



# Hegewald & Peschke

Meß- und Prüftechnik GmbH

## Product information

# Universal testing machine inspekt blue 50 kN



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## Modern load frame design for various applications

- Connection of peripheral devices (e.g. furnaces, temperature chambers) and additional measuring and control channels (e.g. extensometers, measuring probes, optical sensors) possible
- Extensive accessories for a wide range of materials and test methods

## 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 drive for static material testing as well as for alternating and continuous loads
- Reduced noise emission due to low motor speed and optimized frequency range

## 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

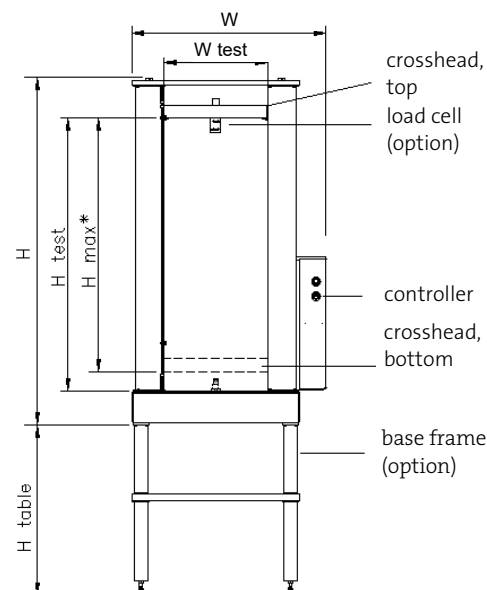


Technical data:

<b>Nominal load</b>	50 kN
<b>Mechanical structure</b>	2 backlash-free recirculating ball screw, covered spindle, brushless drive
<b>Stiffness of the test frame</b> (incl. deformation of load cell and tool adapter)	52 kN/mm
<b>Test speed</b>	0.16 µm/min – 240 mm/min
<b>Resolution of crosshead travel measurement</b>	<0.0025 µm
<b>Force measuring range</b>	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)
<b>Force measurement resolution</b>	24 bit (±8.388.608 Digits)
<b>Measuring, control and regulating electronics</b>	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
<b>Data transmission</b>	Ethernet (LAN) or USB, 50 Hz (standard), <i>optionally higher data acquisition frequency</i>
<b>Electrical connection</b>	230 VAC, 0.5 kVA, 50 Hz, 10 - 30°C, 20- 80 % humidity
<b>Options necessary for operation</b>	Hand panel with force-displacement display for manual positioning and setup operation, load cell, clamping tool/testing tool, adapter set, LabMaster user software, PC, Windows® operating system

Dimensions/weight:

	[mm]
<b>H (height)</b>	1420
<b>H test (test room height)</b>	1070
<b>H max (max. test stroke without test tools, adapter and load cell)</b>	995
<b>W (width)</b>	790
<b>W test (test room width)</b>	420
<b>Depth</b>	520
<b>H table (height table)</b>	685
<b>Weight: 170 kg</b>	





### Accessories and options:

- Base table (standard height: 685 mm)
- Temperature control equipment (e.g. ovens, temperature chambers)
- Clip-on and long-distance extensometers, optical strain gauges
- Protective devices



### LabMaster - Our testing software for the universal testing machine inspekt blue

LabMaster provides the user with a complete software package including all test modules (including tension, compression, bending, peel and torsion modules), making the purchase of additional standards unnecessary.

Thanks to our in-house expertise, special customer requirements for parameterization, evaluation or data export and import can be implemented individually.

