

MEASURING DEVICES

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1) Joint Strength Testing Device Type APE 1



Design:

Bench model equipped with a quick action cable clamping unit.
Indication by digital display.

Application:

For testing the strength of tamped joint between copper cable and carbon brush.

Testing range:

5-500 N (1-110 lb) or 10-1000 N (2-220 lb)

Value switch able: Newton (N), Kilogram (Kg), Pound (lb)

Technical data:

- Maximum cable diameter: 8 mm
- Minimum cable diameter: 0,3 mm
- Accuracy : 0,2 % +/- 1 digit
- Space requirements: 500 x 250 x 250 mm
- Net weight: 7 kg
- Gross weight: 14 kg

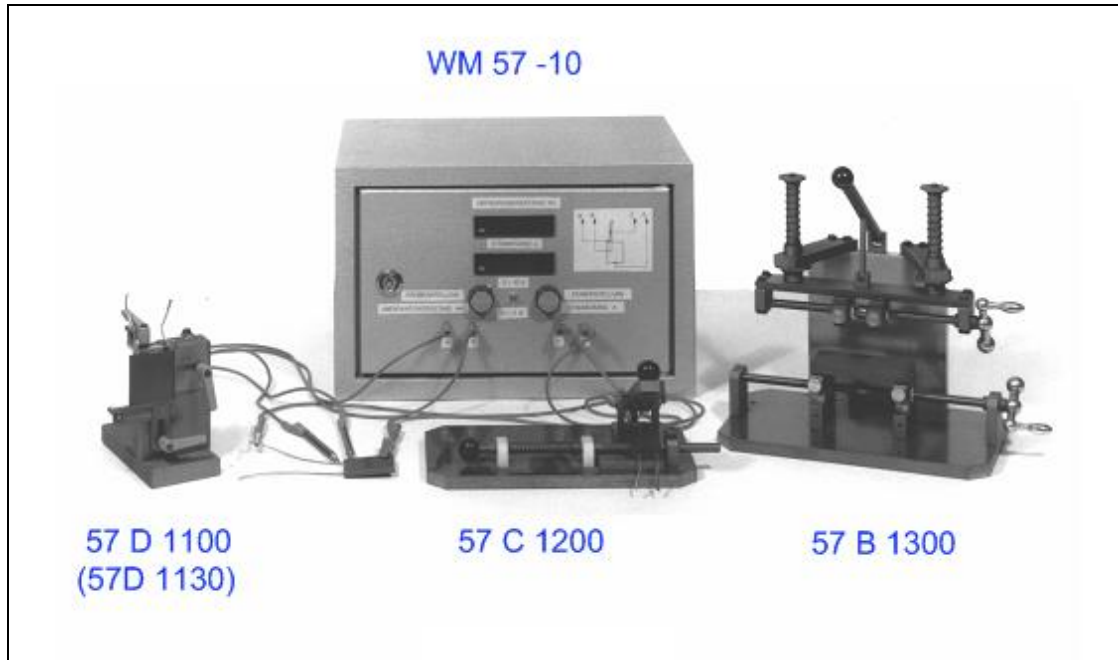
Standard accessories:

- 1 force gauge
- 1 clamping unit
- 1 pulling unit
- 1 power adapter
- 1 documentation

Special accessories

- digital force gauge with other range
- digital force gauge with data transfer - RS-232C, for printer or taking over the measured values in MS-EXCEL

2) Millivolt Drop Testing Device Type WM 57/10 A



Design:

Bench type.

Simple design, easy and quick testing of the millivolt drop possible.

Application:

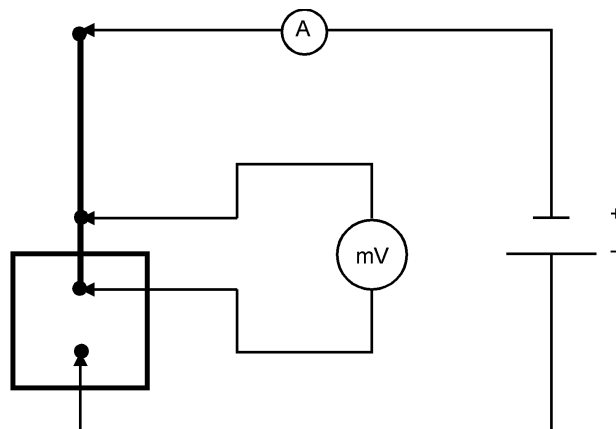
For checking the millivolt drop on ramming contacts.

Range of use:

For all types of carbon brushes.

Stepless variable between 1 and 10 amperes.

Special designs also available for 30, 50 and 60 A.



Capacity: Dependant on the skill of operator
approx. 200 - 600 pcs per hour

Technical data:

- Voltage: 230 V single phase
- Frequency: 50 or 60 cycles
- Testing current: 0 - 10 A
- Space requirement: 500 x 400 x 400 mm (20 x 16 x 16 inch)
- Net weight: approx. 54 kg = 119 lbs
- Gross weight: approx. 78 kg = 172 lbs

Standard accessories:

- 1 digital voltmeter
- 1 digital amperemeter
- 1 coarse set up of current
- 1 fine set up of current
- 2 measuring pins
- 2 clamping units
- 1 adjustable testing device 057 D 01100
- 1 set of tools
- 1 documentation

Special accessories:

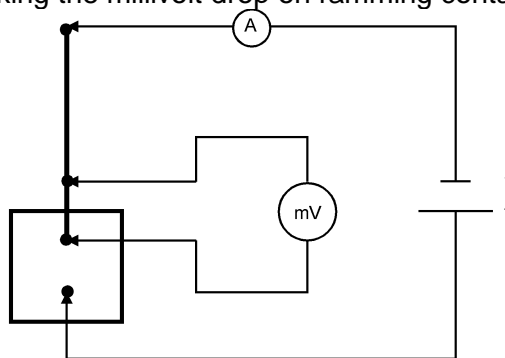
- Adjustable testing device for small brushes 057 D 01130
- Testing device for blocks 057 D 01300
- Testing device for brushes 057 C 01200
- Special design for 30 amperes
- Special design for 50 amperes
- Special design for 60 amperes

3) Automatic Millivolt Drop Testing Machine Type AWM 157/10 A

Design:

Machine stand of welded construction.
Adjustable feed chute with two light beams.
Solid testing device sitting on a pneumatic sliding unit.
Attached electric and pneumatic switch box with a „CPU“- unit.
Coarse and fine adjustment of current (A).
Sorting device for good and bad brushes.
Printer for certificate available (optional).

Application: for checking the millivolt drop on ramming contacts



This Testing Machine Type AWM 157/10 A can run on its own or in connection with an other machine simultaneously.

Range of use:

a = 8 - 50 mm = .315 - 1.969 inch
t = 5 - 40 mm = .197 - 1.575 inch
r = 15 - 60 mm = .591 - 2.362 inch

For carbon brushes with only one ramming contact.

Capacity:

stepless variable between 600 and 1200 brushes per hour

Technical data:

- Voltage:	230 volts, single phase
- Frequency:	50 or 60 cycles
- Testing current:	max 10 A
- Required air pressure:	6 - 8 bar = 86 - 114 PSI
- Air connection:	R 1/4"
- Space requirements:	1200 x 1200 x 1600 mm (48 x 48 x 63 inch)
- Net weight:	approx. 290 kg (638 lbs)
- Gross weight:	approx. 380 kg (836 lbs)

Standard accessories:

- 1 electric switch box
- 1 pneumatic switch box
- 1 compressed air maintenance unit
- 1 loading table
- 1 adjustable feed chute
- 2 light beams with controls
- 1 power supply for testing current 0 - 10 A
- 1 digital amperemeter
- 1 digital millivoltmeter
- 1 coarse set up of current
- 1 fine set up of current
- 1 inserting cylinder
- 1 clamping device with measuring pins
- 1 transport cylinder
- 1 sorting device for good and bad brushes
- 1 control panel
- 1 set interchangeable parts for one type of brush, as per your desire
- 1 set of tools
- 1 documentation

Special accessories:

- Interchangeable parts for additional types of brushes
- Printer
- Printing programme with soft- and hardware
- Cable for printer connection
- Table for printer and paper
- Noise cover for printer
- Service hour meter
- Automatic error detector
- Halogen machine spot
- Fluorescent machine lamp - twin type
- Counting unit with preset counter and selector chute, for filling the finished brushes into two containers, and with alarm lamp and reset

4) Chamfer measuring device Type FM 1



Application :

for measuring the edge chamfer of carbon brushes. or other workpieces.

Technical Data :

- Maximum chamfer: 2,4 mm x 45°
- Minimum chamfer: 0,0 mm
- Minimum workpiece: 2 x 2 x 5 mm

- Space requirements: 120 x 120 x 150 mm
- power supply: Battery
- Net weight: 2 kg