



**DEUTROFLUX**

Accessories for Magnetic Particle Inspection

**KARL DEUTSCH**

# Accessories for Magnetic Particle Inspection

## Optimized Quality Control

To ensure standard-compliant magnetic particle inspections, various accessories are available to check the individual inspection parameters. Only by regular parameter checks reproducible measurements can be achieved.

Magnetic Particle Inspection		
	Description	Order No.
<b>ASTM Centrifuge Tube</b>	The ASTM Centrifuge Tube is used to check a fresh batch of magnetic particle inspection agent for correct concentration.	Tube 6901.001
		Stand 9804.002
<b>FLUXA® Test Block</b>	The FLUXA® Test Block is used to check the indicating sensitivity of fluorescent magnetic particle inspection agents. It contains a permanent magnet and an artificial crack whose indicated length can be read from the engraved scale and gives thus a statement on the indication sensitivity. The FLUXA® Test Block meets the internationally recognized standard ASTM E 1444.	9803.001
<b>Reference Block 1 (according to EN ISO 9934-2)</b>	The same task as with the FLUXA® Test Block is fulfilled by the Reference Block 1 according to standard EN ISO 9934-2. It is residually magnetized and shows a network of coarse and fine cracks on its surface. Their indication is evaluated.	6904.001
<b>Reference Block 2 (according to EN ISO 9934-2)</b>	The Reference Block 2 is used like the FLUXA® Test Block for checking the indicating sensitivity of the magnetic particle inspection agent.	6904.002
<b>BERTHOLD Testing Device</b>	The BERTHOLD Testing Device is a simple instrument to verify the sufficient indication sensitivity of the whole system. It is placed onto the workpiece, magnetized and sprayed together with it. The indication of the artificial cross-shaped crack is evaluated.	3823.001
<b>UV Intensity Meter</b>	This hand-held instrument for measurement of the intensity of long-wave UV radiation (365 nm) is used to ensure sufficient irradiation. The UV photo sensor is detachable. It features direct reading in W/m <sup>2</sup> , unaffected by visible and shortwave UV light.  Measuring ranges: A: 0 - 1,200 µW/cm <sup>2</sup> , B: 1,000 - 6,000 µW/cm <sup>2</sup> (extended range by using an attenuator)	6903.001
<b>Lux Light Intensity Meter</b>	The Lux Light Intensity Meter is a hand-held instrument for measuring the intensity of visible light. UV portions are suppressed, thus enabling a measurement with switched-on UV lamp (in compliance with the standard ISO 3059). For most convenient handling, the sensor is separated from the gauge. As with all our instruments, this gauge is delivered with a certificate and can also be recertified.  Measuring range: 0.1 - 199,900 Lux (lx) Resolution: 0.1 (within range 0.1 - 199.9 lx)	6905.001



ASTM Centrifuge Tube with Stand



FLUXA® Test Block



Reference Block 1



Reference Block 2



BERTHOLD Testing Device



UV Intensity Meter



Lux Light Intensity Meter

# Accessories for Magnetic Particle Inspection

Magnetic Particle Inspection		
	Description	Order No.
<b>Residual Field Indicator</b>	<p>With the Residual Field Indicator the amount of residual magnetism in a workpiece can be checked and the magnetic poles can be located. The indicator is held with its bottom side on the surface of the workpiece. By moving and rotating the indicator, the maximum field strength is determined.</p> <p>Measuring range: +/- 5 Gauss</p>	3821.001
<b>DEUTROMETER 3873</b>	<p>The DEUTROMETER 3873 measures direct and alternating magnetic fields in the low-frequency range. It features a fluorescent keypad and a large illuminated display for most convenient handling and readability in the darkened testing booth. The DEUTROMETER 3873 complies with EN ISO 9934-3:2002 section 9.3 and is suitable for measurements according to EN ISO 17638 section 5.5.2. Various probes in different configurations and geometries are available.</p> <p>Measuring range: 0 - 80 kA/m Units: mT, A/cm, kA/m, Gauss Additional Accessories: Zero Field Chamber and Reference Magnet</p> <p>(Further information can be found in our leaflet P3873)</p>	3873.001
<b>Zero Field Chamber and Reference Magnet</b>	<p>The Zero Field Chamber is used to shield against external magnetic fields. This enables optimum zero adjustment of the DEUTROMETER 3873.</p> <p>With the Reference Magnet the display accuracy of the DEUTROMETER 3873 is checked.</p>	<p>Zero Field Chamber 3872.701</p> <p>Reference Magnet 3872.601</p>
<b>Test Kit for Magnetic Particle Inspection</b>	<p>A complete compilation of accessories for magnetic particle inspection in a stable and convenient carrying case. Each kit contains one</p> <ul style="list-style-type: none"> <li>• DEUTROMETER 3873 with 90°-probe (incl. cable)</li> <li>• UV Intensity Meter</li> <li>• ASTM Centrifuge Tube (incl. stand)</li> <li>• BERTHOLD Testing Device</li> <li>• Reference Block 1</li> <li>• FLUXA® Test Block</li> <li>• Residual Field Indicator</li> <li>• Sample bottle of FLUXA® magnetic particle agent</li> <li>• Instruction manuals</li> </ul> <p>Test Kit for MPI with paraffin resistant cable</p>	<p>3865.004</p> <p>3865.005</p>
<b>DEUTROFLUX Spray Bottle (refillable)</b>	<p>The DEUTROFLUX Spray Bottle enables a convenient and environmental friendly spraying of the workpiece. By pumping up and down a few times before use, the entire agent can be distributed uniformly.</p> <p>Sizes: Bottle: 310 mm x 120 mm Ø, Handle to nozzle: 210 mm Weight (empty): 460 g Capacity: approx. 1 l Max. pressure: 3 bar</p>	6303.001



Residual Field Indicator



DEUTROMETER 3873



Zero Field Chamber and Reference Magnet



Test Kit for Magnetic Particle Inspection



DEUTROFLUX Spray Bottle

# Stationary and Mobile UV Lamps

Lamps	Description	Order No.
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<b>UV-LED Combi Hand Lamp</b>	<p>Mobile UV-LED combi hand lamp with 4 high-power UV-LEDs and 1 white LED (switchable between UV and white light by button)</p> <p>At 400 mm distance:</p> <ul style="list-style-type: none"> <li>- UV intensity approx. 60 W/m<sup>2</sup> (6,000 μW/cm<sup>2</sup>)</li> <li>- UV light field diameter approx. 120 mm</li> <li>- White light intensity approx. 1,500 Lux</li> </ul> <p>Input power: approx. 15 VA</p>	3815.501
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(Further information can be found in our leaflet P3815)



UV-LED Combi Hand Lamp 3815

<b>Large-Area UV-LED Lamp</b>	<p>Stationary large-area UV-LED lamp with 20 high-power UV-LEDs and 5 high-power white LEDs (switchable between UV and white light by button)</p> <p>At 400 mm distance:</p> <ul style="list-style-type: none"> <li>- UV intensity approx. 40 W/m<sup>2</sup> (4,000 μW/cm<sup>2</sup>)</li> <li>- Illuminated UV area approx. 650 mm x 260 mm</li> <li>- White light intensity approx. 2,500 Lux</li> </ul> <p>Input power: approx. 55 VA</p>	3846.001
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(Further information can be found in our leaflet P3846)



Large-Area UV-LED Lamp 3846

<b>Large-Area UV Lamp</b>	<p>Stationary large-area UV lamp with conventional high-pressure bulb</p> <p>At 400 mm distance:</p> <ul style="list-style-type: none"> <li>- UV intensity approx. 60 W/m<sup>2</sup> (6,000 μW/cm<sup>2</sup>)</li> <li>- Illuminated UV area approx. 800 mm x 300 mm</li> </ul> <p>Input power: approx. 850 VA</p>	3848.002
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(Further information can be found in our leaflet P3848)



Large-Area UV Lamp 3848

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