

Servo-hydraulic Testing Machine HB 1000 (Fa. Zwick/Roell)

Technical Data

- Testing machine for analysis of strength under static and dynamic tension, pressure and bending stresses
- maximal testing power: 1000 kN
- max. 100 mm stroke; hydraulic device 120 l/min with 280 bar
- Testing speed of up to 70 mm/s
- Dimensions working room: 2030*755 mm
- Testing frequency under full load: from 20 Hz at 0.2 mm amplitude up to 0.2 Hz at 100 mm amplitude; partial load: from 70 Hz at 0.2 mm amplitude up to 0.2 Hz at 100 mm amplitude
- High-resolution power and distance measuring systems, extendable by means of external fine distance detector head (resolution 0.1 μm) and touch-free optical laser extensometer (resolution 0.2 μm)
- Hydraulic sample holder, gripping pressure adjustable up to 500 bar

Employment Area/Application

- Testing of static and dynamic tension, pressure and bending stresses of mechanically, thermally or adhesively joined samples of compounds, connection and basic materials
- Static testing of standardized flat and round samples of various materials (steel, aluminium, fibre-compound plastic materials)
- Static/dynamic testing of large samples/production elements up to about 2 m, e.g. mechanically joined multi-element connections, hybrid connections, complex welding connections



Servo-hydraulic tester HB 1000 at fatigue tests of mechanically joined connection samples in the Fh AGP-Laboratory



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