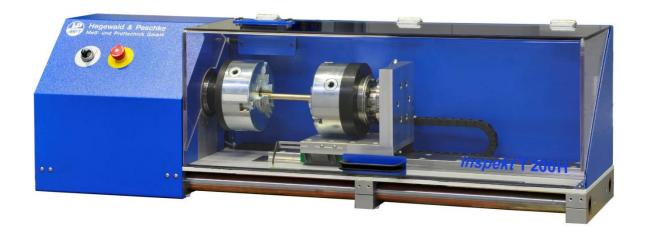


Product Information

Torsion testing devices

with controller





Fields of application

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

- plastic materials, composite materials
- srews, 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, 20ms integration time and a 0,1° angel resolution. The torque sensor will be calibrated by the

The torque sensor will be calibrated by the producer (after 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.

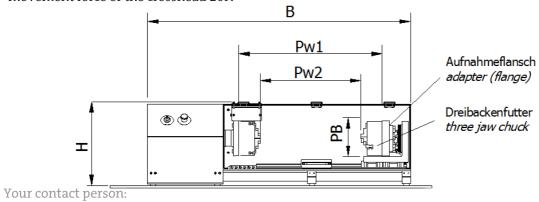
The machine is intended for installation on a table/workbench (to be provided by the customer or optionally available).



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	200Nm	200Nm	200Nm	500Nm
Machine dimensions	W1200 x D340 x H390[mm]	W1200 x D340 x H390[mm]	W1430 x D450 x H550[mm]	W1430 x D450x H550[mm]
Weight*	approx. 105kg	approx. 110kg	approx. 305kg	approx. 280kg
Testing speed	0,05 – 25 turns per minute or with force control up to 200Nm	0,05 – 60 turns per minute or with force control up to 200Nm	0,05 – 25 turns per minute or with force control up to 200Nm	0,05 – 25 turns per minute or with force control up to 500Nm
Max. test chamber length (between flanges) Pw1	670mm	670mm	760mm	720mm
Max. test chamber length (between three-jaw chucks) Pw2	470mm	470mm	560mm	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: 50Hz (standard), data processing internal 2ms, optional: maximum 2 free slots for extension cards			
Optional accessory	Torque sensor (42-030-020 oder 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 20N







Since 1990, Hegewald & Peschke Meß- und Prüftechnik GmbH has been developing, producing and distributing high-quality machines, components and software solutions for material and component testing. The product range includes universal testing machines, hardness testers, component and furniture test stands, micro testing systems, special testing solutions, and different length measuring de-vices for industry and research.

Hegewald & Peschke Meß- und Prüftechnik GmbH, located in Nossen (near Dresden), has several sales agencies all over Germany. Our company offers a quick and reliable customer service and customized solutions for test engineering modernizations.

In the sectors of construction and software development, Hegewald & Peschke MPT GmbH closely co-operates with Fraunhofer-Institutes and universities. These partnerships guarantee that our products are always at a high level and state of the art. Hegewald & Peschke Meß- und Prüftechnik GmbH has been certified ac-cording to ISO 9001 and operates a DAkkS (German calibration service) calibration laboratory for the physical parameters load, length and hardness.



Hegewald und Peschke Meß- und Prüftechnik GmbH Am Gründchen 1 01683 Nossen

Tel.: 035242 445-0 Fax: 035242 445-111

E-Mail: info@hegewald-peschke.de Web: www.hegewald-peschke.de

