

General Information:

- Space-saving, easy to use Test Station with automatic motor drive, built-in precision load cell and distance measurement device.
- For special applications additional test programmes and accessories are available. The units can be adapted to user-specific test situations and specifications as required.
- The test stations enables pull, press, bend, elongation and break tests in all areas of testing as material testing or production control, quality assurance and incoming inspection.
- A wide range of standard fixing and clamping tools as well as specially designed tools for various applications enable customized adaptations to any particular area of testing.
- Sophisticated electronic control that makes operation easy and simple even for less experienced operators.
- High resolution of 10000 increments.
- Internal measuring rate of 10000 Hz provides high accuracy and consistently captures even critical peak force readings.
- Large and good readable touch screen.
- Default settings and special data can be entered using the touch screen panel.
- RS232C, USB and LAN interface ports
- Adjustable test speed
- Preset of test load for non-destructive tests.
- Autoprint/autosave function can be activated
- Auto tare at the start of the test be selected
- Graphic display of measured force/distance curves
- Cycle tests (repeat tests) with an adjustable number of cycles: The load carriage moves between 2 adjustable positions, with an optional adjustable holding time
- Test program selection for the standard programs and, where applicable, for customer-specific special programs
- 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
- Graphical display of the measured values of a measuring series

Model Overview MTM

Type	Indication Range [N]	Resolution [N]
5	0- 50	0.005
10	0- 100	0.01
25	0- 250	0.02
50	0- 500	0.05
100	0- 1000	0.1
200	0- 2000	0.2
500	0- 5000	0.5
1000	0- 10000	1



Test Station MTM 1000 with SG 90 and SHA-40W/A



MTM 100 with SG 80 and DKS-20/A

Clamping Tools and Test Fixtures:

- | | |
|-----------------------|--|
| Turntable | UDT 100 |
| Clamping Crowns | SG 80, SG 90, SG 140 |
| Quick Action Grippers | KSH-6, KSP-8, SHA-12, SHA-20, SHA-40W |
| Cable Clamps | MK-8, DKS-20, KSS25, KSW 25 |
| Comb Tools | KW 1, KW 2 |
| mm-Bore Gauge | HLL for cable insulation pull-off testing |
| Special fixtures | for tension and peel tests of ultrasonic welded contacts |

Please see our catalogue for additional standard tools and tool specifications.

Customer-specific special tools and test fixtures on request.



MTM Control Unit



MTM 50 Test Station with KSH-6/A and UDT 100

Technical Specifications:

Test Unit MTM:

Capacities: 0- 50/100/250/500/1000/2000 N
Dimensions: ca. 116x520x124 mm (WxDxH).
Weight: ca. 11 kg.

Capacities: 0- 5000/10000 N
Dimensions: ca. 176x636x190 mm (WxDxH).
Weight: ca. 40 kg.

Construction: durable all metal construction.
Housing: aluminum
Finish: anodised oxide layer, titanium grey.
Drive: DC-Motor with precision linear drive
Linear stroke: ca. 150 mm, adjustable limit switches for stroke limitation

Operation: via touch screen of the measuring system control unit.

Test speed: Testers 50 to 2000 N: 5 - 600 mm/min.
 (adjustable) Testers 5 and 10 kN: 5 - 300 mm/min.
 max. tolerance: $\pm 3\%$ F.S.

Test load preset: 10-100% of tester's nominal load.
Break Stop: Automatic stop and reversal after break of test specimen.

Cycle function: The load slide drives between two final positions back and forth continuously.

Power supply: 24 (36) V DC, by external mains adapter.
 All test stations are equipped with quick-change tool mounting adapters for tool and test fixture assembly.

Technical Specifications:

Model Designation: MTM

Indication Ranges: 0 - 50/100/250/500/1000/2000 N
 0 - 5000/10000 N.
Resolution: 10000 increments, see overview
Rel. accuracy error: $\leq \pm 0.25\% \pm \text{LSD}$
 (within the measuring range)

Measuring System MTS:

Force Transducer:

DMS-load measuring cell type MWM 80108 with integrated gain and serial port,
 overload protection 200 to 2000%, depending on range .

Distance Measurement Device:

integrated position sensor, 0-150 mm, resolution 0.01 mm.

Control Unit:

Dimensions: ca. 195x125x40 mm (WxHxD);
weight: ca. 900 g

Display:

Touch screen display 7", capacitive;
 LCD Update rate: minimum 5 Hz.

Operation:

Operation by keys displayed on touch screen panel
 (for measuring system and drive unit)
 Selectable language for operator guidance: D, E, F, ES

Evaluation:

Internal measuring rate: 10000 Hz;
 Operating Modes: Tracking Mode and Peak Point Mode;
 Tare compensation;
 Test load preset for non-destructive tests;
 Graphic display of measured force/distance curves;
 Measured-value memory; Measurement series management;
 Graphical representation of the measured values;
 Single and listing output of measured values;
 Real Time Clock for printout with date and time;
 Set-up menu for internal parameter selection and adjustment of measuring system;
 Special test programme sequences, e. g. with automatic reverse and printout, Hold under load function as well as repeat test.

Interface Ports:

RS232C selectable baud rate, data bits, stop bit, parity;
 Ethernet network interface, RJ45
 USB connection of USB devices

Optional Accessories:

- V24 connecting cable for PC
- KeyTast Interface
- Special test programmes
- Acrylic glass stand for display
- Digital Control System CMS for calibration
- Customer-specific test programmes and adaptations available on request