



# QUENCHING AND DEFORMATION DILATOMETER

DIL805A/D/T

Tension and compression tests with a program-  
mable heat treatment and forming unit

## OUR SERVICES

- Determination of flow curves under tensile and compressive load for material characterization and simulation of the forming behavior
- Multi-step heat treatments with varying heating and cooling rates for optimization of mechanical properties of metal and alloys
- (Multi-step) deformation in combination with heat treatment for simulation of rolling, forging, extrusion and sheet metal forming processes
- Determination of recovery/recrystallization behavior
- Studies on the thermal coefficient of expansion

## TECHNICAL DATA

- **Heating principle:** inductive
- **Sample material:** electrically conductive solids
- **Temperature range:** room temperature - 1500 °C
- **Atmosphere:** air, inert gas (N<sub>2</sub>, Ar, He), vacuum (10<sup>-5</sup> mbar)
- **Sample geometry:** solid, hollow and sheet samples
- **Load:** compression 20 kN | tension 10 kN
- **Strain rate:** compression 0.001 - 20/s | tension 0.001 - 1/s
- **True strain:** compression 0.001 - 1 | tension 0.01 - 0.6



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