

## General Information:

- Compact and space saving Test Station for tension and compression tests with digital indication and automatic motor drive.
- Versatile usable Test Station e.g. for pull-off tests of crimped, pressed, soldered and glued parts as cables with crimped terminals, connectors of cable harnesses as well as for insertion and extraction tests of connectors, cable insulation pull-off testing, testing cable ties and shearing tests.
- 10000 Hz measuring rate captures even critical peak force readings.
- Measuring system with high accuracy and repeatability.
- Motorized drive with adjustable and controlled test speed
- Break Stop function with automatic stop and reversal after break of test specimen.
- Preset of test load for non-destructive tests.
- Autoprint Function
- Hold under load function, selectable 60, 120, 180 s.
- Continuous cycle operation.
- Indication and operation of measuring system via durable infrared sensor screen with dot matrix LCD-display.
- Keypad control unit for operation of drive system
- Tare compensation
- Peak Point Mode with indication of the highest measured force value
- Tracking Mode with indication of current force values.
- Measured-value memory.
- Single and listing output of measured values via serial port.
- Real time clock for printout with date and time.
- Overload indication.
- Mechanical overload protection of load cells.
- Serial port for data output.
- Set-up menu for internal parameter setting and adjustment of measuring system.
- Safety-System with safety stop function
- Rugged all metal construction.
- Quick change tool mounting adapters for tool assembly.

## Model Overview ATM:

Type	Indication Range [N]	Resolution [N]
5	0- 50	0.01
10	0- 100	0.02
25	0- 250	0.05
50	0- 500	0.1
100	0- 1000	0.2
200	0- 2000	0.5
500	0- 5000	1
1000	0- 10000	2



ATM 100 with tools SG 80 and DKS-20/A



ATM 50 with tools UDT 100 and MK-8/A

## Clamping Tools and Test Fixtures:

- |                       |   |
|-----------------------|---|
| Turntable             | UDT 100, UDT 100-v                        |
| Clamping Crowns       | SG 80, SG 90                              |
| Quick Action Grippers | KSH-6, KSP-8, SHA-12, SHA-20, SHA-40      |
| Cable Clamps          | MK-8, DKS-20, KSS 25, KSW 25              |
| Plug-in Plate SL-BAT  | for battery cable terminals               |
| Comb Tool             | KW 1, KW 2                                |
| Miniature Grips       | FSEL                                      |
| mm-Bore Gauge         | ML1 for cable insulation pull-off testing |
| Tool Set KBP          | for testing cable tie pistols             |
| Step Cone KBS         | for testing cable ties                    |
| Tool Set KLH          | for insertion and extraction tests        |
- Please see our catalogue for additional standard tools and tool specifications. Customer-specific special tools and test fixtures on request.



ATM 1000 with tools SG 90 and SHA-40/A

### Technical Specifications:

#### **Test Unit ATM:**

<b>Capacities:</b>	0- 50/100/250/500/1000/2000 N
<b>Dimensions:</b>	ca. 116x520x124 mm (WxDxH).
<b>Weight:</b>	ca. 12 kg.
<b>Capacities:</b>	0- 5000/10000 N
<b>Dimensions:</b>	ca. 176x636x190 mm (WxDxH).
<b>Weight:</b>	ca. 40 kg.
<b>Construction:</b>	durable all metal construction.
<b>Housing:</b>	aluminium
<b>Finish:</b>	anodised oxide layer, titanium grey/silver.
<b>Drive:</b>	DC motor with linear drive
<b>Linear stroke:</b>	150 mm.
<b>Test speed:</b>	testers 50 to 2000 N: 5-600 mm/min.
<b>(adjustable)</b>	testers 5 and 10 kN: 5-300 mm/min.
	controlled test speed,
	max. tolerance: $\pm 3\%$ F.S.
<b>Break Stop</b>	
<b>Function:</b>	automatic stop and reversal after break of test specimen.
<b>Test load preset:</b>	10-100% of tester's rated load.
<b>Cycle function:</b>	the load slide continuously drives between 2 end positions back and forth.
<b>Operation:</b>	keypad control unit with On/Off-switch and 6 keys for functions: Start/Stop, Quick Reverse, Pull, Press, Break Stop and Cycle.
<b>Power supply:</b>	24 (36 V) DC, external mains adapter.

All test stations are equipped with quick-change tool mounting adapters for tool and test fixture assembly.

### Technical Specifications:

#### **Model Designation: ATM**

<b>Indication Ranges:</b>	0 - 50/100/250/500/1000/2000 N
	0 - 5000/10000 N.
<b>Resolution:</b>	4000/5000 increments, see overview
<b>Rel. accuracy error:</b>	$\leq \pm 0.25\% \pm \text{LSD}$
	(within the measuring range)

#### **Force Measuring System AMS:**

##### **Force Transducer:**

DMS-load cells type MWM 80108V with integrated AD-converter and RS485 bus. Overload protection 200 to 2000% according to nominal load of load cell.  
 Internal measuring rate: 10000 Hz;

##### **Control Unit:**

Dimensions: ca. 125x105x70 mm (WxDxH);

##### **Display:**

Dot matrix LCD display with LED background lighting, 128x64 pixel, 56.3x38.4 mm.  
 LCD update rate: 5 Hz.

##### **Operation:**

Operation of all displayed keys via infrared sensor screen.  
 Test speed adjustment and set point selection for the drive unit also via the measuring system control unit.

##### **Evaluation:**

Operating Modes: Tracking Mode and Peak Point Mode;  
 Tare compensation;  
 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.  
 Language for printout selectable: D, E.  
 Overload indication;  
 Setup Menu internal parameter selection and adjustment of measuring system;

##### **Serial Port:**

RS232C      selectable parameters: 1200-38400 Baud,  
 7/8 data bits, 1/2 stop bits,  
 parity: even/none/odd;  
 Connector: RJ45.

### Optional Accessories:

- Mini Table Printer DPN 833
- Data Transmission Cable for printer connection
- Data Transmission Cable for PC connection
- Keystast Interface
- Protective Covers
- Please see our catalogue for additional accessories.
- Customer-specific test programmes and adaptations available on request