

General Information:

- Compact and easy-to-use test station with great touch panel and automatic motor drive for tension and compression tests.
- 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 as well as for tension and compression tests in materials testing.
- Automatic motor-driven clamping device for cables etc., with adjustable clamping force.
- Indication range 0 to 50 kN, Resolution 5 N
- Measuring system with high accuracy and repeatability.
- Motorized drive with adjustable and controlled test speed
- Safety-System with safety stop function
- Optional quick change tool mounting adapter for tool assembly on measuring point.
- Various assembly possibilities for individual arrangement and ergonomic operation.
- Peak Point Mode with indication of the highest measured force value
- Tracking Mode with indication of current force values.
- Break Stop function with automatic stop and reversal after break of test specimen.
- Preset of test load for non-destructive tests.
- Hold under load function, selectable 60, 120, 180 s.
- 7" color TFT display.
- Operation of measuring system and drive unit via capacitive touch panel.
- Tare compensation
- Overload indication.
- Measured-value memory.
- Single and listing output of measured values via serial port.
- Real time clock for printout with date and time.
- Set-up menu for internal parameter setting and adjustment of measuring system.



STM 50kN in standard version

Model Overview STM:

Type	Indication Range [N]	Resolution [N]
50 kN	0- 50000	5



STM 50kN with Clamping Crown SG 140



STM 50kN with Testing Fixture KU30-21

Clamping Tools and Test Fixtures:

- | | |
|--------------------------------|---|
| Clamping Crown Testing Fixture | SG 140 |
| Cable Clamp | KU30 in various design, customer-specific versions are available also customer- and application-specific clamping jaws for the motor-driven clamping device, adapted to the respective test specimen. |
| Special Fixtures | customer- and application-specific special fixtures for terminals, contact plates and many other test specimen. |

Customer-specific special tools and test fixtures according to samples or schematic drawings on request.



STM 50kN with Clamping Crown SG 140

Technical Specifications:

Test Unit STM:

Capacity:	0 to 50 kN
Dimensions:	ca. 500x800x350 mm (WxDxH).
Weight:	ca. 140 kg.
Construction:	<p> durable all metal construction mechanical overload protection.</p>
Housing:	stainless steel / aluminium
Finish:	silver / blue, anodised oxide layer
Drive:	BLDC motor with linear drive
Linear stroke:	150 mm.
Test speed:	<p> adjustable 5-300 mm/min. controlled test speed, max. tolerance: $\pm 1\%$</p>
Break Stop Function:	automatic stop and reversal after break of test specimen.
Cycle function:	load slide continuously drives between 2 end positions back and forth.
Cable clamping device:	<p> motor-driven clamping device, adjustable clamping force, length of clamping jaws depending on version up to ca. 220 mm possible.</p>
Power supply:	48 V DC, external mains adapter.



Detail: Cable clamping device with inserted cable

Technical Specifications:

Model Designation: STM 50kN

Indication Range:	0 – 50 kN
Resolution:	5 N
Rel. accuracy error:	$\leq \pm 0.25\% \pm \text{LSD}$ (within the measuring range)

Force Measuring System:

Force Transducer:

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

Control Unit:

Dimensions: ca. 168x22x128 mm (WxDxH);

Operation:

Operation of all displayed keys for measuring system and drive control via capacitive touch panel.

Display:

Color TFT display, resolution 800x480, 166x105.4 mm (7").

Evaluation:

Operating Modes: Tracking Mode and Peak Point Mode;
Internal update rate 10000 Hz;
Tare compensation;
Overload indication;
Test load preset for non-destructive tests;
Hold under load function, selectable 60, 120 or 180 s, optional with following destruction of test specimen.
Autoprint function;
Measured value memory for 10000 measured values;
Single and listing output via serial port;
Real time clock for printout with date and time.
Setup Menu internal parameter selection and adjustment of measuring system;
Language selectable: D, E.

Serial Port:

RS232C: selectable parameters: 1200-38400 Baud,
7/8 data bits, 1/2 stop bits,
parity: even/none/odd;



Touch panel of STM 50kN

Optional Accessories:

- Quick change tool mounting adapter for measuring point
- Mini Table Printer DPN 833
- Data Transmission Cable for printer connection
- Data Transmission Cable for PC connection
- Protective Covers
- Mobile base (4 wheeled) with cabinet
- Please see our catalogue for additional accessories.
- Customer-specific test programmes and adaptations available on request