



FERROMOR® ND5, ND7 & ND8

COLOUR CONTRAST DRY MAGNETIC POWDERS

1 Description

The Ferromor® ND is a range of vividly colored magnetic powders that provide excellent color contrast against the test substrate, as well as good definition due to their particle size.

Dry magnetic powders are commonly used for the in-situ inspection of large components such as castings or welds where magnetization is also carried out by portable means.

Although not as sensitive as oil or water based wet method products such as Lumor® or Supramor®, dry powders offer a convenient and easy to use alternative method of magnetic particle inspection.

Conformances

- ✓ ASME Boiler & Vessel Code, Section V Article 7
- ✓ ASTM E1444
- ✓ SAE AMS 3040

Ask your Chemetall representative for a complete list of approvals

2 Physical and chemical properties

| Property | ND5 | ND7 | ND8 | Unit |
|---------------------------|---------|---------|---------|-------|
| Color | Grey | Red | Yellow | |
| Particle size (mean) | | 90 | | µm |
| Bulk density at 20°C | 2.8 | 2.8 | 2.5 | kg/l |
| Surface temperature limit | 180/350 | 180/350 | 300/575 | °C/°F |

These are typical values only and do not constitute a specification.

3 Method of Use

Heavy deposits of grease, rust, scale and paint should be removed prior to use. The surface of the components to be inspected should be cleaned prior to testing as any contamination on the component can mask any indications and contaminate the magnetic particles.

Surface temperature should be between 0°C (30°F) and the limit stated in chapter 2.

Components are magnetized whilst Ferromor® ND5, ND7 or ND8 is applied to the test area, normally by dusting or puffing immediately prior to and during magnetization. Application of Ferromor® ND5, ND7 or ND8 powder should cease before the magnetization is switched off. Defects will show up as well-defined colored indications and inspection should take place in good white light of at least 500 lx (refer to the controlling specification for levels of ambient light acceptable for inspection).

4 Effects on materials

When Ferromor® ND5, ND7 or ND8 is used in the prescribed manner, no significant corrosion will occur on ferrous materials.

5 Storage

Store in a cool, dry place, with protection from freezing conditions. Shelf life of Ferromor® ND5, ND7 and ND8 is 60 months.

6 Labor and environmental protection

Before operating the process described it is important that this complete document, together with any relevant Safety Data Sheets, be read and understood.

All local and national regulations on the transport, storage, use and waste treatment of chemicals in concentrated or diluted form and as working solutions must be obeyed.

7 General information

Chemetall supplies a wide range of chemical products and associated equipment for cleaning, descaling, paint and carbon removal, metal working and protection and non-destructive testing. Sales Executives are available to advice on specific problems and applications.

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