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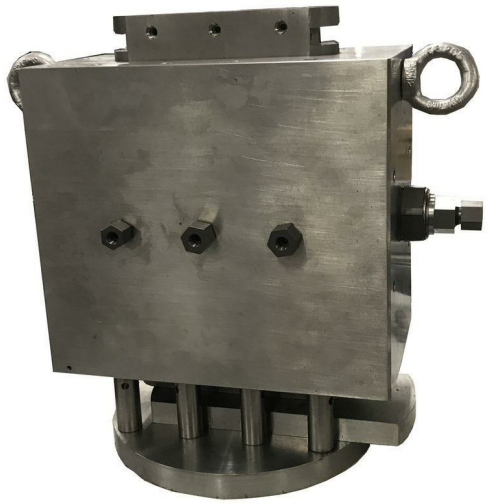
ACC-SERIES ACID FRACTURE CONDUCTIVITY CELL



Description

The acid fracture conductivity cell, mounted horizontally, is designed for etching core samples with acid and subsequently assessing both short-term and long-term fracture conductivities under in-situ conditions of pressure, closure stress, and temperature. The core components of the cell include a main chamber, top and bottom pistons, and a duo of flow inserts located on the right and left sides. Pressure variations along the fracture are tracked by three built-in pressure taps. Additionally, the upper and lower pistons are equipped with three interconnected leak-off ports, which enable leak-off tests to be conducted during both acid etching and conductivity evaluations. The cell's steel structure, which is heated, ensures a stable and appropriate temperature throughout the testing process. This temperature is monitored by a thermocouple situated in a designated port. The cell also features unique detachable end inserts that allow for a combination of acid etching, conductivity measurements, and flow-back tests to be executed within the same testing chamber.

Download: Floxlab_Stimulation Cells_Brochure.pdf

Specifications

Maximum closure stress	20,000 psi
Maximum pore pressure	3,000 psi
Temperature	Ambient to 177°C (350°C)
Sample length	7 inches
Sample width	1.5 inches
Sample height	2 x 3 inches
Wetted part material	Hastelloy

Benefits

Multi-purpose cell (acid etching, leak-off test, fracture conductivity tests)
Uses specimen with large exposed surface area to acid
The use of thick core samples allows the leak off and wormhole phenomenon to be monitored during acid injection
Simulates fluid leak off, and therefore accounts for damaging effects of fracturing fluids.

Video presentation: