Universal Testing Machines

Machines and Facilities for Product Development and Quality Assurance

Universal Testing Machines
Methodical Component and Materials Testing

Early detection of developing faults in materials or products is essential for the prevention of costly losses in manufacture and claims resulting from faulty products, which can include consequential damages.

By establishing essential parameters for new products at the outset against which materials can be monitored, risks in safety and the resulting possibilities for financial penalties are minimised.

In addition to a standard range of machines for materials testing **TesT** also supplies special models for component testing according to customer specifications.

The associated **TesTController** 850 as well as the suitable software **TesTWinner®** can be found on page 5.

Universal Testing Machine 106

TesTController 850
+ TesTWinner®

Universal Testing Machine 110

We are always at your disposal for personal consultation!

Dealing with forces and torques is dangerous. Therefore, the occupational safety is of prime importance at **TesT**. All universal testing machines by **TesT** will

always be delivered with safety device

and electrical shut-off. All models are provided with safety contacts on the doors and firmly mounted rear panels. Doors and rear panels are made of impact resistant MACROLON® which does not splinter. This corresponds to the requirements of DIN 51233. By means of these measures accidents can be avoided and the relevant safety regulations of the EU are considered. All testing machines by **TesT** are provided with a CE mark and are supplied with the EU (CE) Declaration of conformity.

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Universal Testing Machine 115.600kN with grips for tension testing on fasteners

Universal Testing Machine 112.50kN with wedge grips for tensile testing

Model	F max (kN)	V (mm / min)	Force	Strain	Displacement	Regulation	Supply (V, VA)
106.2kN	2	0-500	**TesT** Force Transducer Class 0,5 DIN ISO EN 7500.1	separate Strain Measurement Devices	incremental Resolution 1µm	analogue, digitally overlaid	230, 30
110.1kN	1	0-500					230, 30
112.2kN	2	0-500					230, 60
112.5kN	5	0-500					230, 30
112.10kN	10	0-500					230, 60
112.20kN	20	0-500					230, 140
112.30kN	30	0-500					230, 210
112.50kN	50	0-500					230, 400
114.100kN	100	0-200					230, 600
114.200kN	200	0-200					230, 600
114.250kN	250	0-100					230, 800
114.300kN	300	0-100					230, 800
114.400kN	400	0-100					230, 1000
114.500kN	500	0-100					230, 1000
114.600kN	600	0-100					230, 1200
Special models and other velocities on request							

Subject to technical changes

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Model series - Measuring ranges - Dimensions

Modell	106	110	112	112	112	113	114	114 / 115
Measuring ranges	2 kN	1 kN	2 kN 5 kN	10 kN 20 kN	30 kN 50 kN	100 kN	200 kN 300 kN	400 kN 500 kN 600 kN
Type	one column	two column	two column	two column	two column	two column	two column	two column

Dimensions in mm

Height	930	570	1360	1370	1380	2685	2685	2798
Depth	520	470	440	440	440	875	875	1071
Width	270	420	695	695	695	1225	1225	1223

Stroke*	700	400	1000	1000	1000	1700	1700	1700
Depth Workspace	230	355	440	440	440	720	720	920
Width Workspace	250	200	450	450	450	625	625	625

*Stroke incl. force sensor, excl. adaptors / grips

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TesT 850 - The intelligent **TesTController** 850 is suitable for controlling an regulation of universal testing machines by **TesT**, torsional testing machines und special testing machines, as well as for data acquisition.

The **TesTController** 850 will be installed inside the side covering of the machine, is maintenance-free and will be connected directly to the machine via the integrated CONTROL Card, for monitoring the safety functions, for controlling and for measurement data acquisition. The **TesTController** is connected to a PC or notebook via a USB 2.0 interface.

Associated software: **TesTWinner®**

TesT Software - Out of our customer's requirements a comprehensive solution for measurement data acquisition and processing has been developed until today:

TesTWinner® - In combination with the **TesTController** 850 this software stands for freely editable testing sequences, the execution of machine controlling and measurement data acquisition. **TesTWinner®** locates and calculates data - according to the requirements of the user. The comfortable administration and combination of diverse sequences, illustrations and evaluations is possible with **TesTWinner®.**

In addition to the three standard testing sequences the open and flexible system also offers free programmability of new testing sequences and calculation via MACRO commands, data export in several file formats and an editor for own protocol designs.

Basic System:

- USB 2.0 interface to a PC or notebook
- 2 x 24-bit A/D converter for strain measurement devices, Sampling rate: > 50 kHz
- 2 x 10-bit A/D converter for processing of additional signals, as external switch signals, temperature, etc.; Sampling rate: > 50 kHz
- 1 x Input for incremental signals for displacement / angle / strain measurement
- Control circuit: > 1 kHz
- **TEDS** automatic calibration of sensors according to IEEE 1451-4, by use of integrated chip

Optional expandable to:

- Up to 6 x A/D converter with 24-bit, > 50 kHz
- Up to 6 x A/D converter with 10-bit, > 50 kHz
- Up to 3 x input for incremental signals
- I/O Interface for communication to other systems, e.g. PLC - controlling of handling robots
- Integrated 32-bit controller "on board", for controlling of up to 3 electro-mechanical drive systems

(Subject to technical changes)

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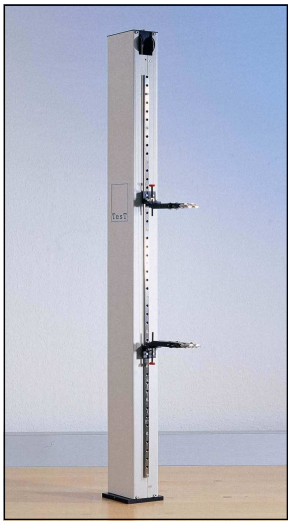
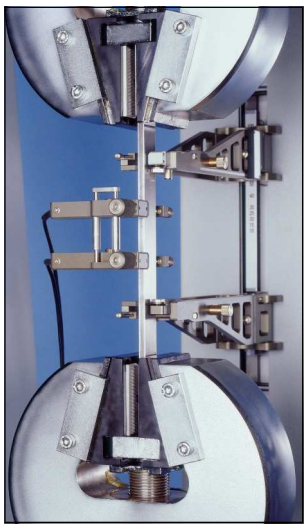
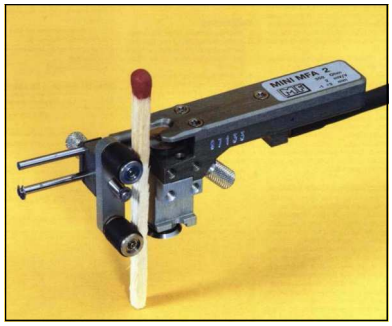


Longitudinal Extensometer

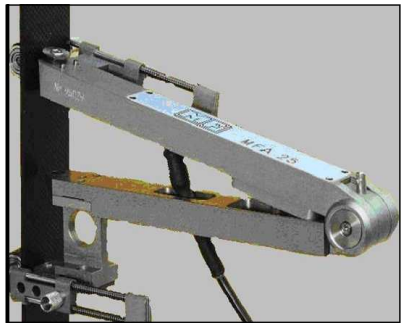


Londitudinal and Transversal Extensometer

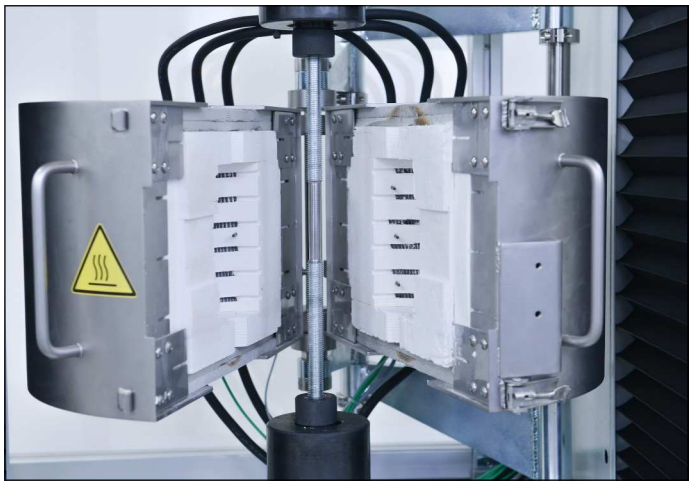
Fully automatic Extensometer



Clamp-on Extensometer Miniature



Clamp-on Extensometer



Thermo Chambers and Kilns for Materials and Component Testing under influence of temperature

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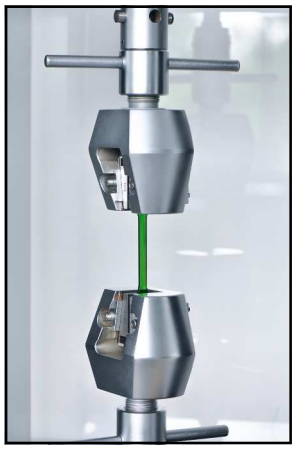
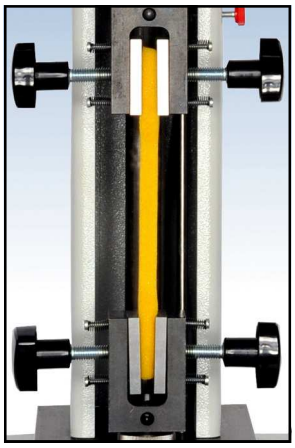
Clamping Devices for Universal Testing Machines

Compression plates



Wedge grips

Wedge grips

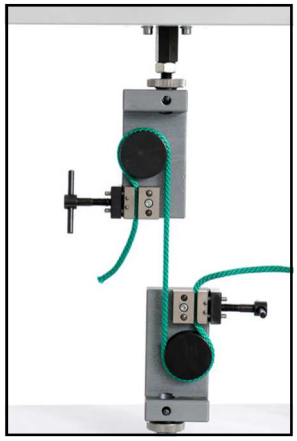


Screw grips

Draw hook, rotating

Eccentric roller grips

Clevises



Rope grips

Hydraulic grips

Component jigs
e.g. for syringes

Bending jigs

Puncture jigs

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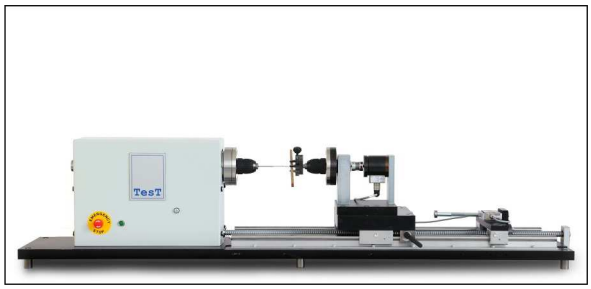
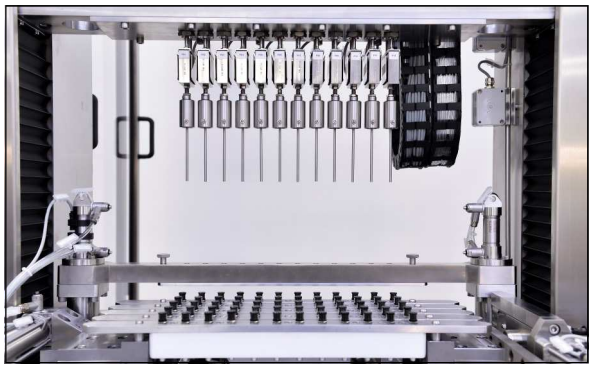
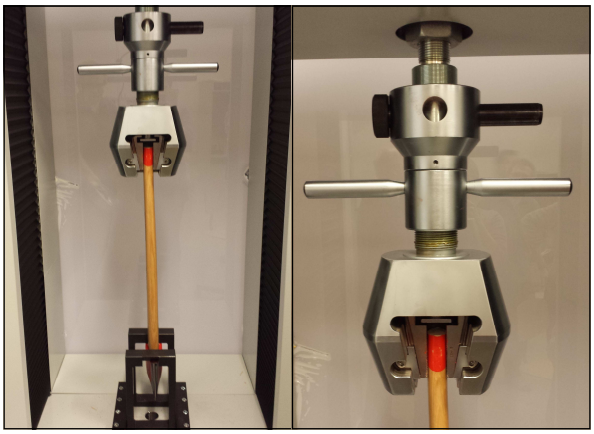
Other Applications by TesT



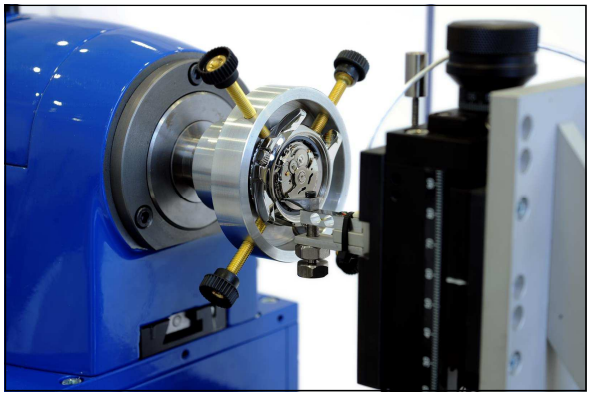
Combined Testing Machine for simultaneous Axial and Torsional Load



Testing on Injection Ampoules (Medical Technology)



Component Testing at Axes and Hammers



Machine for Precision Torsion Testing

Box Compression Testing (Packaging Industry)

TesTCenter for Compression, Tension and Torsion Testing

Fully automated Materials Testing Machine

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