

Hydraulic universal testing machine Inspekt 1000-H

inspekt 1000-H





Mechanic design	Servo hydraulic testing machine The lower crosshead is guided by two fixed spindles which are linked to the machines base. The lower crosshead can be moved by an electromotor to arrive at the distance to the upper crosshead that is required for the individual tests. The upper crosshead is connected to the machine bench via two supporting pillars. The bench is mounted to the piston of the hydraulic cylinder and ensures load transmission to the upper crosshead. Limit switches ensure that the oil pump is switched off when the crossheads come too close. The hydraulic power unit consists of the oil pump, the oil tank, the strainer, and hydraulic and electro hydraulic servo-valves. The entire unit is placed in the lower part of the measuring and controlling unit. Force measuring is done by a high-precision pressure measuring cell which is installed in the hydraulic cylinder.
Standard functions (with PC)	Load, displacement and extension controlled operation Overload protection, automatic force calibration Control panel for manual mode Specimen fracture detector, Return-function High precision positioning of the crosshead is done by a motor.
Nominal load	1000 kN
Test space width x depth	750 mm x 750 mm
Max. clamping length	1000 mm
Test speed	Max. 70 mm/min
Stroke	250 mm
Measuring range	class 1 0,4% - 100% nominal load according to DIN-EN-ISO7500
Load resolution	+/- 120.000 digits at 20ms integration time / +/- 400.000 digits at 250 ms
Stroke measurement	Optical encoder, resolution 0,01 mm
Manipulating speed of the crosshead	400 mm/min
Software interface	RS 232
Data transfer rate	50Hz (standard) / optionally 500Hz via special software add-on module
Optional measuring channels	Option for 7 data acquisition boards for analogue/digital in-/output for load, displacement, extension measuring devices, and also as a +/-10V input for external devices, in- and output for controlling of external devices, guard door option
Size HxWxD	Load frame: (1170x750x2800) mm, control container: (700x800x1070) mm
Weight	Load frame: 3500 kg, control container: 125 kg
Integrated clamping tools	Tensile tests: Clamps for round samples 12-70 mm diameter and flat samples 0-65 mm thick and maximum 70 mm wide Pressure tests: Pressure-plate diameter 160 mm