Materials characterisation capability

Zwick/Roell Z150 material testing machine

Purpose
Screw driven machine used to study the mechanical behavior of metallic materials under compression, tensile and cyclic loading conditions.

Specifications
- Screw driven test frame
- Load cell: 150 kN
- Strain rates: 10^-5 to 0.5 s^-1
- Controlled in either a positional, load-controlled or true strain rate mode
- Bespoke software designed for complex testing modes involving rapid changes to the strain rate
- Tensile / compression testing
- Strain rate jump testing
- Stress relaxation testing
- MTS extensometer and GOM® Aramis for deriving the plastic strain ratio (r) value