



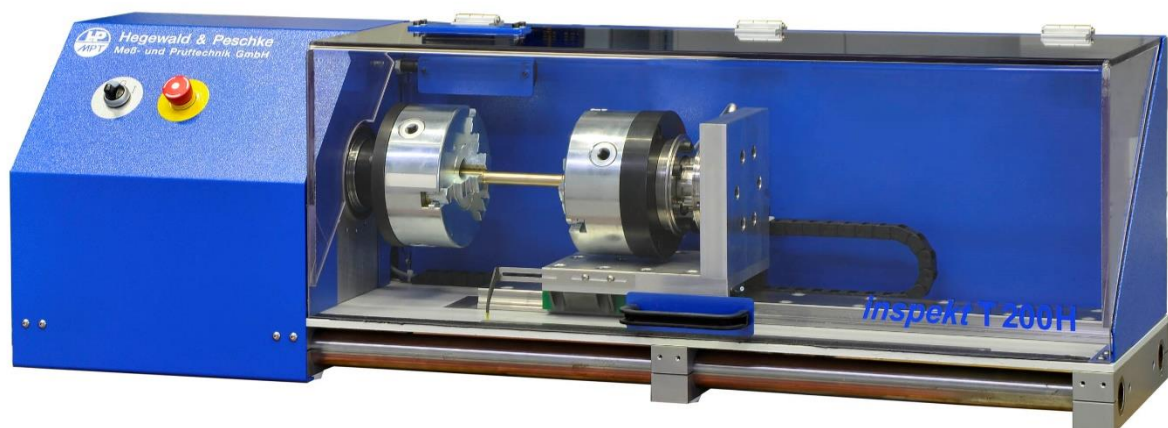
Hegewald & Peschke

Meß- und Prüftechnik GmbH

Product Information

Torsion testing devices

with controller



Hegewald & Peschke, Meß- und Prüftechnik GmbH
Am Gründchen 1, 01683 Nossen
Telefon: +49 35242 445-0, Telefax: +49 35242 445-111
E-Mail: info@Hegewald-Peschke.de
<http://www.Hegewald-Peschke.com>



Fields of application

Torsional load on specimens made of different materials at static tests, e. g. :

- plastic materials, composite materials
- screws, drive shaft
- torsion tests on wires according to DIN ISO 7800 and ASTM A938 as well as alternating torsion tests on wires according to DIN EN 2002-13
- calibration of torque sensors

The torsion testing device is used in science, research and teaching, in test laboratories and in the production accompanied control.

Advantages

- high torsional stiffness and high angular resolution
- infinite number of revisions possible
- electrical overload protection
- possible locking of mobile carriage
- variable testing speed area
- maintenance-free AC servo drive with a planetary gear set free of play
- operation with customary PC and material testing software LabMaster
- protection of the operating staff by a coverage of the workroom with an electromagnetic locking

Torque measurement

The torque measurement will be in the measuring range 1 to 100 % of nominal capacity at a torsional resolution with +/-180,000 digits, 20 ms integration time and a 0.1° angel resolution.

The torque sensor will be calibrated by the producer (according to DIN 51309).

Mechanical design

The system is based on a base frame consisting of 4 fixed bearings (Inspekt T-200H and Inspekt T-200H-XL) or 6 fixed bearings (Inspekt T-500H), which are connected to each other through two hollow shafts made of stainless steel. Thus, a high torsional stiffness is achieved.



The drive is assembled on the frame of the machine and consists of a servo motor with flanged planetary gear. The mobile carriage with adapted torque sensor is installed at a base plate of steel and directed through a rail guide. The specimen to be tested is clamped between the drive and the mobile carriage using suitable clamping tools (e.g. three-jaw chuck or collet). The work area is closed by a safety door with electrical monitoring. This door is looked by a magnetic secure switch during the tests. Only for calibration or service functions the safety door can be deactivated.



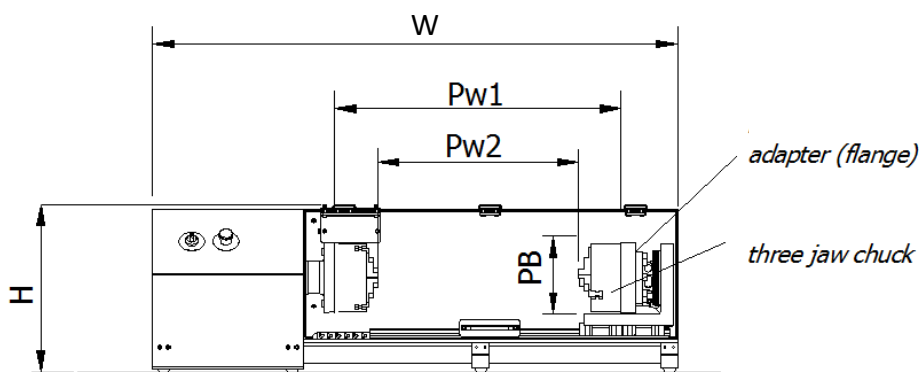
The machine is intended for installation on a table/workbench (to be provided by the customer or optionally available).



Technical data

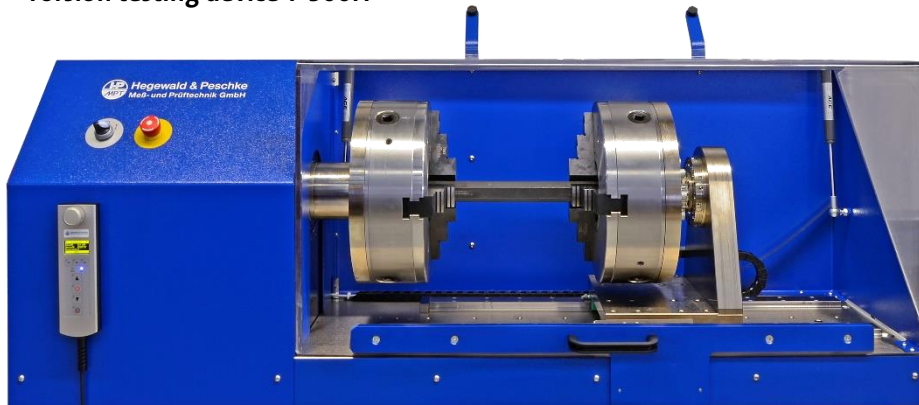
	Inspekt T-200H 41-031-500	Inspekt T-200H 41-031-501	Inspekt T-200H-XL 41-031-506	Inspekt T-500H 41-031-503
Test load	200 Nm	200 Nm	200 Nm	500 Nm
Machine dimensions (WxDxH)	1200 x 340 x 390 [mm]	1200 x 340 x 390 [mm]	1430 x 450 x 550 [mm]	1430 x 450x 550 [mm]
Weight	approx. 105 kg	approx. 110 kg	approx. 305 kg	approx. 280 kg
Testing speed	0,05 – 25 turns per minute or with force control up to 200 Nm	0,05 – 60 turns per minute or with force control up to 200 Nm	0,05 – 25 turns per minute or with force control up to 200 Nm	0,05 – 25 turns per minute or with force control up to 500 Nm
Max. test chamber length (between flanges) Pw1*	670 mm	670 mm	760 mm	720mm
Max. test chamber length (between chucks) Pw2*	470 mm	470 mm	560 mm	470mm
Connection	115/230 VAC, 0.7 kVA, 50/60 Hz, 5- 40°C, 20- 80 % humidity	230 VAC, 1.5 kVA, 50/60 Hz, 5- 40°C, 20- 80 % humidity		
Data transmission	USB 2.0 Interface or LAN, data transfer rate to PC: 50 Hz (standard), data processing internal 2ms, optional: maximum 2 free slots for extension cards			
Optional accessory	Torque sensor (42-030-020 or 42-030-021) Clamping tools (41-031-502, 41-031-504, others on request) PC/TFT Table/workbench Testing software LabMaster			

*movement force of the crosshead 20 N

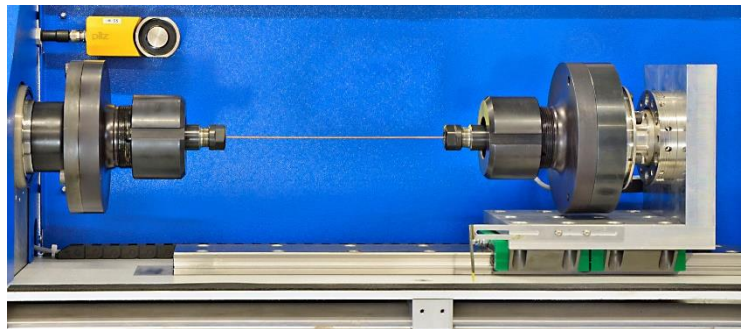
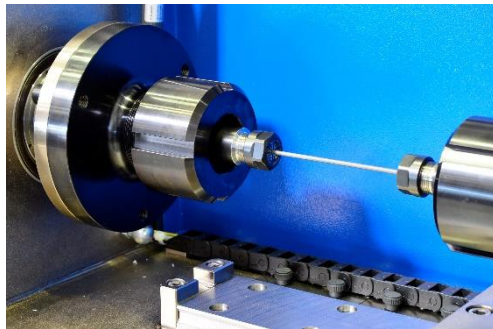




Torsion testing device T-500H



Chuck fixtures for thin wires



Further torsion testers from Hegewald & Peschke: Torsion testing device inspekt T-5000H

