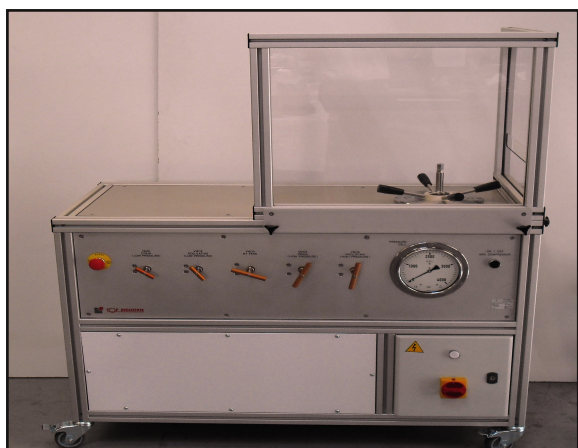


GAS LOADER for DAC



USES:

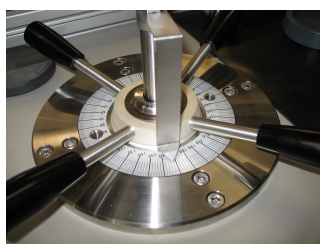
TOP INDUSTRIE proposes a Gas Loader for loading gases into diamond anvil cells (DAC). The system works up to 3 000 bar (43 500 psi)

Based on the experience of Top Industrie in high pressure compressors and thanks to Dr A Zerr (LSPM- CNRS), we have manufactured a new, compact, easily movable and efficient DAC gas loader.



FEATURES :

- Operating pressure of the loading cell 3000 bar
- Dual-stage High Pressure Diaphragm electric compressor or pneumatic
- Inlet pressure minimum 25bar, outlet pressure up to 3000bar.
- Compliant with many DAC designs (Diacell, Boehler-Almax, or custom-made)
- HP vessel 0.3 l (Ø 60 x 74mm)
- Can be used with different gases (N₂, Ar, He, H₂ in option)
- weight 160 kg size (LWH) 1200*600*1500 mm
- 3 Kw / 230 V / 50 Hz option for 110 V
- includes safety head and rupture disc - pressure display - emergency stop
- CE compliant with PED 97/23 can also be built according to ASME
- Easily movable frame with safety screen panels



DIAMOND ANVIL CELLS (DAC) :

Many types of anvil cells can be used. You can have your own cell. However Top Industrie has developed a partnership with Almax easyLab a world leader in DAC. Do not hesitate to contact them



PROCESS :

After a meticulous preparation, the DAC is placed into the HP vessel, installing the filler pieces and the screwing device.

An interlocked pin is set on the bottom side, aligning the DAC by means of a double pin hex plug or by spur gears which uniformly rotate the three matching clamping screws.

The upper plug can be sealed by manual screwing.

The HP vessel can be connected to a vacuum pump insuring the gas purity.

The whole system is pressurized with a dual-stage electric driven diaphragm compressor (Top Industrie PN 609.17.00) to reach 3000bar.

