C)

Titration Dishes

#153-26	Polyethylene
#153-26-1	Casserole, 140 mL Handle, Porcelain

Wash Bottles

#153-31-1	8 oz (250 mL)
#153-31	16 oz (500 mL)

OFITE inventories a large selection of oilfield testing reagents that have to pass strict quality control checks before they are ready to use. Our reagents are intended for laboratory use only and are not to be used for medicinal, drug, food, or household use. All reagents should be used by personnel professionally competent in their use and handling. Responsibility for the safe storage and use of our reagents rests entirely with the buyer and/or user. All reagents are available in containers sized especially for convenience, ranging from 2 oz dropper bottles to 1 gallon containers. Inquiries are invited for special pricing of container sizes or for special reagents not listed in the catalog. Many reagents are available in antifreeze grade to prevent freezing in cold weather climates.

The Department of Transportation (DOT), the Occupational Safety and Health Administration (OSHA), the Environmental Protection Agency (EPA), and other government agencies have regulations regarding the packaging, shipment, labeling, storage, and handling of hazardous chemicals. OSHA regulations require that Material Safety Data Sheets (MSDS) be furnished for all hazardous items. We include these on the outside of each applicable container. DOT regulations specify a special corrugated fiberboard box for all hazardous items and United Parcel Service (UPS) charges an extra hazardous handling fee per package for all boxes containing a hazardous item. All of our packaging fully complies with government regulations covering shipment of hazardous products and any additional fees appear in the freight charges section on the invoice. As with all of our products and services, every effort has been made to hold down these extra charges as much as possible. Many of the reagents OFITE furnishes are not considered hazardous and are not applicable to regulations due to the mixture or the low-level concentration of hazardous ingredients.

All chemical labels are clearly stamped with the shelf life expiration date and the National Fire Prevention Association (NFPA) rating index. Most of our reagents have a shelf life in excess of two years when properly stored and handled. Items that have been opened may deteriorate more rapidly depending on the environmental conditions to which they are exposed. We recommend that all bottles be tightly capped when not being used and that once withdrawn, material should never be returned to the bottle from which it was taken.

***Acetic Acid / Potassium Acetate Buffer UN3265:**
#216-00 16 oz (500 mL)

***Acetic Acid, Glacial UN2789:**
#230-25 8 oz (250 mL)
#230-26 32 oz (1 L)

***Acetone UN1090:**
#280-31 16 oz (500 mL)

Aerosol:
#131-16 ½ oz (15 mL)

Aluminum Chloride, 0.1M:
#290-03 8 oz (250 mL)

***Ammonium Fluoride, 10% Solution, UN3287:**
#211-00 32 oz (1 L)

*Requires special handling for shipping.

***Ammonium Hydroxide Concentrate, UN2672:**
#212-00 16 oz (500 mL)

***Ammonium Persulfate, UN1444:**
#214-00 100 gram

***Aniline Solution, UN1547:**
#145-81 2 oz (60 mL)
#145-84 8 oz (250 mL)

API Standard Evaluation Clay - Bentonite:
#191-00 5 gal (20 L)

API Test Calibration Barite:
#191-02 2 gal (8 L)

API Test Calibration Bentonite:
#191-01 2 gal (8 L)

***Arcosolv PNP Solvent, Propylene Glycol Normal - Propyl Ether UN1993:**
#280-30-02 16 oz (500 mL)
#280-30-01 32 oz (1 L)
#280-30 1 gal (3.785 L)
#280-30-5 5 gal (20 L)

Barium Chloride, Standard Solution:
#285-36-10 8 oz (250 mL)
#285-36 16 oz (500 mL)

***Barium Chloride, 10% Solution, Neutralized UN3287:**
#285-07 8 oz (250 mL)
#285-07-10 16 oz (500 mL)

***Barium Chloride, Saturated Solution, UN3287:**
#285-08 8 oz (250 mL)
#285-08-10 16 oz (500 mL)
#285-12-1 1 gal (3.785 L)

Boric Acid, 2% Solution:
#230-22 8 oz (250 mL)
#230-21 16 oz (500 mL)
#230-20 32 oz (1L)

***Bromide Water UN1744:**
#144-941 16 oz (500 mL)

Bromocresol Green Indicator Solution:
#246-00 2 oz (60 mL)
#246-01 8 oz (250 mL)
#246-00-1 1 gal (3.785 L)

Reagents

Bromocresol Green - Methyl Orange Indicator Solution:
#240-05 2 oz (60 mL)
#240-06 8 oz (250 mL)

Bromocresol Green - Methyl Red Indicator Solution:
#245-00 2 oz (60 mL)
#245-01 8 oz (250 mL)
#245-00-1 1 gal (3.785 L)

Bromophenol Blue Indicator Solution:
#285-34 2 oz (60 mL)

Buffer Powder, Hardness:
#205-21 100g

***Buffer Solution, Hardness, Versenate®, Ammonium Hydroxide UN2672:**
#205-04-01 1 oz (30 mL)
#205-04 2 oz (60 mL)
#205-05 8 oz (250 mL)
#205-05-10 16 oz (500 mL)
#205-05-20 32 oz (1 L)
#205-04-2 64 oz (1.85 L)
#205-04-3 2.5 gal (10 L)
#205-04-5 5 gal (20 L)

Buffer Solution, pH 4, Standard @ 75°F (25°C):
#147-20 16 oz, (500 mL)
#147-20-1 1 gal, (3.785 L)
#147-06-4 Single Pouch

Buffer Solution, pH 7, Standard @ 75°F (25°C):
#147-30 16 oz, (500 mL)
#147-30-1 1 gal, (3.785 L)
#147-06-5 Single Pouch

Buffer Solution, pH 10, Standard @ 75°F (25°C):
#147-40 16 oz, (500 mL)
#147-40-1 1gal, (3.785 L)
#147-06-6 Single Pouch

***Calcium Buffer Solution, Versenate®, Sodium Hydroxide UN1824:**
#205-14-01 1 oz (30 mL)
#205-14 2 oz (60 mL)
#205-14-6 8 oz (250 mL)
#205-14-4 16 oz (500 mL)
#205-14-2 64 oz (1.85 L)
#205-14-3 2.5 gal (10 L)
#205-14-5 5 gal (20 L)

Calcium Carbonate Powder, Precipitated:
#x 35 gram
#285-00-1 100 gram

Calcium Chloride, Anhydrous:
#253-50 500 gram

Calcium Chloride, 2% Solution:
#285-15 16 oz, (500 mL)

Calcium Chloride, Saturated:
#153-59-4 4 oz (120 mL)

Calcium Hydroxide - Low Nitrate:
#144-90-01 8 oz

Calcium Indicator Solution:
#250-00 2 oz, (60 mL)
#250-02 8 oz, (250 mL)
#250-00-1 1 gal, (3.785 L)
#250-01 Antifreeze, 2 oz, (60 mL)
#250-03 Antifreeze, 8 oz, (250 mL)
#250-01-1 Antifreeze, 1 gal, (3.785 L)

***Calcium Nitrate Crystals, UN1454:**
#253-51 500g

***Calcium Nitrate Solution, Saturated UN3139:**
#153-59-5 4 oz (120 mL)

Calcium Sulfate, Anhydrous:
#285-06 58g

Calcium Titration Solution, No. 1:
#205-22 2 oz (60 mL)
#205-24 16 oz (500 mL)

***Calcium Titration Solution, No. 2 UN3287:**
#205-23 2 oz (60 mL)
#205-25 16 oz (500 mL)

Calcon Powder:
#205-26 40g

Calibration Fluid, Certified, 20 cP, Silicone:
#132-84 16 oz (500 mL)

Calibration Fluid, Certified, 50 cP, Silicone:
#132-81 16 oz (500 mL)

Calibration Fluid, Certified, 100 cP, Silicone:
#132-80 16 oz (500 mL)

Calibration Fluid, Certified, 200 cP, Silicone:
#132-83 16 oz (500 mL)
#132-83-1 1 gal (3.785 L)

Calibration Fluid, Certified, 500 cP, Silicone:
#132-82 16 oz (500 mL)

CalVer® II Indicator Powder:
#210-00 10g
#210-00-2 20g
#210-00-1 100g

***Citric Acid, 2M, Demulsifier, IPA Solution UN1219:**
#151-20-1 16oz (500 mL)

Congo Red Solution:
#221-00 2 oz (60 mL)

Cresol Red Indicator Solution:
#290-02 2 oz (60 mL)
#290-02-02 8 oz (250 mL)
#290-02-1 1 gal (3.785 L)

Defoamer, Octyl Octanol Alcohol:
#151-17 2 oz (60 mL)

*Requires special handling for shipping.

Defoamer, Silicone Solution:
#205-50 2 oz (60 mL)
#205-51 8 oz (250 mL)

Deionized Water:
#206-03 2 oz (60 mL)
#206-00 4 oz (120 mL)
#206-01 8 oz (250 mL)
#206-02 16 oz (500 mL)
#206-04 32 oz (1 L)
#206-05 .5 gal (2 L)
#206-06 1 gal (3.785 L)
#206-07 2.5 gal (10 L)
#206-08 5 gal (20 L)
#147-06-7 Rinse Water Single Pouch

Dispersant Solution:
#205-30 32 oz (1 L)

Eriochrome Black T:
#205-28 25 gram

***Ethanol (Ethyl Alcohol) UN1987:**
#280-32 32 oz (1 L)

Ethylene Glycol:
#152-55-4 32 oz (1 L)

***Formaldehyde, 4% Solution UN2209:**
#213-00 32 oz (1 L)

Heater Bath Oil:
#130-78-25 16 oz (500 mL)

High pH Indicator Solution:
#147-42 2 oz (60 mL)
#147-44 8 oz (250 mL)

Hydraulic Oil:
#171-96-1 32 oz (1 L)
#171-96-2 1 gal (3.785 L)

Hydrochloric Acid Solution, .02 N (N/50):
#275-04 8 oz (250 mL)
#275-04-02 16 oz (500 mL)
#275-02-1 1 gal (3.785 L)
#275-05-1 Antifreeze, 1 gal (3.785 L)

Hydrochloric Acid Solution, .1 N (N/10):
#275-02 8 oz (250 mL)
#275-10 16 oz (500 mL)

Hydrochloric Acid Solution, .2 N (N/5):
#275-06 8 oz (250 mL)
#275-06-2 64 oz (1.85 L)

***Hydrochloric Acid Solution, .5 N (N/2) UN1789:**
#290-01 2 oz (60 mL)
#290-01-02 8 oz (250 mL)

***Hydrochloric Acid Solution, 1 N UN1789:**
#275-08-1 8 oz (250 mL)
#275-08 32 oz (1 L)
#275-08-2 64 oz (1.85 L)

*Requires special handling for shipping.

***Hydrochloric Acid Solution, 5 N UN1789:**
#275-12 8 oz (250 mL)
#275-09 32 oz (1 L)

***Hydrochloric Acid, 10% Solution UN1789:**
#275-03 8 oz (250 mL)
#275-03-02 16 oz (500 mL)

***Hydrochloric Acid 15% Solution UN1789:**
#275-07-02 8 oz (250 mL)
#275-07 32 oz (1 L)

***Hydrochloric Acid 37% Solution UN1789:**
#275-00 2 oz (60 mL)
#275-00-02 16 oz (500 mL)
#275-01 32 oz (1 L)

Hydrogen Peroxide 3% Solution:
#200-10-1 2 oz (60 mL)
#200-10 4 oz (120 mL)
#200-11 8 oz (250 mL)
#200-12 16 oz (500 mL)
#200-13 32 oz (1 L)
#200-09-1 1 gal (3.785 L)

Indicator Powder, Hardness:
#205-20 100g

Indicator Solution (Calmagate®), Versenate® Hardness:
#205-02 2 oz (60 mL)
#205-02-4 8 oz (250 mL)
#205-02-2 16 oz (500 mL)
#205-02-3 32 oz (1 L)
#205-02-1 1 gal (3.785 L)
#205-03 Antifreeze, 2 oz (60 mL)
#205-03-3 Antifreeze, 32 oz (1 L)
#205-03-1 Antifreeze, 1 gal (3.785 L)

Iodine Titrating Solution:
#145-553 8 oz (250 mL)

Iron Buffer Solution:
#285-40 2 oz (60 mL)
#285-41 8 oz (250 mL)
#285-42 1 gal (3.785 L)

Iron Indicator Solution:
#285-37 2 oz (60 mL)
#285-38 8 oz (250 mL)
#285-39 1 gal (3.785 L)

***Iron Sulfide Detection Solution UN2922:**
#280-02 2 oz (60 mL)

***Isopropyl Alcohol, UN1219:**
#165-68 32 oz (1 L)
#280-10 1 gal (3.785 L)
#280-10-5 5 gal (20 L)

***Isopropyl Alcohol (99%) - Deionized Water Solution, 1:1 Mix UN1219:**
#280-15 32 oz (1 L)

Magnesium Chloride, Standard Solution:
#285-35 8 oz (250 mL)

Manver Indicator Solution:
#205-27 2 oz (60 mL)
#205-27-02 8 oz (250 mL)

Masking Agent (Triethanolamine : Tetraethylenepentamine : Water):
#261-55-01 1 oz (30 mL)
#261-55 2 oz (60 mL)
#261-50 16 oz (500 mL)

Methylene Blue Solution, 1 mL = 0.01 ME:
#200-01-1 4 oz (120 mL)
#200-01 8 oz (250 mL)
#200-03 16 oz (500 mL)
#200-05 32 oz (1 L)
#200-07 1 gal (3.785 L)
#200-07-5 5 gal (20 L)
#200-02 Antifreeze, 8 oz (250 mL)
#200-04 Antifreeze, 16 oz (500 mL)
#200-06 Antifreeze, 32 oz (1 L)
#200-08 Antifreeze, 1 gal (3.785 L)

Methyl Orange Indicator Solution:
#240-00 2 oz (60 mL)
#240-02 8 oz (250 mL)
#240-00-2 32 oz (1 L)
#240-00-1 1 gal (3.785 L)
#240-01 Antifreeze, 2 oz (60 mL)
#240-03 Antifreeze, 8 oz (250 mL)
#240-01-1 Antifreeze, 1 gal (3.785 L)

Methyl Purple Indicator Solution:
#240-04 2 oz (60 mL)
#240-04-02 8 oz (250 mL)
#240-04-1 1 gal (3.785 L)

Methyl Red Indicator Solution:
#241-00 2 oz (60 mL)
#241-01 8 oz (250 mL)
#241-00-2 64 oz (1.85 L)

Mineral Oil:
#120-001 1 gal (3.785 L)

Mineral Oil, SO® (Shell Ondina®):
#120-003 1 gal (3.785 L)

Nitrate Test Reagent, NitraVer® 6, 0 - 0.4 mg/L:
#144-91 Package of 100

Nitrite Test Reagent, NitriVer® 3, 0 - 0.5 mg/L:
#144-92 Package of 100

Nitric Acid Solution, 0.1 N (N/10):
#270-05 8 oz (250 mL)

Nitric Acid Solution, 1 N, UN2031:
#270-02 1 oz (30 mL)
#270-01 8 oz (250 mL)

Nitric Acid Solution, 3 N, UN2031:
#270-00 8 oz (250 mL)

***Orthophosphoric Acid Solution, UN1805:**
#144-942 8 oz (250 mL)

*Requires special handling for shipping.

Paraformaldehyde Solution "A":
#145-301 2 oz (60 mL)
#145-311 Antifreeze, 2 oz (60 mL)

Paraformaldehyde Solution "B":
#145-302 2 oz (60 mL)
#145-312 Antifreeze, 2 oz (60 mL)

Paraformaldehyde Solution "C":
#145-303 2 oz (60 mL)
#145-313 Antifreeze, 2 oz (60 mL)

Paraformaldehyde Solution "D":
#145-304 2 oz (60 mL)
#145-314 Antifreeze, 2 oz (60 mL)

Phenol Red Serum, (Aerobic Bacteria Culture):
#180-36 10 cc

***Phenol Solution, 5% UN2821:**
#144-943 8 oz (250 mL)

Phenolphthalein Indicator Solution:
#220-00 2 oz (60 mL)
#220-01 8 oz (250 mL)
#220-02 16 oz (500 mL)
#220-03 32 oz (1 L)
#220-00-1 1 gal (3.785 L)

Potassium Chloride Solution:
#285-11 4 oz (120 mL)

Potassium Chromate Solution:
#215-00 2 oz (60 mL)
#215-02 8 oz (250 mL)
#215-04 16 oz (500 mL)
#215-05 32 oz (1 L)
#215-00-1 1 gal (3.785 L)
#215-01 *Antifreeze, 2 oz (60 mL) **UN1230**
#215-03 *Antifreeze, 8 oz (250 mL) **UN1230**
#215-01-1 *Antifreeze, 1 gal (3.785 L) **UN1230**

***Potassium Hydroxide, 25% Solution UN1814:**
#217-00 16 oz (500 mL)

***Potassium Hydroxide, 0.1 N (N/10), in Methanol, UN1230:**
#285-43 8 oz (250 mL)
#217-05 16 oz (500 mL)

***Potassium Hydroxide, 8 N, UN1814:**
#253-56 2 oz (60 mL)
#253-57 4 oz (120 mL)
#253-55 16 oz (500 mL)
#253-55-2 64 oz (1.85 L)

Potassium Iodide, 5% Solution:
#145-72 8 oz (250 mL)

Potassium Iodide Crystals:
#144-944 50 gram

Potassium Iodide - Iodate Solution:
#145-554 8 oz (250 mL)

***Potassium Nitrate, Saturated UN3139:**
#153-59-6 4 oz (120 mL)

Potassium Nitrate Crystals UN1486:
#253-53 500 gram

QAS (Quaternary Ammonium Salt) Solution:
#285-32 16 oz (500 mL)

Reinke Salt (Ammonium Reineckate), in 1 oz French Square Bottle with Cap:
#295-21 0.75 gram

Rev Dust:
#191-10 50 lb Bag

***Silver Nitrate Crystals, UN1493:**
#265-15 1 lb (453.6 g)

Silver Nitrate Solution, 0.001g Cl^-/mL, 0.0282 N, 1,000 ppm:
#265-12 4 oz (120 mL)
#265-00 8 oz (250 mL)
#265-02 16 oz (500 mL)
#265-04 32 oz (1 L)
#265-00-1 1 gal (3.785 L)
#265-01 Antifreeze, 8 oz (250 mL)
#265-03 Antifreeze, 16 oz (500 mL)
#265-05 Antifreeze, 32 oz (1 L)
#265-01-1 Antifreeze, 1 gal (3.785 L)

Silver Nitrate, 0.141 N:
#265-14 16 oz (500 mL)

Silver Nitrate Solution, 0.01 g Cl^-/mL, 0.282 N, 10,000 ppm:
#265-13 4 oz (120 mL)
#265-06 8 oz (250 mL)
#265-08 16 oz (500 mL)
#265-10 32 oz (1 L)
#265-06-1 1 gal (3.785 L)
#265-07 Antifreeze, 8 oz (250 mL)
#265-09 Antifreeze, 16 oz (500 mL)
#265-11 Antifreeze, 32 oz (1 L)
#265-07-1 Antifreeze, 1 gal (3.785 L)

***Soap Solution, Standard, 1 mL = 1 MGA CO_2 UN1170:**
#205-18 16 oz (500 mL)

Sodium Chloride, Crystals:
#253-52 500 gram

Sodium Chloride, 10,000 ppm Cl^-:
#235-00 4 oz (120 mL)

Sodium Chloride, Saturated:
#153-59-7 4 oz (120 mL)

Sodium Chromate Solution:
#145-401 "A", 2 oz (60 mL)
#145-402 *"B", 2 oz (60 mL) **UN1789**
#145-403 "C", 2 oz (60 mL)

Sodium Hexametaphosphate, Crystals:
#205-41 500 g

Sodium Hexametaphosphate, 10% Solution:
#205-40 32 oz (1 L)

***Sodium Hydroxide Pellets, UN1823:**
#260-02 2 oz (60 g)

Sodium Hydroxide Solution, .02 N (N/50):
#285-44 2 oz (60 mL)
#285-45 8 oz (250 mL)

Sodium Hydroxide Solution, .1 N (N/10):
#260-00 2 oz (60 mL)
#260-03 8 oz (250 mL)
#260-01 16 oz (500 mL)
#260-00-1 1 gal (3.785 L)
#260-02-1 Antifreeze, 1 gal (3.785 L)

Sodium Hydroxide Solution, .2 N (N/5):
#260-08 8 oz (250 mL)
#260-08-2 64 oz (1.85 L)

***Sodium Hydroxide Solution, 1 N UN1824:**
#260-05-4 4 oz (120 mL)
#260-05 8 oz (250 mL)
#260-05-1 16 oz
#260-05-6 32 oz (1 L)
#260-05-2 64 oz (1.85 L)
#260-05-3 2.5 gal (10 L)
#260-05-5 5 gal (20 L)

***Sodium Hydroxide Solution, 5 N UN1824:**
#285-33-01 4 oz (120 mL)
#285-33 8 oz (250 mL)
#285-33-1 16 oz (500 mL)
#285-33-2 64 oz (1.85 L)
#285-33-3 2.5 gal (10 L)
#285-33-5 5 gal (20 L)

***Sodium Hydroxide Solution, 6 N UN1824:**
#260-06 8 oz (250 mL)
#260-06-1 32 oz (1 L)

***Sodium Hydroxide Solution, 8 N UN1824:**
#260-10 2 oz (60 mL)
#260-07 8 oz (250 mL)
#260-07-1 16 oz (500 mL)

Sodium Hydroxide, 15% Solution UN1824:
#260-09 4 oz (120 mL)

***Sodium Hypochlorite Solution, UN1791:**
#261-00 8 oz (250 mL)

***Sodium Perchlorate Solution, UN3139:**
#285-13 8 oz (250 mL)
#285-10 16 oz (500 mL)
#285-14 32 oz (1 L)
#285-13-2 64 oz (1.85 L)

Sodium Sulfate, Anhydrous:
#145-82 28 gram

Sodium Sulfide, 10% Solution:
#262-00 8 oz (250 mL)

*Requires special handling for shipping.

Sodium Sulfite, 0.05% Solution:
#145-71 8 oz (250 mL)

Sodium Thiosulfate Solution, 0.01 N (N/100):
#262-05 8 oz (250 mL)

Sodium Thiosulfate Solution, 0.1 N (N/10):
#262-06 8 oz (250 mL)

***Stannic Chloride, 10% Solution UN3264:**
#290-04 16 oz (500 mL)
#290-04-2 64 oz (1.85 L)

Starch Indicator Solution:
#145-551 2 oz (60 mL)

STPB (Sodium Tetraphenylborate) Solution:
#285-31 16 oz (500 mL)

***Sulfate Indicator Solution UN1789:**
#255-00 2 oz (60 mL)
#255-02 8 oz (250 mL)
#255-04 32 oz (1 L)
#255-01 Antifreeze, 2 oz (60 mL)
#255-03 Antifreeze, 8 oz (250 mL)

Sulfate Reducer Vials, (Anaerobic Bacteria Culture):
#180-38 10 cc

***Sulfide Buffer Solution UN1789:**
#145-552 2 oz (60 mL)

Sulfide Ion Solution:
#145-501 "A", 2 oz (60 mL)
#145-502 *"B", 2 oz (60 mL) **UN1789**
#145-503 "C", 2 oz (60 mL)

***Sulfuric Acid, 0.02 N (N/50), UN2796:**
#230-17-01 1 oz (30 mL)
#230-17 4 oz (120 mL)
#230-08 8 oz (250 mL)
#230-04 16 oz (500 mL)
#230-06 32 oz (1 L)
#230-08-2 64 oz (1.85 L)
#230-08-3 2.5 gal (10 L)
#230-08-5 5 gal (20 L)
#230-09 Antifreeze, 8 oz (250 mL)
#230-05 Antifreeze, 16 oz (500 mL)
#230-07 Antifreeze, 32 oz (1 L)
#230-09-2 Antifreeze, 64 oz (1.85 L)
#230-09-3 Antifreeze, 2.5 gal (10 L)
#230-09-5 Antifreeze, 5 gal (20 L)

***Sulfuric Acid, 0.1 N (N/10), UN2796**
#230-00-01 1 oz (30 mL)
#230-00 2 oz (60 mL)
#230-16 4 oz (120 mL)
#230-10 8 oz (250 mL)
#230-02 16 oz (500 mL)
#230-18 32 oz (1 L)
#230-00-2 64 oz (1.85 L)
#230-00-3 2.5 gal (10 L)
#230-00-5 5 gal (20 L)
#230-01 Antifreeze, 2 oz (60 mL)
#230-11 Antifreeze, 8 oz (250 mL)
#230-03 Antifreeze, 16 oz (500 mL)
#230-01-2 Antifreeze, 64 oz (1.85 L)
#230-01-3 Antifreeze, 2.5 gal (10 L)
#230-01-5 Antifreeze, 5 gal (20 L)

***Sulfuric Acid, 5 N, UN2796**
#230-15-01 1 oz (30 mL)
#230-15 2 oz (60 mL)
#230-12 4 oz (120 mL)
#230-13 8 oz (250 mL)
#230-13-1 16 oz (500 mL)
#230-14 32 oz (1 L)
#230-12-2 64 oz (1.85 L)
#230-12-3 2.5 gal (10 L)
#230-12-5 5 gal (20 L)

Thymolphthalein Indicator Solution:
#225-00 2 oz (60 mL)
#225-01 8 oz (250 mL)
#225-02 16 oz (500 mL)
#225-03 32 oz (1 L)

Triethanolamine, 10% Solution:
#205-55 32oz (1 L)

Titrating Solution (EDTA), Hardness, Versenate®, 2 EPM, 1 mL = 40 mg/L Ca^{2+}, .001M:
#205-15 4 oz (120 mL)
#205-06 8 oz (250 mL)
#205-00 16 oz (500 mL)
#205-16 32 oz (1.85 L)
#205-00-1 1 gal (3.785 L)
#205-07 Antifreeze, 8oz (250 mL)
#205-01 Antifreeze, 16oz (500 mL)
#205-07-1 Antifreeze, 1 gal (3.785 L)

Titrating Solution (EDTA), Hardness, Versenate®, 20 EPM, 1 mL = 400 mg/L Ca^{2+}, .01M:
#205-08 4 oz (120 mL)
#205-10 8 oz (250 mL)
#205-12 16 oz (500 mL)
#205-17 32 oz (1 L)
#205-08-1 1 gal (3.785 L)
#205-09 Antifreeze, 4 oz (120 mL)
#205-11 Antifreeze, 8 oz (250 mL)
#205-13 Antifreeze, 16 oz (500 mL)
#205-09-1 Antifreeze, 1 gal (3.785 L)

Titrating Solution (EDTA), Hardness, Versenate®, 200 EPM, 1 mL = 4,000 mg/L, .1M:
#205-17-1 4 oz (120 mL)
#205-17-2 8 oz (250 mL)
#205-17-3 16 oz (500 mL)
#205-17-4 32 oz (1 L)
#205-17-5 1 gal (3.785 L)

Wetting Agent:
#280-00 1oz (30 mL)
#280-00-1 1 gal (3.785 L)
#280-01 Antifreeze, 1 oz (30 mL)

***Xylene/IPA (Isopropanol) Solution, 1:1 mix, UN1993:**
#280-25 1 gal (3.785 L)
#280-25-5 5 gal (20 L)

***Xylene Solution, UN1307:**
#280-20 1gal (3.785 L)
#280-20-5 5gal (20 L)

*Requires special handling for shipping.

INDICATOR SOLUTIONS

Some substances in solution have the unique property of changing color when the pH of the solution reaches a certain value. The pH range over which the substance, or indicator as it is known, changes color is narrow and exact and is therefore useful for colorimetric pH determinations of a solution within a specific range. Most indicators are weak organic acids or salts of such acids. No two indicators change color in exactly the same pH range. Listed below are the indicator solutions used in routine testing for determining the approximate acidity or alkalinity of fluids expressed in pH units.

DESCRIPTION CONDITION	COLOR - pH
Bromocresol Green	Yellow - 4.0 / Blue - 5.4
Bromocresol Green - Methyl Red	Pink - 4.6 / BlueGreen - 5.2
Bromophenol Blue	Yellow - 3.0 / Blue - 4.6
Calmagite	Red - Ca^{+2} - Mg^{+2} / Blue - EDTA
Congo Red	Blue - 3.0 / Red - 5.0
Cresol Red	Orange - 2.0 / Yellow - 3.0 / Red - 8.8
Methyl Orange	Pink - 3.2 / Yellow - 4.4
Methyl Purple	Purple - 4.8 / Green - 5.4
Methyl Red	Pink - 4.2 / Yellow - 6.2
Phenolphthalein, 0.5%	Colorless - 8.0 / Pink - 10.0
Phenol Red, 0.02%	Yellow - 6.8 / Red - 8.2
Potassium Chromate	Yellow - xs Cl^- / Red - xs Ag^+
Starch Indicator	Colorless = No Iodine / Blue = Iodine
Thymolphthalein, 0.05%	Colorless - 9.3 / Blue - 10.5
Water Hardness	Red - Ca^{+2} - Mg^{+2} / Blue - EDTA

METRIC CONVERSIONS

Liquid:
1 fl oz = 29.57 mL
2 fl oz = 59.15 mL
4 fl oz = 118.29 mL
8 fl oz = 236.59 mL
16 fl oz = 1 pint = 473.18 mL
32 fl oz = 1 quart = 946.35 mL
128 fl oz = 1 gallon = 3,785.41 mL

Length:
1 micron (µm) = 0.001 mm = 1/25,400 inch
10 mm = 1 cm = 0.394 inch
25.4 mm = 2.54 cm = 1 inch
30.48 cm = 0.3048 meter = 1 foot
39.37 inch = 1.094 yards = 1 meter
1,000 meters = 1 kilometer = 0.621 mile

Weight:
.0353 oz = 1 g
1 oz = 28.35 g
2 oz = 56.70 g
8 oz = 226.8 g
16 oz = 1 lb = 453.6 g = .454 kg

Temperature:
°C = (°F - 32) × 5/9
°F = (°C × 9/5) + 32

Pressure:
1 PSI = 6.9 kilopascal (kPa)
dynes/cm^2 = 0.100 pascal (Pa)

Miscellaneous:
mg/L = parts/million (ppm) × specific gravity

HAZARDOUS CHEMICALS DOT SHIPPING REQUIREMENTS

PRODUCT NAME	UN#	PACKING GROUP	HAZARD CLASS	NFPA RATING HEALTH	FLAMMABILITY	REACTIVITY
Acetic Acid, Glacial	UN2789	II	8	3	2	0
Acetic Acid, Potassium Acetate Buffer	UN3265	II	8	3	2	0
Acetone	UN1090	II	3	2	3	0
Ammonium Fluoride, 10% Solution	UN3287	III	6.1	3	0	0
Ammonium Hydroxide, Concentrated Solution	UN2672	III	8	3	1	0
Ammonium Persulfate	UN1444	III	5.1	3	0	3
Aniline Solution	UN1547	II	6.1	3	2	0
Arcosolv PNP Solution	UN1993	III	3.0	1	2	0
Barium Chloride, 10%	UN3287	III	6.1	2	0	0
Barium Chloride (Saturated)	UN3287	III	6.1	2	0	0
*Bromine Water	UN1744	I	8	U	0	0
Buffer Solution, Hardness	UN2672	III	8	3	1	2
Calcium Buffer Solution	UN1824	III	8	3	0	1
Calcium Nitrate	UN1454	III	5.1	2	0	3
Calcium Nitrate, Saturated	UN3139	III	5.1	2	0	3
Calcium Titration Solution II	UN3287	I	6.1	3	0	1
Citric Acid, Demulsifier, IPA Solution	UN1219	II	3	2	4	0
Ethanol (Ethyl Alcohol)	UN1987	II	3	2	3	0
Formaldehyde Solution	UN2209	III	3	2	0	1
Hydrochloric Acid, 0.5 N - 37%	UN1789	II	8	3	0	0
IPA/Xylene	UN1993	II	3	3	2	3
Iron Sulfide Detection Solution	UN2922	II	8	3	0	0
Isopropyl Alcohol	UN1219	II	3	2	4	0
Isopropyl Alcohol (99%) / Deionized Water	UN1219	II	3	2	4	0
Nitric Acid, 1 and 3 N	UN2031	II	8	3	0	0
Orthophosphoric Acid	UN1805	III	8	3	0	0
Phenol Solution, 5%	UN2821	II	6.1	3	2	1
Potassium Chromate, **AF**	UN1230	II	3	3	2	1
Potassium Hydroxide 0.1 N in Methanol	UN1230	II	3	1	3	0
Potassium Hydroxide, 8.0 N	UN1814	II	8	3	0	1
Potassium Hydroxide, 25% Solution	UN1814	II	8	3	0	1
Potassium Nitrate, Crystals	UN1486	III	5.1	1	0	3
Potassium Nitrate, Saturated	UN3139	III	5.1	1	0	3
Silver Nitrate Crystals	UN1493	II	5.1	4	0	1
Soap Solution	UN1170	II	3	0	3	0
Sodium Chromate B Solution	UN1789	II	8	3	0	0
Sodium Hydroxide Pellets	UN1823	II	8	3	0	1
Sodium Hydroxide, 1.0 N, 2.0 N	UN1824	II	8	3	0	0
Sodium Hydroxide, 15%,20%,6 N,8 N	UN1824	II	8	3	0	1
Sodium Hydroxide Solution, **AF**	UN1824	II	3	2	3	1
Sodium Hypochlorite Solution	UN1791	III	8	3	0	1
Sodium Perchlorate Solution	UN3139	II	5.1	2	0	2
Stannic Chloride, 10%	UN3264	II	8	2	0	1
Sulfate Indicator Solution	UN1789	III	8	2	0	0
Sulfide Buffer Solution	UN1789	II	8	3	0	0
Sulfide Ion “B” Solution	UN1789	II	8	3	0	0
Sulfuric Acid, 5 N, N/10, N/50	UN2796	II	8	3	0	2
Xylene	UN1307	III	3	2	3	0

PACKING GROUPS:
Group I - Great Danger
Group II - Medium Danger
Group III - Minor Danger

HAZARD CLASS:
3 = Flammable Liquids
5.1 = Oxidizer
6.1 = Toxic Substance
8 = Corrosive
9 = Miscellaneous

HEALTH:
0 = Ordinary
1 = Slight Hazard
2 = Hazardous
3 = Extreme Danger
4 = Deadly

FLAMMABILITY:
0 = Will not burn
1 = Ignites if preheated
2 = Ignites if moderately heated
3 = Ignites at most ambient conditions
4 = Burns readily at ambient conditions

REACTIVITY:
0 = Stable: not reactive with water
1 = Unstable if heated
2 = Violent chemical heated
3 = Shock and heat may detonate

***United Parcel Service (UPS) will not ship**

Balance:

166-06-99	Balance, Triple-Beam

Cement Testing:

120-00-99	Consistometer, HTHP, Chandler, 25,000 PSI, 400°F
120-20-99	Curing Chamber, HTHP, 8-Specimen, Chandler, 3,500 PSI, 500°F

Filter Presses and Parts:

141-10-99	T-screw for Water-Loss Press
142-53-99	Filter Press, API, Model MB
143-00-99	Regulator
170-00-99	Filter Press, HTHP, Complete
170-00-1-99	Heating Jacket for HTHP Filter Press, 115-Volt
170-00-4-99	Filter Press, HTHP, 4-Unit, 115-Volt
170-04-99	Regulator for HTHP Filter Press, Top
170-06-99	Back Pressure Receiver for HTHP Filter Press
170-12-1-99	Cell Assembly
170-24-99	End Cap for Removable Screens, 2,000 PSI
170-45-99	Test Cell, Double-End
170-70-99	Filter Press in Case, HTHP, EZ Pak, 115-Volt
171-08-99	Base for HTHP Heating Jacket
171-50-99	Filter Press without Case, HTHP, 115-Volt
171-57-99	Regulator Assembly for HTHP Filter Press

Hot Plate:

168-01-99	Hot Plate with Thermostat, 325-Watt, 115-Volt

Kits:

144-50-99	Chloride and Alkalinity Kit in Carrying Case
151-00-99	Garrett Gas Train
163-02-99	Case for Pilot Test Kit, Stainless Steel

Meter:

131-50-99	Emulsion Stability Meter

Mixers and Stirrers:

152-00-99	Mixer with Container, Hamilton Beach®, Single-Spindle
152-18-99	Stirrer with Stand and Rheostat, T-line Laboratory
163-20-99	Mixer for Mud Cup, 115-Volt
152-45-99	Stirrer, Magnetic, Heated, 115-Volt

All items subject to availability. Please check our website, www.OFITE.com for complete details.

Mud Balances:

100-50-99	Mud Balance with Case, Fann®, Metal
100-40-99	Case for OFITE Mud Balances
100-60-99	Tru-Wate™ Pressurized Fluid Density Scale with Fulcrum and Case, Halliburton
115-00-10-99	Mud Balance with Case, OFITE, Metal

Retorts:

165-99	Retort Kit in Stainless Steel Case
165-00-99	Retort with Thermostat, 10 mL, Removable, 325-Watt, 115-Volt
165-14-99	Retort Kit in Stainless Steel Case, 50 mL, 115-Volt

Viscometers and Rheometers:

130-10-99	Model 800 Viscometer with Case
130-20-99	Cup Heater, 115-Volt
130-38-99	Thermocup, OFITE, 115-Volt
130-43-99	Power Pak for 12-Volt Viscometers, 230/115 to 12-Volt
130-60-12-99	12-Speed Viscometer, 115-Volt
130-74-99	Transformer, 230 to 115 Volts, 1.10 Amps, 50 / 60 Hz
130-75-C-99	Pressurized Viscometer with ORCADA™ Software Control System, Hastelloy®-Wetted Parts, and Padded Carrying Case
130-76-99	Model 900 Viscometer in Case, 115-Volt
130-78-16-99	Bob for Pressurized Viscometer, B5
#130-97	Hand-Crank Viscometer
#130-98	2-Speed Viscometer, 12-Volt
#130-99	6-Speed Viscometer
#133-99	Variable-Speed Rheometer
#134-07-1-99	Motor for Viscometer, 115-Volt
#166-08-99	Shearometer with Stainless Steel Container, Graduated Scale, 5 g Tubes, Complete

Did you know?

All OFITE reconditioned equipment carries the same warranty as new equipment manufactured by OFI Testing Equipment!

INQUIRIES OR ORDERS SHOULD BE SENT TO:

OFI TESTING EQUIPMENT, INC.
1006 WEST 34TH STREET
HOUSTON, TX 77018-6321

Phone: 713-880-9885
877-837-8683
Fax: 713-880-9886

www.ofite.com
sales@ofite.com

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Inconel .....Huntington Alloys
KIMAX .....Gerresheimer Glass Asset Management Inc.
Lindberg / Blue M .....GSLE SubCo LLC
Lucite .....E.I. du Pont de Nemours and Company
M.I. .....M-I LLC
Millipore .....Millipore Corporation
Nalgene .....Nalge Nunc International
Ohaus .....Ohaus Corporation
pHydrion .....Micro Essential Laboratory, Inc.
pHTestr .....Cole-Parmer Instrument Company
POWERSTAT .....PacSci Motion Control, Inc.
Precision .....Jouan, Inc.
PYREX .....Corning Inc.
QUANTOFIX .....Macherey, Nagel, & Co.
Scout .....Ohaus Corporation
Sharpie .....Sanford, L.P. Newell Operating Company
Silverson .....Silverson Machines Ltd.
SofChek .....Hach Company
Teflon .....E.I. du Pont de Nemours and Company
Tygon .....Saint-Gobain Performance Plastics
Valor .....Ohaus Corporation
Versenate .....Dow Checmical Company
Victor .....Victor Equipment Co.
Viton .....E.I. du Pont de Nemours and Company
Whatman .....Whatman International Limited
Windows .....Microsoft Corporation

WARRANTY

OFITE will warrant only to its purchasers that each new product manufactured by OFITE will be free from defects in material and workmanship for a period of ninety (90) days from the date of purchase. All other warranties, expressed, implied or statutory of any kind or nature with respect to the products sold by OFITE, and any others sold or otherwise transferred by OFITE, or an affiliate of OFITE, including without limitation, any warranty of merchant ability of fitness for a particular purpose, will be **DISCLAIMED AND WAIVED FOR ALL PURPOSES.**

OFI Testing Equipment, Inc.

Customer Order Form

SHIP TO: *(UPS will not ship to a P.O. Box)*

COMPANY: _____

ADDRESS: _____

_____

CITY: _____ **STATE:** ____

COUNTRY: _____ **ZIP:** _____

NAME/DEPT: _____

PHONE: _____

FAX: _____

BILL TO:

COMPANY: _____

ADDRESS: _____

_____

CITY: _____ **STATE:** ____

COUNTRY: _____ **ZIP:** _____

NAME/DEPT: _____

PHONE: _____

FAX: _____

PURCHASE ORDER NUMBER: _____

☐ **Payment Enclosed $**_____
(Include Freight and Taxes if Applicable)

☐ **Please Bill Me**
OFITE Customer Account#: _____

☐ **Credit Card Sales, Personal/Company**
Account Number: _____
Expiration Date: _____

☐ **VISA**
☐ **MASTERCARD**
☐ **AMERICAN EXPRESS**

Name: _____
(Please PRINT Name as it Appears on Card)

☐ **PLEASE SEND CATALOG**

Signature: _____

QTY	PART NO	DESCRIPTION	UNIT PRICE	TOTAL PRICE

Mail/Shipping: **1006 West 34th Street Houston, TX 77018-6321 U.S.A.**
Tele: **(713) 880-9885 or (877) 837-8683 (toll free)** ***Fax:*** **(713) 880-9886** ***E-Mail:*** **sales@ofite.com**

You can also order online at www.ofite.com!

OFI Testing Equipment, Inc.

Laboratory Housing Questionnaire

Geographical Location – where used:
- ☐ Land Usage
- ☐ Offshore Usage

Location: _____

Classification:
- ☐ Class 1 – Div. 1 (Explosion Proof - Most Hazardous)
- ☐ Class 1 – Div. 2 (Explosion Proof - Less Hazardous)
- ☐ Non Classified
- ☐ Coast Guard / ABS Standards

Size: Overall, Outside:
- ☐ 10' length × 8' width × 8.5' height
- ☐ 20' length × 8' width × 8.5' height
- ☐ 30' length × 8' width × 8.5' height
- ☐ 40' length × 8' width × 8.5' height

Note: Intermediate lengths, 18', 26', etc., are available at extra costs – please specify.

General Layout: (Overall Building Size Dependent)
- ☐ Bedroom
- ☐ Bathroom
- ☐ Office
- ☐ Skid Mounted (Protrudes beyond building)
- ☐ Non-Skid Mounted

Composition, Outside:
- ☐ Fiberglass
- ☐ Steel

Counter Tops:
- ☐ Formica
- ☐ Stainless Steel
- ☐ Epoxy Resin

Windows:
- ☐ How Many: _____
- ☐ Location: _____

Doors:

Number of Doors: _____

Position of Doors:
- ☐ One Side – Center, Offset, if so where? _____
- ☐ Two Sides – Center, Offset, if so where? _____
- ☐ Three Doors – Positions: _____

Hinge (From outside facing building):
- ☐ Left
- ☐ Right

Door Handle:
- ☐ Recessed Handle
- ☐ 3-point locking
- ☐ Freezer latch

Electrical Requirements:
- ☐ Voltage: _____
- ☐ Hertz: _____

Phase:
- ☐ Single Phase
- ☐ Three Phase
- ☐ Amperage requirements:

Special Requirements (Optional):
- ☐ Eye Wash Station
- ☐ Fume Hood Vent
- ☐ Fire and Gas Detection
- ☐ Reagent Cabinet
  - ☐ Flammable
  - ☐ Non-Flammable
- ☐ Filing Cabinet
- ☐ Hot water heater
- ☐ Specify:

Standard Equipment – Supplied:
- ☑ Small Refrigerator
- ☑ Fire Extinguisher
- ☑ Floor Mats
- ☑ Office Chair(s)

Special Instructions: _____

_____

_____

_____

_____

_____

_____

Tele: **(713) 880-9885 or (877) 837-8683 (toll free)** ***Fax:*** **(713) 880-9886** ***E-Mail:*** **sales@ofite.com**

www.ofite.com

OFI Testing Equipment, Inc.

Application for Credit

(Please Type or Print Legibly)
Application is hereby made for an open credit account with net 30-day terms.

APPLICANT:
Legal Name of Firm: _____ Subsidiary of: _____

INVOICE ADDRESS:
Street or PO Box: _____ Phone Number: _____
City/State/Zip: _____ Fax Number: _____
E-Mail: _____

SHIPPING ADDRESS:
Street: _____ Phone Number: _____
City/State/Zip: _____ Fax Number: _____

TYPE OF BUSINESS:
Check One: Corporation ☐ Partnership ☐ Proprietorship ☐
Date Established: _____ Fed. Tax ID No: _____ Tx. Resale No. _____

BANK REFERENCE:
Bank Name: _____ Account No: _____ Type of Acc't: _____
Address: _____ City/State/Zip: _____ Contact: _____
Phone No: _____ Fax No: _____

TRADE REFERENCES:
Name: _____ Phone: _____ Fax No. _____
Address: _____ City/State/Zip: _____ Acc't/Cust No: _____

Name: _____ Phone: _____ Fax No. _____
Address: _____ City/State/Zip: _____ Acc't/Cust No: _____

Name: _____ Phone: _____ Fax No. _____
Address: _____ City/State/Zip: _____ Acc't/Cust No: _____

FINANCIAL HISTORY (If yes to any of the following, give details on another page.)

Have you ever filed bankruptcy or reorganization for benefit of creditors?	Yes ☐	No ☐
Have you ever been sued by any person or entity for alleged nonpayment of a debt?	Yes ☐	No ☐
Is your inventory pledged as collateral?	Yes ☐	No ☐
Are your accounts receivables factored or pledged as collateral?	Yes ☐	No ☐

PURCHASING AGENTS:
Name/Title: _____ Name/Title: _____ Name/Title: _____
Purchase Order Number Required with Order: Yes ☐ No ☐ Sometimes ☐

The applicant's signature attests financial responsibility and that the information and statements in this application are true and complete, and are made for the purpose of inducing OFI Testing Equipment to establish an open account line of credit. OFI Testing Equipment is hereby authorized to obtain any information it considers necessary from any source concerning the statements in the application. The applicant promises to pay for all purchases in accordance with the terms and conditions as stated below. The applicant further agrees to notify OFI Testing Equipment immediately if the applicant becomes insolvent or otherwise unable to meet current obligations and to pay reasonable attorney or collection fees plus interest in case of default in payments in compliance with terms. If, at any time, for any reason, the undersigned is unable to pay for purchases when due, the undersigned agrees to pay and authorizes OFI Testing Equipment to bill my/our account service charge in the amount of 1.5% per month on the unpaid balance. All purchases are deemed made and payment is due at the principle place of business of OFI Testing Equipment. For any transaction, the undersigned agrees to pay all charges within 30 days following the invoice date. OFI Testing Equipment reserves the right to withdraw credit immediately or not to extend credit to the undersigned at its sole discretion at any time. The undersigned wishes to apply for credit with OFI Testing Equipment in accordance with these terms and conditions, which have been read, understood and accepted.

Signature of Authorizing Officer: _____ **Date:** _____ **Phone No:** _____

Please Print Name: _____ **Title:** _____ **Fax No:** _____

Mail / Shipping: 1006 West 34th Street Houston, TX 77018-6321 U.S.A.
Tele: (713) 880-9885 or (877) 837-8683 (toll free) **Fax: (713) 880-9886** **E-Mail: sales@ofite.com**

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#100-60 Tru-Wate™ Pressurized Fluid Density Scale, Standard .5
#100-60-X Tru-Wate™ Pressurized Fluid Density Scale, Metric .5
#110-00 Mud Deaerator with Vacuum Pump .6
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