

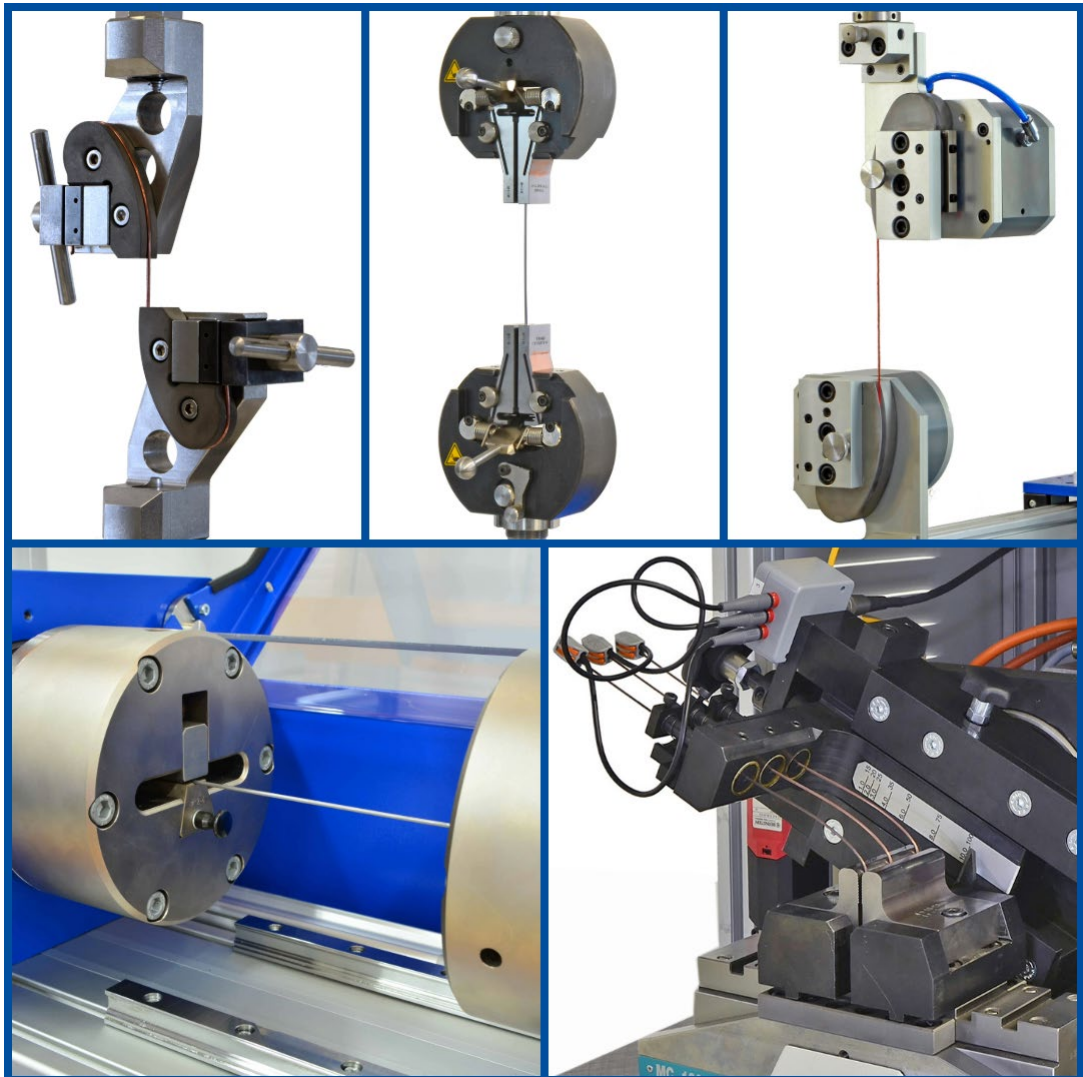


Hegewald & Peschke

Meß- und Prüftechnik GmbH

Application flyer

Testing of wires



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



Universal testing machines for tensile tests on wires

- Tensile test on metallic materials according to EN ISO 6892-1
- Determination of elongation at break and tensile strength according to EN 60851-3 (IEC 60851-3)

Depending on the diameter, material and the tendency of the wires to break at the clamps, the use of special clamping tools is required for reliable clamping.

Wedge type grips with extended clamping jaws

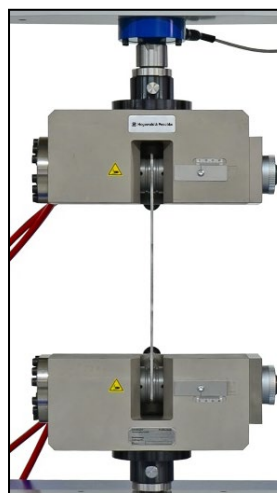


Due to the long design of the clamping jaws, the clamping force is introduced softly into the specimen, thereby reducing the notch effect at the end of the clamping surface. Particularly with specimens that do not have a cross-section reduction between the clamping area and the test cross-section, the fracture position is otherwise much more frequently located directly at the clamping jaw.



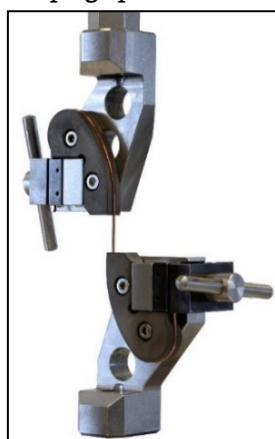
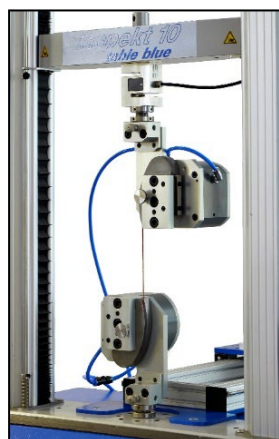
The load reduction curve relieves the load on the specimen and does not require such high clamping forces, significantly reducing the risk of clamp breakage.

Hydraulic grips for wires and stranded wires up to 600 kN

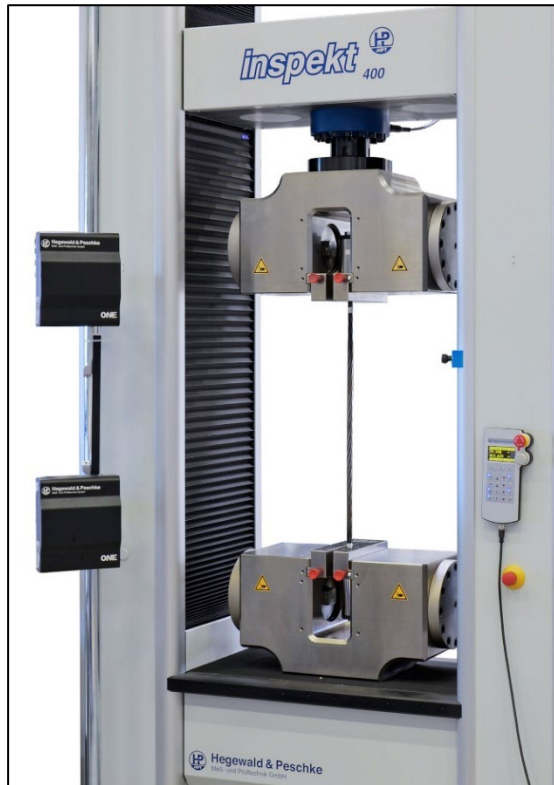


Hydraulic clamping tools enable the wires to be clamped quickly and without slipping. Special clamping jaws are available for gentle clamping of (braided) wire ropes.

Pneumatic or mechanical rope grips

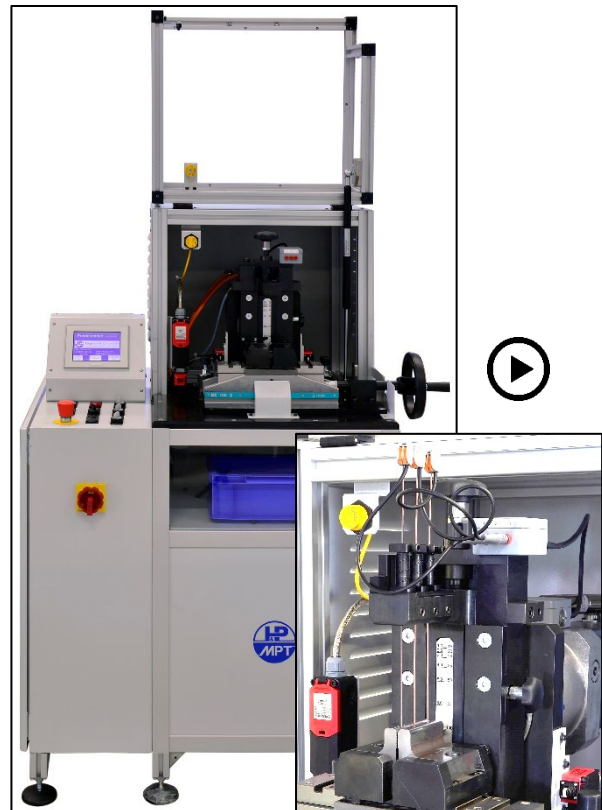


Video extensometer for long wires and steel strands



- Perfect for static tensile tests on tensile strands according to ISO 15630-3 / ASTM A416 / ASTM A1061
- 2-camera video extensometer system for determining the modulus of elasticity and elongation at break
- Measurement of the yield strength according to ASTM A1061
- Specimen break always within the strain measurement range
- No artificial specimen marking required
- Also suitable for twisted tensioning wires
- Digital image correlation enables:
 - Determination of local strains (location and direction resolved)
 - Creation of colour-coded area maps for visualisation of strain distribution

Bending fatigue testing machine 180° for wire specimens according to DIN 51211 and ISO 7801

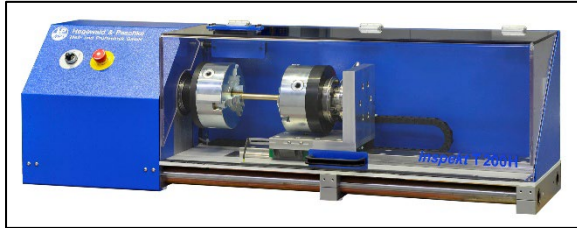


Alternating bending test to determine the formability of cold-formed or cold-formed and heat-treated wires (max. tensile strength 2,000 MPa) by repeatedly bending the wires back and forth in one plane.

Test materials	Wire samples with a diameter between 0.3 - 12.5 mm and a max. tensile strength of 2,200 MPa
Bending speed	max. 1 s per 180° bending (longer intervals can be set)

Torsion testing devices

Torsion testing devices with controller



Torsion testing device 200 Nm

Field 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

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

Various models of torsion tester are available with a maximum torque of between 200 Nm and 5000 Nm.



Torsion testing device 5000 Nm

Torsion testing device TW-500H for tests according to ISO 7800



Field of application:

Simple torsion test on metallic materials according to ISO 7800*

Advantages:

- Compact complete system
 - Fixed work table with integrated control unit
 - Robust industrial control
 - Automatic breakage detection by the control system
 - Indirect torque measurement via motor power
- User-friendly operation via touch panel
 - Simple test configuration
 - Interactive user guidance based on the standard-based test sequence
 - Fast test execution based on templates
 - Export of test results as CSV
- Industrial safety standard
 - Safety door electrically closed and interlocked (PL_d)
 - Safe stop (STO) with open safety door
 - Pneumatic pressure release (PL_c)
- Easy clamping of the wire specimens with optimized specimen holders
- Simple adjustment of the clamping length via scaling in the machine bed