

ARDROX[®]

Ardrox 8903W

Contrast aid paint for magnetic flaw detection processes

Scope

ARDROX 8903W is a suspension of a white pigment in a resin base, which utilises a fast drying, flammable solvent (non-chlorinated) system to facilitate speed and ease of application.

ARDROX 8903W is used in conjunction with the ARDROX black magnetic particle inspection processes. It provides an excellent contrasting white background when dark steels are being tested.

ARDROX 8903W provides a matt finish, free from reflections, which assists the viewing of defects. The smooth surface finish provided by this product allows the magnetic ink to remain mobile on the surface for longer, thus assisting the detection of fine defects.

ARDROX 8903W has been Type Tested in accordance to the DIN EN ISO Standard 9934 Part 2.

Method of use

The metal surface is first cleaned to remove rust, scale, paint or other contaminants. If water is used in the process, ensure the component is dried. The final cleaning operation should be to degrease the surface using ARDROX 9PR5, then allow it to flash dry.

ARDROX 8903W is then sprayed directly from an aerosol (ensure the aerosol is thoroughly shaken to disperse all settled white pigment – agitator balls are present in the aerosol to aid dispersion). The spare actuator button in the aerosol cap may be used to obtain an alternative spray pattern.

In the case of bulk material, it is essential to shake the container thoroughly immediately prior to use, then it may be applied by the use of any spray gun system to obtain a uniform white coating. Alternatively, the product may be applied by brush, but this method is more likely to produce uneven coverage.

The product should be applied in order to produce an even, thin coating over the surface being inspected. The coating will be dry almost immediately and the appropriate magnetising mode can be used to produce the requisite amount of magnetic flux in the component.

Where current flow or “prod” techniques are used, ensure that the contact area is not coated with ARDROX 8903W since it will act as an electrical insulator. If necessary, clean those areas with ARDROX 9PR5 prior to magnetisation.

Coatings of ARDROX 8903W are not affected by the grades of kerosene commonly used as carriers for magnetic inks.

The equipment required to produce magnetic flux in the component can vary from small, hand-held units to large, purpose-built, lathe style benches.

When the inspection has been completed, ARDROX 8903W is removed with ARDROX 9PR5 or ARDROX PR1. NOTE: The surface roughness will affect the ease of removal.

Effects on materials

When ARDROX 8903W is used in the prescribed manner, no significant corrosion is likely to be encountered on any ferromagnetic materials. The product will degrade the majority of plastics and rubbers.

Intending users are advised to check the compatibility of ARDROX 8903W with any non-metallic materials that the product may come in contact with, before use.

Technical information

Appearance: Fine dispersion of a white pigment in a colourless solvent.
Density: 1.10 g/ml at 21°C.
Flash Point: -18°C (Closed Cup).

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

Store at ambient temperature, in a cool, dry place away from direct sunlight or other sources of heat.

Equipment materials

Equipment/tanks should be constructed of stainless steel.

Safety guidance

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

General information

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

Labour and environmental protection

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.

Further specific information on the products can be found in the EC Safety Data Sheets supplied. The user should also pay strict attention to information and hazard symbols shown on product labels.

Waste disposal

All waste waters must be treated in accordance with national legislation and local regulations prior to discharge to the sewer.

Aml Feb 2006