



Together for a safer world

# Accessories

## Magnetic Particle Inspection



# Accessories for Magnetic Particle Inspection

Whether you are looking to add to your range or replace outdated items, we have impressive line-up of MPI accessories and test components designed to satisfy your every inspection need. If you want help choosing the right accessory, please contact us.

## MAGNETIC FLOW/COIL TEST PIECE

For more information, see the Product Data Sheet for this test piece.

### PART NUMBERS

RRP58004, TP4, 5 holes, 200 x 25 x 25 mm: 026T002



## MAGNETIC FIELD TEST BAR

Contains coarse and fine surface and subsurface defects in both directions. Meets or exceeds most industrial and military standards for artificial test specimens; complies with MIL-STD-271.

**PART NUMBER:** 189838



## CURRENT FLOW TEST PIECE

For more information, see the Product Data Sheet for this test piece.

### PART NUMBERS

0-1000A, RRP58004, TP1: 026T001

1000-3000A, RRP58004, TP2: 026T003

3000-5000A, RRP58004, TP3 : 026T004



## AS 5282 TEST RING

A magnetic particle test piece with pre-drilled holes to simulate subsurface defects. For more information, see the Product Data Sheet for this test piece.

**PART NUMBER:** 026T005



## REFERENCE BLOCK TYPE 1 ACCORDING TO EN ISO 9934-2

After rinsing with test liquid, the test block displays the extent to which the test liquid is able to deliver indications. Tested in accordance with EN ISO 9934-2. Supplied with certificate and reference picture. For more information, see the Product Data Sheet for this test block.

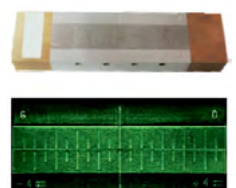
**PART NUMBER:** 026T042 / 135012



## REFERENCE BLOCK TYPE 2

Use the reference block type 2 to evaluate the sensitivity of your magnetic ink. Tested in accordance with EN ISO 9934-2. Supplied with certificate and reference picture. For more information, see the Product Data Sheet for this test block.

**PART NUMBER:** 135013



# Accessories for Magnetic Particle Inspection

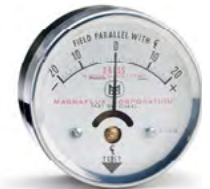
## Field Indicators

### CALIBRATED FIELD INDICATORS

Rugged, pocket-size meters, supplied with certification. For more information, see the Product Data Sheet for this product..

#### PART NUMBERS

20 Gauss: 105645      10 Gauss: 505056



### DISPOSABLE MAGNETIC FIELD INDICATORS

An inexpensive, disposable, non-calibrated magnetic field indicator. No certification. For more information, see the Product Data Sheet for this product.

**PART NUMBER:** 2480



### ASME FIELD INDICATOR

Designed in accordance with ASME Boiler and Pressure Vessel Code Section V, Article 7. For more information, see the Product Data Sheet for this product.

**PART NUMBER:** 008M003



### MAGNETIC INDICATOR STRIPS

These strips help determine the direction of magnetic fields at their precise location. They comply with EN-ISO 9934-1:2001.

#### PART NUMBERS

Type I for general use: 008M004      Type II for aerospace work: 008M005

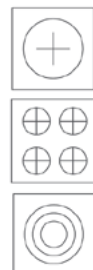


### QUANTITATIVE QUALITY INDICATORS (QQI™)

QQI test pieces are used to verify field direction and relative strength. They also balance multi-directional fields and increase productivity by minimising magnetising shots. For more information, see the Product Data Sheet.

#### PART NUMBERS

KSC-230 S standard QQI: 519630  
KSC-4-230 Miniature QQI: 519631  
KSCT-234 Variable Depth QQI: 519632



# Accessories for Magnetic Particle Inspection

## Monitoring Devices

### QB2-PLUS QUICK BREAK TESTER AND SHOT-TIMER

The QB2-Plus provides a quantitative verification of Quick Break function and measures the duration of the magnetising shot. The QB2-Plus can verify the correct function of AC, HWDC, and FWDC equipment, and verify Quick Break function on 3-phase FWDC units. Shot time and Quick Break voltage are alternately shown on the LCD display after each reading.

**PART NUMBER:** 628989



### DIGITAL CALIBRATION KIT

Our lightweight and fully-portable digital amperage meter is specifically designed for NDT applications and can be used to certify amperage on MPI equipment up to 10,000 Amps. It checks AC, HWDC, 1 Phase FWDC, and 3 Phase FWDC, is accurate to + 3% at level, and meets ASTM E1444 and ANSI Z-540 specifications

**PART NUMBER:** 005M133



### MP-1 RESIDUAL FIELD STRENGTH METER

The MP-1 meter detects residual fields up to 20 A/cm in ferro-magnetic parts and shows polarity. No calibration needed. Comes with a carrying bag and one probe.

**PART NUMBERS**

MP-1 meter: 133010      Calibration block for MP-1: 133011



### FSM-2 MAGNETIC FIELD STRENGTH METER

The FSM-2 is used for tangential measuring of the magnetic field strength in DC and AC fields. A tangential field probe is attached to the workpiece's surface during magnetisation, and the hall sensor measures the voltage change produced by the magnetic field. For more information and part numbers, see the Product Data Sheet for this meter.



### TEST KIT FOR MAGNETIC PARTICLE INSPECTION

One each of the following, supplied in a carry case::

- FSM-2 meter with tangential field probe and mains adapter **OR** MP-1 meter
- Reference block for FSM-2 or MP-1 (optional)
- Disposable, non-calibrated magnetic field indicator
- UV-Intensity meter J 221
- Reference block type 2
- Centrifuge tube

**PART NUMBERS**

MPI test kit with FSM-2 meter: 135057      MPI test kit with MP-1 meter: 135052



# Accessories for Magnetic Particle Inspection

## Magnetic Coils

### L10 ELECTROMAGNETIC COIL

The L10 electromagnetic coil is specifically designed to detect transverse defects in shafts, spindles and similar components. It can inspect parts up to 250 mm (10") diameter. For more information, see the Product Data Sheet for this coil..

**PART NUMBER:** 008C020



### CLOSED MAGNETISING COIL

Number of turns: 3

**PART NUMBERS**

Clearance Ø 200mm: 129001

Ø 350mm: 129002

Ø 500mm: 129003



### HINGED COIL

With easy-to-operate locking handle. Number of turns: 3

**PART NUMBERS**

Clearance Ø 200mm: 129020

Ø 350mm: 129021

Ø 500mm: 129022



### MINDEN TYPE COIL

For testing rail wheels. Needs to be connected to a power pack; we recommend our Ferrotest range, depending on the lengths of the connecting cables and the size of the magnetising coil. Available for wheels disks with rolling circles up to 920 mm (Minden type 1000) and 1,250 mm (Minden type 1300).

**PART NUMBERS**

Minden type 1000: 129710

Minden type 1300: 129713



# Accessories for Magnetic Particle Inspection

## Connectors

### MAGNET ELECTRODES

For connection to high current cables.

#### PART NUMBERS

Type DIX PM 70 with lug connector - for powerpacks with a test current up to 6,000 A: 129102

Magnet cross contact with lug connector (12 pieces required): 129103



### MELT-OFF ELECTRODES

To be fixed at handles and connected to high current cables.

#### PART NUMBERS

Type A (up to 1500 A): 129110    Type B (1500 - 3000 A): 129111    Type C (3100 - 8000 A): 129112

Handles for installation of the melt-off electrodes, consisting of one handle with control cable and one handle without control cable: 056200



## Conductors

### CENTRAL CONDUCTORS

Insulated copper bars for applying circular magnetisation to hollow parts (for example, components that have through-holes or thin walls) or when there is insufficient current available for single-shot magnetisation.

#### PART NUMBERS

Ø 12 mm x 300 mm long: 028T002

Ø 25 mm diameter x 600 mm long: 028T004



### SMALL PARTS ADAPTORS

Our auxiliary adaptors enable our standard bench units to test small parts. Mounted directly to either the head or tail stock, the solid copper adaptors maintain adequate clearance to proper clamping action.

#### PART NUMBERS

Fits our MAG-40 bench units: 030C035

Fits our MAG-50 bench units: 030C009



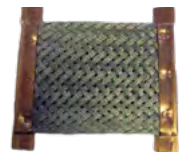
# Accessories for Magnetic Particle Inspection

## Contact Pads and Plates

### CONTACT PADS

Our contact pads and plates prevent arc burn by maintaining proper electrical contact between test parts and contact heads. Available in a variety of sizes, they are manufactured to fit most MPI units.

| Part number | Model         | Area (mm) | Material               |
|-------------|---------------|-----------|------------------------|
| 031C003     | MAG 50        | 145 x 125 | Copper braid, neoprene |
| 031C010     | MAG II/20     | 45 x 65   | Copper braid           |
| 031C012     | MAG II/20F    | 60 x 65   | Brass mesh             |
| 031C016     | MAG 40 series | 100 x 120 | Brass mesh             |
| 031C020     | MAG 50 series | 145 x 125 | Copper braid           |



### CONTACT PLATES

Our copper contact plates are designed for use with stationary crack detection systems or Universal systems types 100, 150, 200, etc. They are made from spirally-inserted copper braid cord with a tinned contact area. For more information and part numbers, see the Product Data Sheet for these products.



### COPPER BRAID

Copper braid to make special contacts. Available in different lengths. For more information and part numbers, see the Product Data Sheet for this product.



### CONTACT BLOCK

Our contact block enables you to test parts that are too large or heavy to process on wet bench units. It clamps between the head and tail stock of your bench, enabling you to attach prods, clamps, split coils, etc.

**PART NUMBER:** 023A007



### STEADY RESTS

Steady-rests support and stabilise long or heavy parts – such as crankshafts – during the MPI inspection process. Our rail and headstock-mounted roller-style steady-rests support a variety of part lengths and make the loading of heavy and long parts easier.

#### PART NUMBERS

Moveable Steady Rest: 20955A3      Headstock Steady Rest: 20978A1



# Accessories for Magnetic Particle Inspection

## Sprayers

### PORTABLE TEST LIQUID PUMP

Complete with container and hand hose. Capacity: 8 litres. Power supply: 3 x 400 V (circuit breaker), 230 V available on request. Output quantity: 25 litres per minute at 3 m throughput height or 40 litres per minute at 2 m throughput height.

**PART NUMBER:** 129410



### MOBILE TEST LIQUID PUMP

Includes light metal drip tray to recollect test liquid to container. Spraying via hand hose. Capacity: 8 litres. Power supply: 3 x 400 V (circuit breaker), 230 V available on request. Output quantity: 25 litres per minute at 3 m throughput height or 40 litres per minute at 2 m throughput height.

**PART NUMBER:** 129415



### STATIONARY TEST LIQUID PUMP

Stainless steel container. Pump with cover that can be easily removed. Spraying via hand hose. Capacity: 40 litres. Power supply: 3 x 400 V (circuit breaker). Output quantity: 25 litres per minute at 8 m throughput height. Applicable standards and specifications: EN 60204-1:2006, DIN EN ISO 9934-3:2002, DIN VDE 0100-410:2007, DIN VDE 0100-540:2012.

**PART NUMBER:** 129420



### WATER-ONLY GUN

Water gun with trigger action for washing parts during the penetrant process. Comes with two interchangeable nozzles to provide a fine or a coarse spray pattern.

**PART NUMBER:** 004G015



### AIR-WATER GUN

A combined air and water spray gun for washing parts during the penetrant process. It has a trigger-controlled water spray.

**PART NUMBER:** 004G003



### MAGNAGLO APPLICATOR

Replacement nozzle for bath applications; easily attaches to a 1/2" bore hose.

**PART NUMBER:** 004G006





# Accessories for Magnetic Particle Inspection

## Sprayers continued

### **POLYSPRAY**

An inexpensive spray unit for applying penetrant.

**PART NUMBER:** 004G004



### **POWDER APPLICATOR**

A lightweight powder "puffer" for applying dry powder developer. Removable cap for easy refilling.

**PART NUMBER:** 008D003



## Centrifuge Tubes

Use our 100 ml Centrifuge tubes to monitor the bath concentration and level of contamination in your magnetic particle baths. They are designed in accordance with ASTM D96-73 standard and conform to ASTM E-709-80.

### **PART NUMBERS**

For visible ink: 044C003

For fluorescent ink: 044C005

Stand only: 044C004

