

General Information:

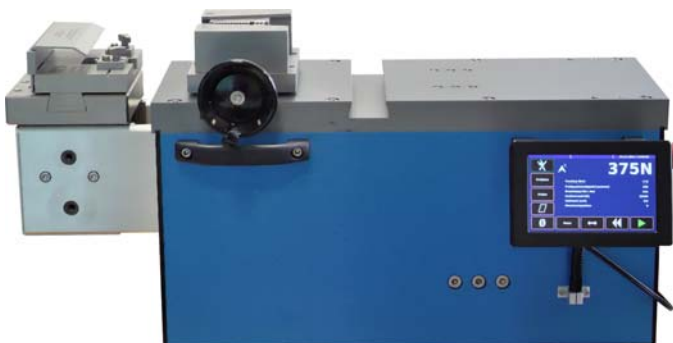
- Compact and easy-to-use test station with automatic motor drive for tension and compression tests, operated via a control unit with large colour touch screen.
- Versatile usable test station e.g. for pull-off tests of crimped, pressed, welded and glued parts as cables with crimped terminals, contact plates, connectors of cable harnesses, for peel test of welded parts as well as for tension and compression tests in materials testing.
- Sophisticated and easy to use electronic control that makes operation easy and simple even for less experienced operators.
- High internal measuring rate and high resolution provides high accuracy and consistently captures even critical peak force readings.
- Motorized drive of the load carriage with adjustable and controlled test speed to ensure an even load on the test object.
- User language selectable: German, English, French, Spanish
- Quick change tool receptions for tool assembly.
- High overload protection of load cell.
- Indication range 0 to 25000 N, Resolution 3 N
- Peak value mode with display of the highest measured force value of a measurement
- Tracking mode with current measured value display
- Adjustable test speed 5-300 mm/min.
- Break Stop function with automatic stop and quick reverse after break of test specimen.
- Preset of test load for non-destructive tests
- Autoprint/autosave function can be activated
- Cycle tests (repeat tests) with an adjustable number of cycles: The load carriage moves between 2 adjustable positions, with an optional adjustable holding time
- Measured value memory
- Test plans can be created for fixed test parameter settings
- Users can be created and saved (with password)
- Password protection for test parameter settings can be activated
- Auto tare at the start of the test can be selected
- Graphical display of the measured values of a measuring series

Model Overview STM:

Type	Indication range [N]	Resolution [N]
25 kN	0- 25000	3



STM 25 kN Basic version without testing tools



STM 25 kN with SW-GA25-32/4Z and ClampWCC 25

Optional Accessories:

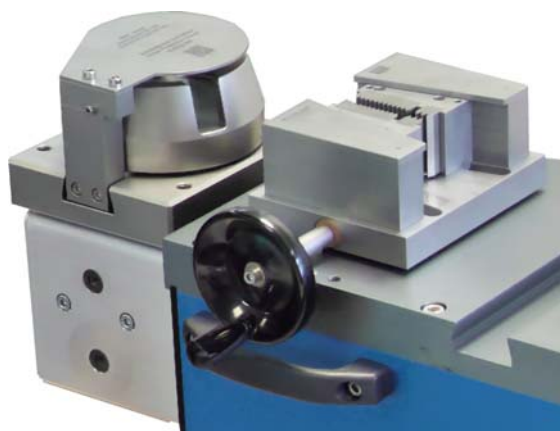
- V24 connecting cable for PC
- V24 connecting cable for serial printer
- KeyTast Interface
- Digital Control System CMS
- Acrylic glass stand for display
- Special test programmes: Cycle Test "Force"
- Customer-specific test programmes and adaptations available on request



STM 25 kN with Clamping Crown SG 151 and Clamp WCC 25



Control Unit



STM 25 kN detail: assembled tools

Technical Specifications:

Model designation: STM 25kN Prüfstation:

Indication range: 0 – 25000 N
 Resolution: 3 N
 Rel. accuracy error: $\leq \pm 0.25\% \pm \text{LSD}$
 (within the measuring range)

Built-in Force Measuring System:

Force Sensor:

DMS-load cell with integrated 16 bit AD-converter.
 Overload protection up to 150% of nominal load of load cell.

Load device:

Dimensions: ca. 840x276x330 mm (WxDxH);
 Weight: ca. 120 kg (without testing tools);
 Construction: durable all metal construction
 Housing: Aluminium;
 Finish: grey / blue, anodised oxide layer
 The completely sealed housing prevents specimen parts and dirt from entering.
 Tool assembly: Quick-change tool receptions on the measuring point and the top plate of the housing
 Drive: BLDC motor with linear drive
 Linear Stroke: ca. 150 mm.
 Test speed: adjustable 5-300 mm/min, controlled test speed, max. tolerance: $\leq \pm 2\%$
 Test force preset: 10-100% of nominal load.
 Break Stop Function: automatic stop and quick reverse (settable).
 Power supply: 36 V DC, external mains adapter.
 Transport handles that can be mounted on both sides (4 pieces)

Control Panel

- All inputs and operations for the measuring system and the drive unit via capacitive touch panel with backlighting.
- Dimensions: 196x180x40 mm, weight: 900 g
- Ports: RS232C, USB, Ethernet
- Touch screen display 7", capacitive
- Operation of tester by keys displayed on touch screen for measuring system and drive unit
- Selectable language for operator guidance: D, E, F, ES
- Set-up menu for internal parameter selection and adjustment of measuring system

Evaluation:

- Operating modes: Tracking Mode and Peak Point Mode;
- Internal update rate: 10000 Hz
- Tare compensation
- Overload indication
- Measured value memory
- Measurement series management
- Graphical representation of the measured values
- Real Time Clock with date and time;
- Single and listing output of measured values via the serial interface
- Adjustable parameters for RS232C

Clamping Crowns SG 150 series

150 mm diameter, incl. pivoting protection cover plate.
Max. capacity: 25 kN
Available with quick-change adapters for mounting on test devices STM 25 kN

The clamping crowns of the 150 series are available in 3 standard versions:

Model SG 150:

8 slots with 5/6/7/8/9/10/11/13 mm width

Model SG 151:

6 slots with 10/12/13/15/15/17 mm width

Model SG 152:

5 slots with 17/19/21/24/25 mm width

Customer-specific special designs with application-specific slot widths available on request.



Special Fixture SW-GA25-32/4Z

Special testing fixture with swage for testing the pull force strength of ultrasonic metal welding connections of wires at contact plates (axial welded cable on weld pad). Swage with 2 adjustable fixing bars for contact parts with weld pads with a width of 12 to 32 mm and a maximum thickness of 4 mm.

Slidable protective cover plate to protect against test specimens parts flying around if the test specimen is destroyed.

Inclusive quick-change adapter for mounting on test devices STM 25 kN.

Max. capacity: 25 kN

Customer-specific special designs with application-specific fixtures for test specimens available on request.

Application examples:



SW-GA25-32/4Z



Wedge Grip WCC 25 kN

Wedge grip with quick-change clamping jaws for clamping cables, flat and round specimens.

Jaws with different profiles and thicknesses can be used in the movable jaw holders of the WCC 25 kN

Depending on the thickness of the clamping jaws used, test objects with a thickness/diameter of 2 to 30 mm can be clamped.

Front and rear insert clamping jaws are available for optimal clamping, especially of cables, which, when using different profiles, enable optimal adaptation to the test object for non-destructive clamping.

Inclusive quick-change adapter for mounting on base plate of test device STM 25 kN

Max. capacity: 25 kN

Front standard insert jaw types (WxH 50x48 mm):

KV-S1: Saw tooth profile

KV-S3: Corrugated profile

KV-S4 (V12-S3): V-shaped jaws 12x2 mm with corrugated profile for round samples

KV-S5 (V16-S3): V-shaped jaws 16x4 mm with corrugated profile for round samples

KV-K: Pyramid (serrated) jaws

Rear standard insert jaws (WxH 15x48 mm)

KH-SZ5: 5 mm straight and sharp tooth profile

Further application-specific clamping jaw designs available on request

