## Half Area Filter Press

Measuring filtration behavior and wall-cake building characteristics of a mud is essential to drilling fluid control and treatment. The characteristics of the filtrate, such as oil, water or emulsion content, are also fundamentally important. The types and quantities of solids in the fluid and their physical and chemical interactions affect these characteristics. Temperature and pressure in turn affect the physical and chemical interactions. It is therefore necessary to run tests at both low-pressure/low-temperature and high-pressure/high-temperature. Each of these testing conditions requires different equipment and techniques.



The Half Area Filter Press is a compact version of the standard Filter Press and employs 1/2 size filtration area. Time and pressure requirements are the same as for the API filter press. Readings are converted to standard measure by multiplying by two as specified in the *American Petroleum Institute*, "API Recommended Practice 13B-1 and 13B-2".

The Half area filter press can be used in the conventional manner or in the upside down position to make measurements free of settling of the solids. Laboratory tests indicate that variation in filtration rate may be obtained due to solids settling. This unit makes possible a routine test to determine more nearly the true filtration and wall cake condition of the hole. The Half area filter press has 1/2 the API filtration area and all filtrate volumes must be multiplied by 2 to correlate with API specifications.

The Half area filter press consists of a filter cell body (cell) containing a pressurizing inlet, a pressure regulator, and a pressure gauge. A rubber diaphragm (boot) is supplied to contain the drilling fluid and separate it from the pressurizing gas. The boot allows the filter cell to be operated in any position. A reversible frog mounting is provided on the exterior of the cell to allow conventional filtration or upside down filtration. A wall mounting bracket is provided for supporting the filter press on a wall.

Fann Instrument Company offers a complete line of instruments for use in testing drilling fluids in accordance with the following American Petroleum Institute publications:

API Recommended Practice 13B-1, ANSI/API 13B-1/ISO 10414-1, API Recommended Practice 13B-2, & API Specification 13A

Order No. 207228 Half Area Filter-Press

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