



Hegewald & Peschke

Meß- und Prüftechnik GmbH

Product information

Universal testing machine inspekt table 20 kN



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Modern and flexible load frame design for various applications

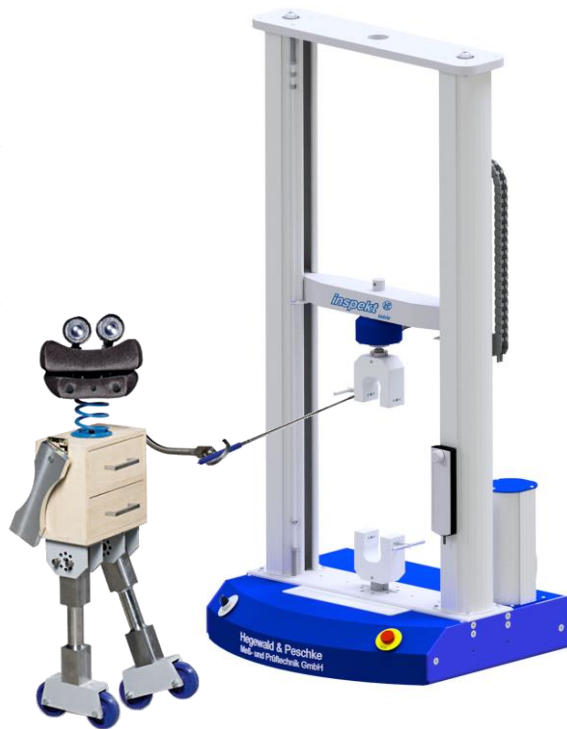
- Load frame extremely variable in height and width → optimal adaptation to different specimen and component sizes
- Connection of peripheral devices (e.g. furnaces, temperature chambers) and additional measuring and control channels (e.g. extensometers, measuring probes, optical sensors) possible

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

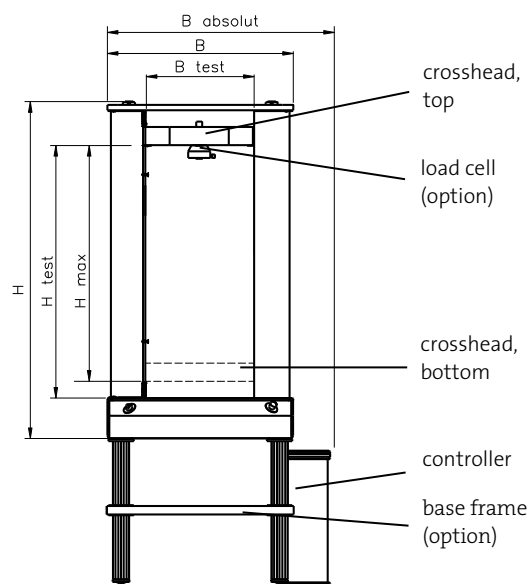


Technical data:

Nominal load	20 kN	
Mechanical structure	2 backlash-free recirculating ball screw, covered spindle, AC-servomotor	
Stiffness of the test frame	40 kN/mm (incl. deformation of load cell and tool adapter)	
Drive power	300 W	900 W
Test speed <i>(optionally expandable)</i>	0.001 - 600 mm/min	0.005 - 2000 mm/min
Resolution of crosshead travel measurement	< 0.0025 µm	< 0.01 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, 0.7 kVA, 50/60 Hz, 5- 40°C, 20- 80 % humidity	
Main test tool connection	R20/8	
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)	1420
H test (test room height)	1080
H max (max. test stroke without test tools, adapter and load cell)	1005
B (width)	685
B absolut (width with control)	ca. 1000
B test (test room width)	420
Depth	550
Weight: 130 kg	



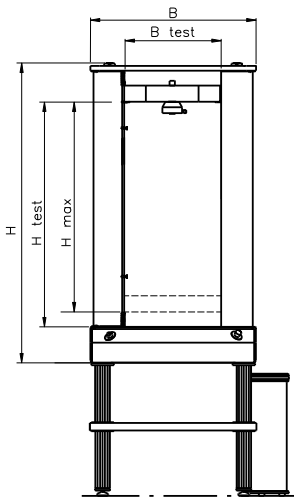


Further options:

- 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. 2]
- Protective devices [Fig. 3]
- T-groove plates, e.g. for component tests [Fig. 4]
- 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	H +500	B +190	B +190 H +250	B +330	B +620
Weight [kg]	150	180	180	220	250	350
H [mm]	1670	1970	1420	1670	1420	1420
H test [mm]	1315	1605	1070	1305	1045	1045
H max [mm]	1225	1525	995	1215	970	970
B [mm]	685		875		1015	1305
B test [mm]	420		610		750	1040
Stiffness [kN/mm]	40		32		25	20

