

High-Pressure High-Temperature Material Synthesis Instrumentation and Supplies



The QUICKpress non endloaded piston cylinder apparatus

SPECIFICATIONS:

- Pressure range 150MPa to 4.0 GPa with a precision of +0.03 GPa
 Powerteam hydraulic components with 5 year warranty.
- Stainless steel hydraulic lines and flex hose with10,000psi burst rating
- Temperature range 25 to 2000°C with +15°C gradients over the sample
 500watt Signal Transformer with 4/0 copper cables
- * Controlled heating and cooling rates. Quench rates of 300°C/second
- * Sample volume: 150 mm3 using 13mm ID pressure plate up to 2.5 GPa
- * Sample volume: 500 mm3 using 19mm ID pressure plate up to 1.0 GPa
- * Sample volume: 90 mm3 using 10mm ID pressure plate up to 4.0 GPa
- * Sample volume: 800 mm3 using 25mm ID pressure plate up to 0.5 GPa
- * Run durations of a few minutes to several months

LABORATORY REQUIREMENTS:

- * Laboratory bench 2ft x 4ft surface supporting 300 lbs
- * 35 amps, 210 VAC electrical power on a single phase, dedicated line
- * Cooling-water flow-rate of 1 L/min at a pressure of 30 psi (2 bars).

RECOMMENDED SUPPORT EQUIPMENT:

- * Water chiller/recirculator
- * Small electric spot welder
- * Binocular microscope
- * 750 °C muffle furnace with a 5 x 5 x 10cm heating chamber
- * Diamond-blade wafer saw

Request additional information inquire@DepthsoftheEarth.com (480) 513-9921