

HPHT Filter Press Model 500CT

Description

HPHT Filter Press, Model 500CT simulates filtration against a permeable formation at high temperatures and pressures. Each 500 ml HPHT Filter Press consists of the following components and operating supplies:

- Stainless steel cell with CellTell™ Positive Pressure Indicator
- Aluminum heating jacket
- Pressurization System (Nitrogen or CO₂)
- Back Pressure Receiver, 100 ml
- Graduated cylinder

Application

Measuring filtration and cake-building properties is fundamental to treatment and control of drilling fluids. Studying filtrate characteristics, oil, water, or emulsion content, is also essential.

For a drilling fluid, the quantity, type and size of solid particles, emulsified water, and properties of the liquid phase affect the filtration characteristics. Temperature and pressure may influence the interactions of these various components. Therefore, filtration tests are often performed at ambient and high temperatures, providing data for comparison.

Advantages

- Wide range of customizing configurations for your specific needs
- HPHT safety features that help protect from hazards
- Heavy-duty components and materials that withstand HPHT conditions
- Pilot light on heating jacket that signals when temperature reaches thermostat setting
- Single or double opening cells that accept various filter media choices, such as API standard filter paper, ceramic discs of various porosities, and screens of various mesh sizes
- Choice of 115 volt AC or 230 volt AC heating jacket
- Pressurization alternatives, such as CO₂ cartridges, nitrogen, or in-house source



HPHT Filter Press, Model 500CT
Maximum Pressure: 1800 psig
Backpressure: 750 psig
Maximum Temperature: 500° F

Safety Features

Each HPHT Filter Press cell is furnished with a CellTell™ Positive Pressure Indicator. This new safety feature gives feedback about the pressure status of any HPHT cell. CellTell™ Positive Pressure is unaffected by temperature and resistant to motion caused by vibration and rotation.

Specifications

Maximum Working Pressure	Cell: 1800 psig (12.4 MPa)
	Backpressure: 750 psig (5.17 MPa)
Maximum Temperature	500°F (260°C)
Sample Cell Volume	500 ml
Receiver Volume	100 ml
Filtering Area	3.5 in ² (22.6 cm ²)
Heating Capacity	800 watts
Power Requirement	115/230 VAC, Frequency 50/60 Hz
Note: For temperatures greater than 400°F (204°C), the filter paper should be backed with a glass fiber filter or a stainless steel filter.	

Ordering Information

HPHT Filter Presses are available in various configuration as shown in the following tables.

HPHT Filter Press 115 Volts		
HPHT Filter Press Assembly	No. 101565561	No. 101565562
Cell Configuration	500 ml, dual opening ^b No. 209587	500 ml, single opening No. 209586
Cap & Screen Configuration	1 Cap No. 209536 w/Detachable Screen, 325 Mesh/ 60 Mesh Backup 1 Cap No. 209568	Cap No. 209532 60 Mesh Screen ^a No. 207232
Pressurization	Dual Nitrogen Manifold No. 209545	
Backpressure Receiver	100 ml, No. 209542	
Heating Jacket	115 Volts, 800 Watts, No. 209540	
Note: Items listed for each assembly part number are included.		
^a Screen is installed in the cap.		
^b Both ends are open.		

HPHT Filter Press 230 Volts		
HPHT Filter Press Assembly	No. 101565563	No. 101565564
Cell Configuration	500 ml, dual opening ^b No. 209587	500 ml, single opening No. 209586
Cap & Screen Configuration	1 Cap No. 209536 w/Detachable Screen, 325 Mesh/ 60 Mesh Backup, 1 Cap No. 209568	Cap No. 209532 60 Mesh Screen ^a No. 207232
Pressurization	Dual Nitrogen Manifold, No. 209545	
Backpressure Receiver	100 ml, No. 209542	
Heating Jacket	230 Volts, 800 Watts, No. 209541	
Note: Items listed for each assembly part number are included. ^a Screen is installed in the cap. ^b Both ends are open.		

Recommended Safety Equipment

Fann Filter Press Cell Clamps are available as a separate purchase.

- P/N 232207 — Filter Press Cell Clamp for 175 ml cell
- P/N 232208 — Filter Press Cell Clamp for 500 ml cell

Optional Equipment

Fann offers a complete line of replacement parts, accessories, and tools for all HPHT Filter Presses.



Filter Press Cell Clamp, 500 ml



Cell Carrying Tool, Cap Removal Tool, Valve Reseating Tool, Screens, Ceramic Discs, and Filter Paper

Fann Instrument Company offers a complete line of equipment, materials, and supplies for analyzing various drilling fluids and oil well cements in accordance with API Specifications and API Recommended Practices.