



The **original MAGNAFLUX accessories of brand TIEDE** presented in this leaflet are certified equipment and additional auxiliaries. Each item has been tested in combination with MAGNAFLUX/TIEDE products and stand its test in the operational praxis.

Operation manuals are provided, as far as necessary.



Test piece according to Prof. Berthold

The test piece consists of a soft iron cylinder divided into 4 90°-segments by inserted non-magnetizable sheets. These inserted sheets with a magnetic resistance like air simulate a cross slot allowing the direction verification of magnetic fields.



Ref.-No. 135005

Calibration standard type 1 incl. reference picture

according to EN ISO 9934-2 annex B (former MTU No. 3)

When using magnetic powder suspensions it is most important to regularly check the indication ability of the test media. Hydro-mechanical strains in pump circulations, discharge of powder particles, too weak or too strong preparation of the media can be reasons for not proper identification of flaws.

After rinsing the calibration block with test liquid the shown crack picture gives information to which extent the used test liquid is able to deliver indications. Delivery incl. certificate with reference picture.



Ref.-No. 135012

Reference standard type 2 incl. reference photo

according to EN ISO 9934-2 annex B

The sensitivity of the magnetic powder ink can be evaluated and realized by the reference block type 2.

Delivery incl. certificate with reference picture.



Illustration at daylight



Shows the test result

Ref.-No. 135013

ASTM-centrifuge

complete with stand

To control the testing agent onto the correct concentration of the magnetic powder in liquid base material. The ASTM centrifuge serves to determine the exact powder portion.



Ref.-No. 135015

Residual field strength meter MP-1

To detect residual fields up to 20 A/cm in ferro-magnetic parts.

- Instrument shows polarity
- Instrument incl. carrying bag and one probe
- no calibration needed

Display	analog
Measuring unit	A/cm
Metering range	0-5 A/cm 0-20 A/cm
Power supply	1,5 V battery (baby)
Size	83 x 122 x 40 mm
Weight	ca. 345 g (incl. 1 probe)



Ref.-No. 133010

Calibration block for MP-1

Calibrated on 5 A/cm.

Ref.-No. 133011

Magnetic field strength meter FSM-2

The Tiede FSM-2 is used for tangential measuring of the magnetic field strength in DC and AC fields. The measurement is effected by a tangential field probe being attached to the work piece's surface during magnetization. Via the hall sensor the electronics measures the voltage change produced by the magnetic field. The FSM-2 is equipped with a RS 232 interface. True R.M.S. of asymmetric magnetic fields, the value retaining function as well as the display background lighting are other useful features. With closed cover, the housing meets protection class Ip65. It is delivered together with mains adapter and tangential field probe.



Display	digital
Measuring unit	kA/m, A/cm, Oe, mT and G
Metering range	+/- 400 A/cm
Power supply	9 V battery (charge level indicator) or mains adapter
Size	165 x 110 x 35 mm
Weight	ca. 550 g (incl. 1 probe)
Probe	Tangential*

Ref.-No. 133033

Tangential field probe for FSM-2 (spare)

Ref.-No. 133039

Axial field probe for FSM-2 (spare)

Ref.-No. 133043

Angled tangential field probe for FSM-2 (spare)

Ref.-No. 133044



Carrying case for FSM-2

Ref.-No. 133038

Reference block for FSM-2 incl. certificate (option)

calibrated on 200 A/cm.

By using work pieces with a long-term stability a daily calibration is not necessary. We can supply on request the calibration standard 200 A/cm as an accessory. Please take into consideration that the measuring unit has to be adjusted to the reference block. This is important for supplementary orders of the reference block for an existing FSM-2.



Ref.-No. 133042

***Option: axial or angled. The FSM-2 can only be calibrated to a one probe; a changing operation between probes is not possible.**

Magnetoscope

Residual field indicator to determine the residual magnetism of work pieces (YES/NO-indication).
The instrument does not require a battery.



Ref.-No. 135001

UV-Intensity meter J 221

To measure the irradiance of UV-lights. By attaching the perforation filter extension of the metering range "B" to approx.

5,000 - 30,000 $\mu\text{W}/\text{cm}^2$.

The sensor can be taken off and can be used for external measurement by wire connection.

Display	analog
Measuring unit	$\mu\text{W}/\text{cm}^2$
Metering rate	A: 0 - 1200 B: 1000 - 6000

Ref.-No. 134001



Luxmeter

The luxmeter is a high-resolution instrument to measure the irradiance of daylight sources or the daylight environment.

The measurement is done by a sensor connected to the instrument by a flexible cable.

Display	digital
Measuring unit	Lux
Metering range	0,01...199,99 $\times 10^3$ automatic switch-over
Power supply	3 x 1,5 V AA battery
Size	140 x 88 x 38 mm
Weight	approx. 160 g (incl. sensor)

Ref.-No. 134056



Test set for magnetic particle inspection

content (in carrying case): 1 Magnetic field strength meter FSM-2 with tangential field probe and mains adapter
1 Reference block for FSM-2 (optional)
1 UV-Intensity meter J 221
1 Magnetoscope
1 Test piece according to Prof. Berthold
1 Reference block according to EN 9934-2
1 ASTM-centrifuge

Bestell-Nr. 135057

Test set with MP-1 (Residual field strength meter)

instead of FSM-2

Ref.-No. 135052

