



Hegewald & Peschke

Meß- und Prüftechnik GmbH

Product information

Universal testing machine inspekt table 100 kN



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Modern and flexible load frame design for various applications

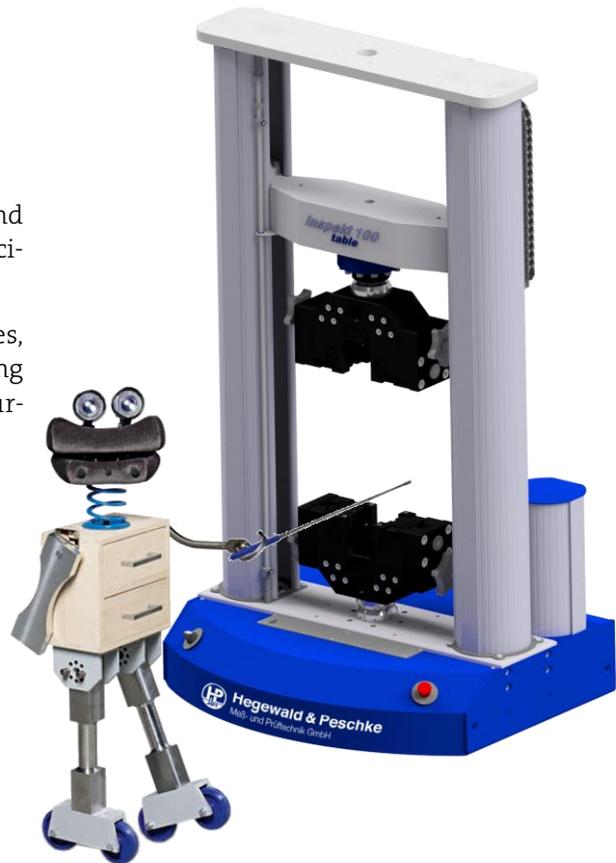
- Load frame extremely variable in height and width → optimal adaptation to different specimen and component sizes
- Connection of peripheral devices (e.g. furnaces, temperature chambers) and additional measuring and control channels (e.g. extensometers, measuring probes, optical sensors) possible

Innovative construction guarantees highest measuring precision

- Use of backlash-free precision ball screws with larger diameter (preloaded in aluminium support profiles) and special nut system
 - Precise load transmission
 - High lateral force stability
 - Increased axial rigidity
- Brushless AC drive for static material testing as well as for alternating and continuous loads

Innovative control electronics for maximum measurement resolution & extensive functionality

- High modularity and control precision
- Adaptive controller
- High-quality signal converters for maximum resolution
- Standard functions:
 - Force, displacement, strain control
 - Overload protection
 - Automatic sensor identification incl. calibration data storage
 - Specimen break detection
 - Return function
 - Manual positioning via hand panel or our testing software *LabMaster*



Our testing machines speak your language: LabMaster - the testing software from Hegewald und Peschke

- User-friendly usage concept
- Complete software including all test modules (tensile, compression, bending, peel test) without additional costs
- Universally applicable: simple and complex test procedures: standard-compliant and customer-specific
- High flexibility for integration of external devices, data import and export as well as free configuration of test procedures

Highest safety with maximum operating convenience

- CE-compliant protective housing optionally available for every application
- Sustainable: capable for cost-efficient and application-oriented updates/upgrades

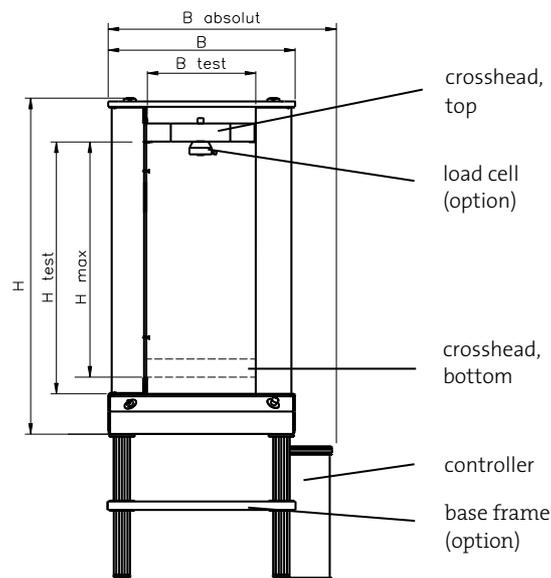


Technical data:

Nominal load	100 kN
Mechanical structure	2 backlash-free recirculating ball screw, covered spindle, AC-servomotor
Stiffness of the test frame (incl. deformation of load cell and tool adapter)	120 kN/mm
Test speed	0.0005 - 400 mm/min (<i>optionally expandable</i>)
Resolution of crosshead travel measurement	< 0.0025 µm
Force measuring range	Class 1 (optionally class 0.5) from 0.1 - 100 % of the nominal load depending on the load cell used (according to DIN EN ISO 7500-1, ASTM E4)
Force measurement resolution	24 bit (±8,388,608 digits)
Measuring, control and regulating electronics	Load and traverse path channel integrated 3 additional free slots* for expansion cards for analog/digital inputs/outputs for force, displacement, strain gauges, as well as +/-10V input for external measuring devices, safety door connection <i>*optionally expandable to 7 slots</i>
Data transmission	Ethernet (LAN) or USB, 50 Hz (standard), <i>optionally higher data acquisition frequency</i>
Electrical connection	230 VAC, 1.5 kVA, 50/60 Hz, 5- 40°C, 20- 80 % humidity
Main test tool connection	R60/30
Options necessary for operation:	Hand panel with force-displacement display for manual positioning and setup operation, load cell, clamping tool/testing tool, adapter set, LabMaster user software, PC (current standard), Windows® operating system

Dimensions/weight:

	[mm]
H (height)	1585
H test (test room height)	1145
H max (max. test stroke without test tools, adapter and load cell)	1065
B (width)	880
B absolut (width with control)	ca. 1200
B test (test room width)	510
Depth	695
Weight: 400 kg	

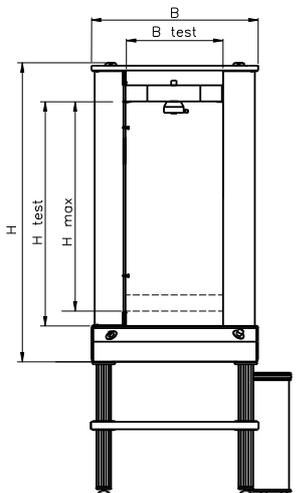


Further options:

- Base frame for conversion to floor model (standard height: 685 mm)
- Tempering equipment (e.g. ovens, temperature chambers) [Fig. 1]
- Clip-on extensometers, long-distance extensometers, optical extensometers [Fig. 1, 2, 3]
- Protective devices [Fig. 3]
- T-groove plates, e.g. for component tests
- Expansion of electronics to 7 slots
- Increased test speed
- Modified moving crosshead:
 - with load cell shifting unit for test applications outside the standard test axis [Fig. 4]
 - for mounting several load cells side by side
 - with clearance hole for guide bushings (e.g. of compression plates) for spring testing
- Lower fixed crosshead with clearance bushing for testing underneath the test frame



Option: extension and widening of the test room



Enlargement in [mm]	H +250	B +240
H [mm]	1835	1580
H test [mm]	1385	1110
H max [mm]	1295	1030
B [mm]	880	1120
B test [mm]	510	750
Stiffness [kN/mm]	120	100
Weight [kg]	450	550