



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.

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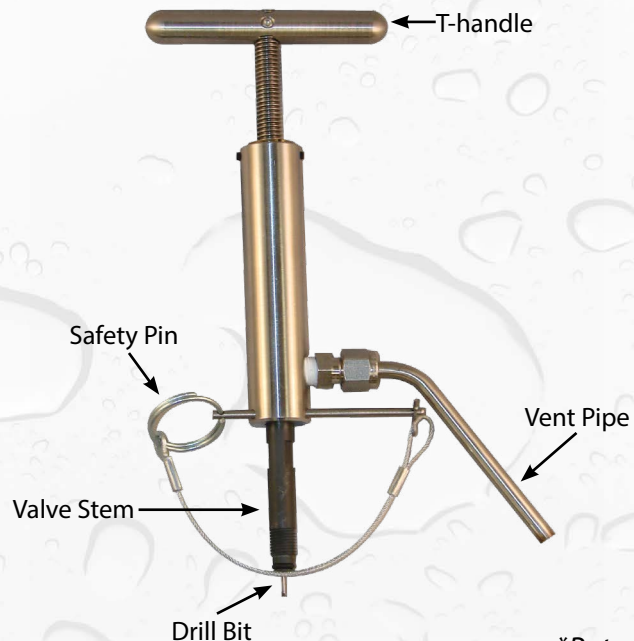
HTHP Pressure Relief Tool

The HTHP Pressure Relief Tool* (#170-91) provides a safe way to release the pressure in a clogged cell. It screws onto the cell cap using the existing valve stem port. Then, using a T-handle, the operator can drive a pin into the cell to puncture through any obstruction. The pressure will then vent safely through the vent pipe, away from people and equipment.



Features

- Easily punctures filter paper, cement screens, and ceramic disks
- Safely directs vented pressure away from people and equipment
- Conveniently fits the valve stem port on all 175 and 500 mL HTHP Filter Presses that accepts standard valve stem pressurization



**Patent Pending*



Dependable Products From People You Trust



HTHP Pressure Relief Tool

Patent Pending

Part No. 170-91

Instruction Manual

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Introduction

High temperature, high pressure filtration cells are designed to test the sealing characteristics of drilling fluids and cement. Unfortunately, sometimes the test fluid seals the entire cell, making it difficult to release the pressure. A clogged cell is a safety hazard for lab personnel. Without a safe way to release pressure, everyone in the lab is at risk.

The HTHP Pressure Relief Tool provides a safe way to release the pressure in a clogged cell. It screws onto the cell cap using the existing valve stem port. Then, using a t-handle, the operator can drive a pin into the cell to puncture through any obstruction. The pressure will then vent safely through the vent pipe, away from people and equipment.

Components

#130-77-069	High Pressure Fitting
#170-17	O-ring for Valve Stem
#170-91-001	Valve Stem
#170-91-002	Body
#170-91-003	Plunger Rod
#170-91-004	Plunger Stop
#170-91-005	Puncture Pin
#170-91-006	End Cap
#170-91-007	Handle
#171-23-2	Safety Pin with Lanyard

Safety

Trapped pressure inside an HTHP filtration cell can be very dangerous. Take the following precautions before attempting to open the cell:

1. Always wear appropriate personal protective equipment (PPE).
2. Never attempt to open a hot cell. Make sure the fluid in the cell has cooled down to ambient temperature.
3. Make sure the cell caps and pressure ports are pointed away from people and equipment.
4. Place a rag or towel over the valve stem and **slowly** unscrew and remove it. If the pressure is still not released, then use the HTHP Pressure Relief Tool to remove the obstruction.

Procedure

1. Remove the valve stem and inspect both o-rings. Replace any that show signs or wear or damage.
2. Replace the valve stem and secure it in place with the safety pin.
3. Screw the valve stem on the HTHP Pressure Relief Tool into the valve stem port on the cell cap.
4. Point the vent pipe away from people and equipment.
5. Slowly turn the t-handle clockwise. You should feel some resistance and a small burst of released pressure when the pin punctures the obstruction.
6. Slowly turn the t-handle counterclockwise. The remaining pressure will vent when the pin is free of the obstruction.
7. Unscrew and remove the valve stem from the cell cap.
8. Clean the HTHP Pressure Relief Tool:
 - a. Remove the safety pin and valve stem.
 - b. Flush the valve stem, body, and vent pipe with water (for water-based fluids) or solvent (for oil-based fluids).
 - c. Allow all components to dry before reassembling.

