

Vappro VBCI MPTI

Magnetic Particle Testing Ink- Fortified with Vappro VBCI Inhibitor

Conforms to BS 4069 • MIL-STD-2132 • NAVSEA 250-1500-1 • NAVSEA T9074-AS-GIB-010/271 • RoHS Compliant

Passed German VIA (Vapour Inhibition Ability) Test TL 8135-002

Description

Vappro VBCI MPTI Magnetic Particle Ink is a non-destructive testing technique utilized to detect defects or discontinuities (such as cracks) at or near the surface in ferromagnetic metals such as iron, steel and their alloys.

Vappro VBCI MPTI Magnetic Particle allows engineer to easily see that disruption – or hairline fractured cracks and thus identify the defect, it is also referred to as Magnetic Particle Inspection, is a nondestructive examination technique used to detect surface flaws.

Vappro VBCI MPTI detects hairline cracks on Seams, Shrink Cracks, Tears, Laps, Flakes, Welding defects, Grinding cracks, Quenching cracks, Fatigue cracks, etc.

The principle mechanism of the Vappro VBCI MPTI is that the specimen is magnetized to produce magnetic lines of force, or flux, in the material. If these lines of force meet a discontinuity, such as a crack, secondary magnetic poles are created at the faces of the crack. Where these secondary magnetic fields appear at the surface of the metal, they can be revealed by applying magnetic particles, as a powder, or in a liquid suspension, to the surface. The particles are attracted to the flux leakage and clump round the flaw, making it visible. The particles may be black, or coated with a fluorescent dye to increase their visibility. The magnetic flux lines should be at right angles to a flaw to give the best indication, as this creates maximum flux leakage. This governs the choice of a suitable magnetizing technique. Often, more than one technique must be used to give a complete inspection.

A flaw attracts more particles if it cuts more magnetic lines of force, so the ability to show a flaw depends on the depth of the flaw, the angle of the flaw to the lines of force, and the magnetic field strength induced during magnetization.







Features & Benefits

- Conforms to BS 4069
- RoHs Compliant
- Fortified with Vappro VBCI Corrosion Inhibitors to combat crevice corrosion.
- Inspect a wide range of components without fear of corrosion or specification non-conformance
- Does not contain any ozone depleting substances
- Inspect in all conditions without the need for darkness or UV lights
- Economical
- Ease of application- The visible particles come in a convenient, aerosol format to be easily carried and used in the field
- Does not contain any hazardous substance as mentioned in Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE)
- Very low toxicity and low odor

For more detailed information, please email to nelsoncheng@vapprovbci.com or info@vapprovbci.com

RoHS

Magna

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Applications

- Detecting fine and medium discontinuities or hairline cracks
- Field testing
- Spot inspections
- In-service inspections
- Machined parts
- Light surfaces
- Difficult to reach areas

