SKL-WP2

Water-Washable Visible Penetrant

SPOTCHECK® SKL-WP2 is a water-washable visible penetrant designed for large surface areas and rough surfaces where excess penetrant would be difficult to remove with a solvent cleaner or emulsifier. It can be removed with a water spray, either manually or with an automated process.

SKL-WP2 produces a visible red color contrast for discontinuity identification, and it has outstanding penetrating characteristics.

BENEFITS

Dependable and convenient to use

- Easy to carry and use in the field with the convenient aerosol cans which are carefully designed for consistent, even coverage and maximum test area coverage
- Use in all conditions without the need for darkness or UV lights
- Quickly and completely covers the entire test surface due to high surface wetting

Maximum indication detection

- Produces strong, vibrant indications thanks to the bright, vibrant red color, especially when used with SKD-S2 solvent-based developer
- Wide application versatility
- Inspect a wide range of components without fear of corrosion or specification non-conformance
- Meets AMS 2644 and is NDT-approved for professional industrial applications
- Reduced processing cost per part due to excellent washability, which is especially useful for large parts and cast components

FEATURES

- Outstanding penetrating characteristics
- Easy water-wash removal
- Vivid high-contrast color
- Superior flaw resolution
- Excellent reliability
- Wide range of applications
- Excellent controlled washability over a wide temperature range and variable dwell times.

SPECIFICATION COMPLIANCE

- AMS2644
- ASME BPVC-V
- ASTM D129
- ASTM E165/E165M
- ASTM E1417/E1417M
- EN ISO 3452-1
- EN ISO 3452-2 (Sensitivity Level 2)
- MIL-STD-2132D

SKL-WP2

APPLICATIONS

Defect location: open to surface

Ideal for:

- A production environment where many parts are inspected daily.
- Castings
- Forgings
- Welds
- Pressure vessels
- Tubular goods
- General metal work

Ideal for:

- Cracks
- Leaks

NOTE: we do not recommend SKL-WP2 for inspecting plastic materials, as it may stain, soften or even dissolve the base material under test.

COMPOSITION

A blend of petroleum distillates, non-ionic surfactants and an oil-soluble organic red dye.

PRODUCT PROPERTIES

Form and colour	Red liquid
AMS 2644 class	Type 2, Method A/C
Flash point	> 93°C (bulk product)
Density	0.88 g/cm^3
Viscosity	8.0 mm^2/s
Sulphur content	< 300 ppm
Chloride content	< 300 ppm
Corrosion	Meets AMS 2644

Like all Magnaflux materials, our visible penetrants are closely controlled to ensure batch-to-batch consistency, optimum process control and inspection reliability.

USER RECOMMENDATIONS

NDT Method	Penetrant Testing, Visible
Storage temperature	10°C to 30°C
Usage temperature	5°C to 55°C (bulk) -5°C to 50°C (aerosol)
Coverage	20 - 30m^2 per litre 10 - 15m^2 per aerosol
Cleaner/remover	SKC-S
Solvent-based developer	SKD-S2
Water-based developer	ZP-5B
Accessories	Reference test block (part no. 070C001)

SKL-WP2

INSTRUCTIONS FOR USE

Ensure test part is clean and dry, and free from oil, grease and other contaminants.

Apply penetrant by immersion dip, brush, flow on, conventional or electrostatic spray. Cover the test area completely.

Allow penetration time. Minimum penetration time is 2 to 5 minutes, with 10 minutes being adequate for most situations. Lower temperatures thicken the penetrant and require longer penetration times.

Spray the component with clean water at 10°C to 40°C, or wipe with a lint-free cloth dampened with our SKC-S cleaner. Once clean, the component should be dried before a developer is applied.

Apply a thin layer of developer* to the surface and allow a minimum of 10 minutes development time before inspecting the component under white light. Indications will appear dark red against the white developer background.

* A developer is used to maximise sensitivity and provide a white contrasting background. Two types of developer can be used:

Solvent-based: quick-drying materials which are applied by spraying. The component under test must be dry before developer is applied.

Water-based (aqueous): can be applied by dipping or spraying. To maximise penetrant sensitivity, parts should only be exposed to aqueous developers for short periods of time. The component must be dried before inspection.

Developer residue can be removed either by wiping with a cloth or by a water and detergent wash. Penetrant residues can be removed by vapour degreasing or solvent soak.

Pre-clean component with cleaner SKC-S.

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Apply penetrant SKL-WP2 to the clean component and allow contact time.

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Use SKC-S or spray the component with water to remove excess penetrant.

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Dry component, apply developer (SKD-S2 or ZP-5B) and inspect.

PACKAGING AND PART NUMBERS

008A163
(x 10)

055C071
(x 4)

055C072

HEALTH AND SAFETY

Review all relevant health and safety information before using this product. For complete health and safety information, refer to the Safety Data Sheets, which are available at **www.magnaflux.eu**.