

BYCOTEST® 103



Ready-to-use Black Magnetic Ink

General description

BYCOTEST® 103 is an oil-based, ready-to-use black ink that gives clear black indications when viewed in daylight.

Applications

Used in conjunction with suitable magnetising equipment, 103 will locate medium-fine surface and slightly subsurface defects in ferrous materials. Typical defects found include shrink cracks, welding defects, grinding cracks, quenching cracks and fatigue cracks.

Composition

103 is a suspension of black magnetic particles in a high-flash, low-odour petroleum distillate.

Benefits

- Ready to use
- High sensitivity
- Clear indications

Typical Properties (not a specification)

Property	103
Form and colour	Black suspension
Flash point	> 93°C (bulk)
SAE sensitivity	6 - 7
Viscosity at 38°C	2.5 mm ² /s
Settlement volume (1 hour)	1.2 - 2.4 ml
Particle size (mean)	0.2 - 2.0 µm
Sulphur content	< 200 ppm
Halogen content	< 200 ppm
Storage temperature	10°C to 30°C
Usage temperature	-10°C to 50°C

Like all Magnaflux materials, 103 is closely controlled to ensure batch-to-batch consistency, optimum process control and inspection reliability.

General Method of Use

- **Clean the component before testing** to reduce the risk of contamination and provide a suitable test surface.
- **If the test surface is a dark colour**, apply a thin coating of a suitable white contrast paint - such as 104A or 104Plus - to provide a better contrasting background.
- **Shake the aerosol can** for 30 - 60 seconds initially to ensure that the ink is mixed thoroughly. You will need to shake the can repeatedly during use.
- **Spray the ink onto all surfaces of the component.** The indications will be formed during the application of a magnetising current.
- **After inspection**, the components should be properly demagnetised before cleaning.

Recommended Products

Product type	Product Name(s)
Precleaning / cleaning	C10, C15
Contrast paints	104A and 104Plus

Specification Compliance

Specification	103
AMS3043 (Aerosols only)	✓
ASME B & PV Code, Sec V	✓
EN ISO 9934-2	✓
GOST R ISO 9934-2-2011	✓

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Availability and Part Number



008A249 (x 12)

Health and Safety

Read the relevant Safety Data Sheet for this product before use. Safety Data Sheets are available on request from your Magnaflux distributor or via the Magnaflux website:

www.eu.magnaflux.com

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