DRILLING FLUIDS EQUIPMENT

For over 30 years OFI Testing Equipment (OFITE) has provided instruments and reagents for testing drilling fluids, well cements, completion fluids, and wastewater. In addition to these product lines we also offer a range of instruments for core analysis. From our manufacturing facility in Houston, TX we provide customers all over the world with quality products and exceptional service.

Our drilling fluids product line includes innovative designs such as the Model 900 Viscometer, which showcases our ability to develop new technology to meet customer and industry demands. We also offer Retorts, Aging Cells, Roller Ovens, Mud Balances, Filter Presses, and all other instruments required to evaluate drilling fluid properties according to API Recommended Practice 13B-1 and 13B-2.

As an independent manufacturer and supplier, OFITE has one priority, our customers.



Filter Press, HTHP, Model MB, 4 Unit

The 4 Unit Model MB HTHP Filter Press is designed for testing drilling fluids and cement under elevated temperatures and pressures. This simulates various downhole conditions and provides a reliable method for determining the effectiveness of the material being tested. The complete assembly consists of four standard 250 mL filter presses mounted in a convenient frame for regular laboratory or drilling rig usage. All filter press units are complete and ready for use after the assembly has been connected to a source of compressed nitrogen.



Features

- Four Model MB filter presses mounted in a convenient installation for regular laboratory or drilling rig usage
- Includes a dual nitrogen manifold for supplying up to 1250 PSI pressure to the cell and up to 750 PSI to the back pressure assemblies
- All four (4) units are supplied nitrogen at the same pressures
- Both the high pressure to the cell and the back pressure can be controlled ON/OFF individually by valves mounted at the front of the work table base
- High performance hoses, connections, and valves
- Dual manifold back connection assembly has a standard ¼" pipe thread (NPT) with a ¼" tubing fitting



- 171-50-4 115 Volt
- 171-51-4 230 Volt

Specifications

- Maximum Temperature: 350°F (176°C)
- Maximum Pressure: 1,500 PSI (10,342.5 kPa)
- Pressure Source: Nitrogen (at least 1500 PSI / 10,343 kPa)
- Test Cell Capacity: 250 mL
- Voltage: 115 or 230 Volt (built to specification)
- Heater: 200 Watt
- Size: 39.25" × 25.75" × 37.5" (99.7 × 65.4 × 95.3 cm)
- Weight: 175 lb (79.5 kg)
- Shipping Size: 46" × 31" × 44" (117 × 79 × 112 cm)
- Shipping Weight: 250 lb (113.4 kg)

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Intro

The 4-unit Model MB HTHP Filter Press assembly is designed for testing drilling fluids and cement under elevated temperatures and pressures. This simulates various downhole conditions and provides a reliable method for determining the effectiveness of the material being tested. The complete assembly consists of four standard 250-mL filter presses mounted in a convenient frame for regular laboratory or drilling rig usage. All filter press units are complete and ready for use after the assembly has been connected to a source of compressed nitrogen. It includes a dual nitrogen manifold for supplying up to 1,350 PSI (9,309 kPa) pressure to the cell and up to 750 PSI (5,171 kPa) to the back pressure assemblies.

Although all four units are supplied nitrogen at the same pressure, both the primary pressure to the cell (left regulator) and the back pressure (right regulator) can be turned on and off individually by valves mounted at the front of the work table base. The red knobs control the primary pressure flow of nitrogen to the cells and the black knobs control the flow to the back-pressure receivers. The pressure for each line is indicated by the gauge above each regulator and both pressure lines contain a check valve to prevent any accidental reverse flow of fluid.

The connection at the back of the dual manifold assembly has a standard $\frac{1}{4}$ " pipe thread (NPT) with a $\frac{1}{4}$ " tubing fitting so that the connection to the nitrogen bottle can be made with $\frac{1}{4}$ ", .035", or .049" wall stainless steel tubing or with a high pressure hose. Any system that is used must be rated at 1,500 PSI (10,343 kPa) or more working pressure.

Specifications

Size:	39.25" × 25.75" × 37.5" (99.7 × 65.4 × 95.3 cm)
Weight:	175 lb (79.5 kg)
Shipping Size:	46" × 31" × 44" (117 × 79 × 112 cm)
Shipping Weight:	250 lb (113.4 kg)
Maximum Temperature:	350°F (176°C)
Maximum Pressure:	1,500 PSI (10,342.5 kPa)
Pressure Source:	Nitrogen (at least 1500 PSI / 10,343 kPa)
Test Cell Capacity:	250 mL
Voltage:	115V or 230V (built to specification)
Heater:	200 Watt

Components

- #142-58 O-ring for HTHP Coupling
- #153-16 Glass Graduated Cylinder; 25 mL × 2/10 mL
- #154-10 Dual-Scale Thermometer with Metal Dial; 5" Stem; 50° 500°F; 0° - 250°C
- #170-07 O-ring
- #170-11 Heating Element; 115V; 200W
- #170-19 2¹/₂" (6.35 cm) Filter Paper; Specially Hardened for Filter Presses

#171-24 1350 & 750 PSI Nitrogen Manifold

- #170-20 Manifold Block
- #171-23-1 Retainer Pin
- #171-24-001 Modified Regulator
- #171-25-1 Relief Valve; Set at 750 PSI
- #171-25-2 Relief Valve; Set at 1,350 PSI
- #171-26 5000# Hose; 3/16" × 3'; Qty: 2
- #171-28 Dual Manifold Body
- #171-38 1,000-PSI Gauge; 2¹/₂"; ¹/₄" NPT Bottom
- #171-40 1,500-PSI Gauge; 2¹/₂"; ¹/₄" NPT Bottom
- #171-42 3,000-PSI Gauge; 2¹/₂"; ¹/₄" NPT Bottom
- #171-38 1000-PSI Gauge; 21/4"; 1/4" NPT Bottom
- #171-52 O-ring
- #171-54 Fuse
- #171-60 HTHP Test Cell
- #171-62 Test Cell Lid
- #171-66 Stainless Steel Receiver Tube
- #171-75 Receiver Body
- #171-82 Power Cord with Male Plug Only

Optional:

- #170-37 Nitrogen Cylinder; 21" × 7"; Right-hand Thread
- #171-26 5,000# Hose; 3/16" × 3'

#171-50-4-SP Spare Parts for #171-50-4:

#140-60-01 O-ring for Bleeder Valve; Qty: 16 O-ring for HTHP Coupling; Qty: 48 #142-58 Repair Kit for Victor Regulator; Qty: 2 #143-19 #153-16 Glass Graduated Cylinder; 25 mL × 2/10 mL; Qty: 4 Silicone Stopcock Grease; 150 g Tube; Dow Corning; Qty: 4 #153-55 #154-10 Dual-Scale Thermometer with Metal Dial; 5" Stem; 50° -500°F; 0° - 250°C; Qty: 2 #170-07 O-ring; Qty: 8 #170-19 2¹/₂" (6.35 cm) Filter Paper; Specially Hardened for Filter Presses; Qty: 20 1000-PSI Gauge; 21/4"; 1/4" NPT Bottom; Qty: 2 #171-38 #171-52 O-ring; 2 5/16" × 21/2" × 3/32"; Qty: 48 Fuse: Qty: 4 #171-54 #171-78 Screw for Test Cell; Qty: 24 #171-79 Hex Wrench; 1/4"; Qty: 2