

CP-1 CONTRAST PAINT

Magnetic Particle Process



PRODUCT INFORMATION

Description: CP-1 Contrast Paint improves the performance and reliability of magnetic particle inspection under conditions of ordinary, white light.

CP-1 Contrast Paint provides a high contrast background for interpreting magnetic particle indications. By applying white, CP-1 Contrast Paint to a part before magnetic particle inspection, indications will show more clearly against a white background and be easier to interpret. Once the inspection is completed, CP-1 Contrast Paint is easy to remove.

A major advantage of conventional fluorescent magnetic particle inspection is that flaw indications appear bright yellow-green, or, sometimes, orange-red, against a dark background. However, fluorescent magnetic particles cannot always be used, particularly in the field, where darkened inspection booths are unavailable, and where black lights do not always work.

CP-1 Contrast Paint enhances the visibility of black or red-brown magnetic particles under white light conditions. It is particularly useful when the color of the surface being inspected approaches the color of the dark magnetic particles.

Companion Materials: Black Oxide No. 1 (complies with AMS-3041, AMS-3043, ASTM-E-709, and ASTM-E-1444)

Container Sizes: aerosol cans
one-gallon cans

Basic Instructions: In order to avoid loss of sensitivity, CP-1 Contrast Paint must be applied in a layer no thicker than fifty microns. (When applied by aerosol spray, the paint layer is typically less than 15 microns thick.)

CP-1 does not conduct electricity. Therefore, take care to avoid coating the points at which electrical contact will be made during magnetization.

In applications where magnetization does not require electrical contact, such as when using a yoke electromagnet, a coil or similar device, paint on electrical surfaces is not critical. However, paint residue on electrical surfaces, such as wire terminals and plugs, should be removed following inspection and before putting an inspected part in service.

Application:

1. Clean the surfaces to be tested. Sherwin Incorporated DR-62 Cleaner is a good solvent to use for cleaning; it evaporates readily and completely.
2. Apply a thin layer of CP-1 Contrast Paint to a clean, dry surface. Paint thickness should not exceed fifty microns.
3. Allow the coating to dry. Drying rate depends on temperature and humidity.
4. If applicable, remove paint from electrical contact points.
5. Perform magnetic particle test in the normal way.
6. Examine flaw indications on test surface in diffuse, white light. A minimum intensity of 1000 lux (100 ftc) is suggested, as per ASTM-E-1444

Removal: CP-1 Contrast Paint is a strippable coating. If required after completing inspection, CP-1 may be peeled from smooth surfaces. Brushing will aid in removing CP-1 from rougher surfaces. On difficult surfaces, a solvent such as Sherwin Incorporated's DR-62 may be required.

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PRECAUTIONARY INFORMATION

CP-1 Contrast Paint poses no unusual hazards other than those normally associated with paint materials. Read warning and precautionary information on the label. Read the Material Safety Data Sheet before using. CP-1 Contrast Paint is flammable.

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