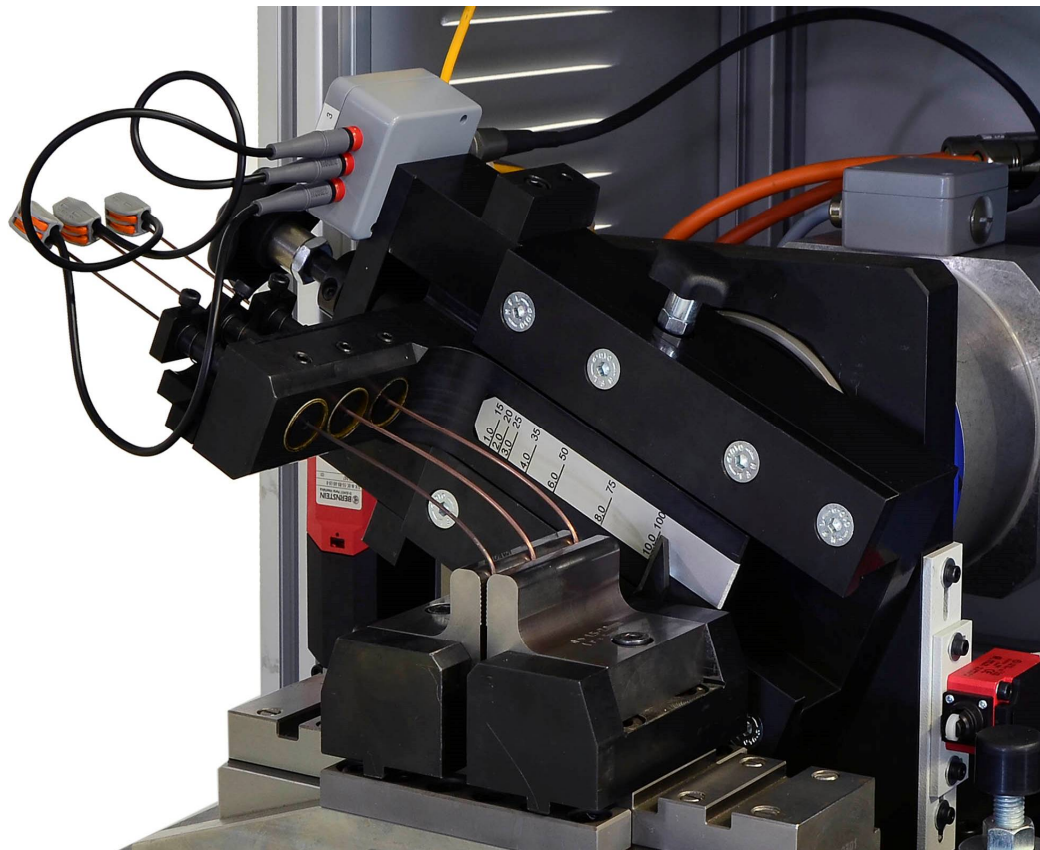


Testing of wires



Universal Testing Machines with special grips

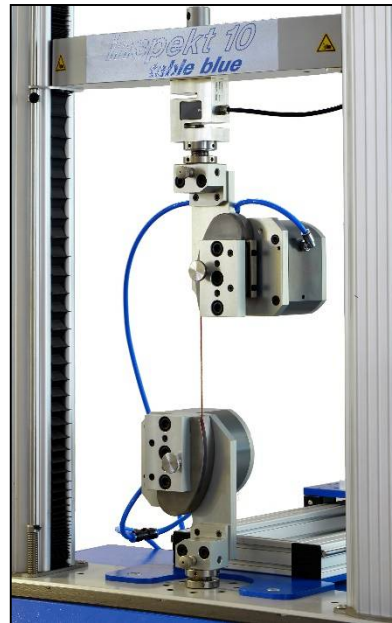


Wedge type grip with clamping jaw holders for the testing of round and flat wires as well as other semi-finished specimens



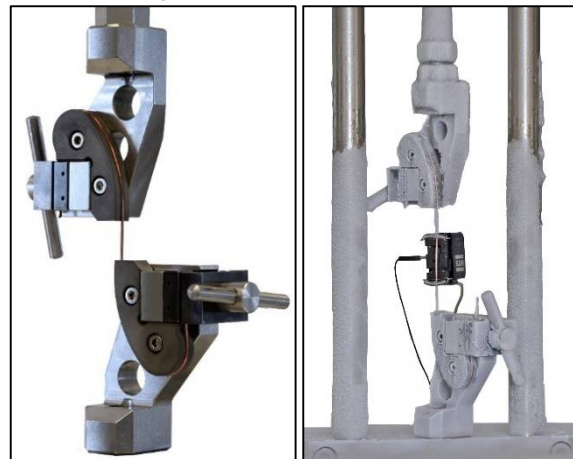
The long design of the clamping jaws allows a soft leading of the clamping force into the specimen, enhancing the tensile test by reducing the stress concentration at the end of the clamping area. It is known that specimen fracture may occur at the clamping jaw, if the cross sectional area of the free length and the clamped specimen is equal. Exactly this effect is prevented by the special jaw design.

Pneumatic rope grip



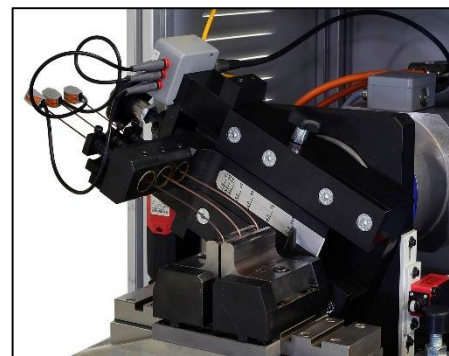
This grip is among others suitable for tensile tests on wires up to 4mm thickness. The clamping force can be reduced by the bollard grip design. This decreases the risk of fractures at the grips significantly.

Enlacement grip for wires



The enlacement clamping device for wires and tapes is designed for tensile tests with specimens up to a maximum load of 1kN. It is suitable for tests in liquid nitrogen down to -196°C.

Bending Fatigue Testing Maschine 180° for wire specimens according to DIN51211 and ISO7801



Technical Data:

Test materials	Wire samples with a diameter between 0.3 - 10.0mm and a max. tensile strength of 2.000MPa
Bending speed	max. 2s per 180° bending (longer intervals can be set)
Dimensions (WxDxH)/ Weight	1030mm x 800mm x 1385mm/ 300kg

Functional principle:

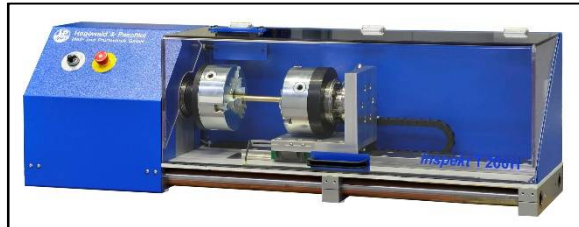
The wire samples are of a defined length. They are bent with a 90° angle to the left and to the right. The angle deviates by max. $\pm 3^\circ$.

The lower end of the wire is clamped into a screw terminal and guided through a pair of bending rolls. The bending rolls are made of special hardened material to allow the testing of wires up to 2,000MPa. The rolls ensure defined bending depending on the wire diameter. The bending rolls can be exchanged.

The upper end of the wire is clamped into a movable, servomotor-driven bending arm. The testing facility is adjustable according to the standard indicated above.

The test station allows the simultaneous testing of up to 3 specimen depending on the wire diameter. Accordingly the test time can be reduced dramatically.

Torsion testing device Inspekt T-200H



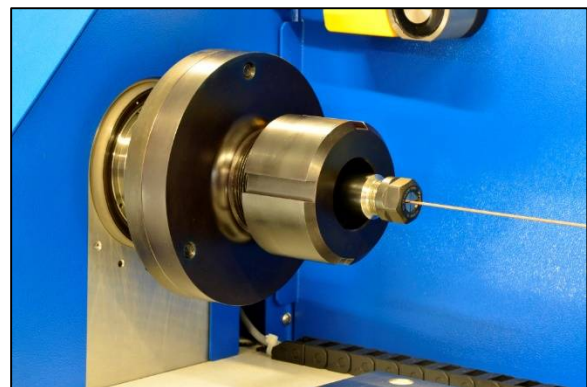
Fields of application:

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

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

Advantages:

- high torsional stiffness and high angular resolution
- electrical overload protection
- variable testing speed
- 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



Technical Data:

Test load	200Nm (alternative 100 – 500Nm possible)
Specimen dimensions	Ø40mm connecting chuck, max. Ø100mm, max. 300mm length
Machine dimensions, weight	WxDxH 1200 x 340 x 390 mm; test room without tools: 500mm ca. 105kg (movement force of the crosshead 20N)
Torque measurement	Measuring range: 1 to 100 % of nominal capacity, Resolution of measurement: +/-180,000 digits at 20ms integration time, 0,1° Resolution of angel, torque sensor will be calibrated through producer (after DIN 51309)
Testing speed: v	Speed 0,05-25 (optional up to 60) turns per minute or with force control up to nominal torque

Your contact person: