Ultra-High-Pressure Generation Systems

Standard Design

Max. operating pressure 7,000 bar Pressure intensifier capacity 18 ml

Options 10,000 bar 45 ml

Systems for the generation of very high pressures (up to 10,000 bar – liquid or gases) based on hand pumps, electrical piston pumps or intensifiers.

Advantages

- Simple and easy generation of highest pressures in liquids and gases
- Reliability and safety with optimum stress distribution in the high-pressure cylinder
- Sturdy design and minimum wear at highest pressures

Features

- Single fluid intensifier system
- Pressure intensifier ratio 1:16

Options

- Intensifier system with two different fluids liquid-liquid
- Intensifier system for two different fluids liquid-gas
- 2nd pressure intensifier
- Process control and batch documentation with programmable logic controller (PLC)

Applications

- Geology and mining research
- Deep-sea research
- Burst-pressure studies



Pressure generation system 10,000 bar for gases (Austria). A pneumatically driven diaphragm gas compressor is used for prefilling to 1,000 bar. The intensifier driven by a hydraulic pump generates the pressure up to 10,000 bar. The actual pressure is digitally indicated.



Electrical piston pump for pulsation-free flow generation. The control box includes a speed controller for the DC servo motor and allows an accurate control of the flow. Flow is adjusted using the potentiometer and is digitally indicated. Designed for manual and automatic operation mode.



Pressure test system 2,000 bar (maximum pressure available 7,000 bar) allows the generation of high pressures by hand. The test sample can be connected to the bulkhead coupling.