

# SPOTCHECK SKL-SP2 SKL-WP2 SK-3 KIT



## RED PENETRANTS

Penetrant	Description	Composition	Benefits
SKL-SP2	Solvent-removable (post-emulsifiable)	A blend of petroleum distillates, plasticiser and an oil-soluble organic red dye.	Broad range of applications.
SKL-WP2	Water-washable and solvent-removable	A blend of petroleum distillates, non-ionic surfactants and an oil-soluble organic red dye.	Excellent controlled washability over a wide temperature range and variable dwell times.
SK-3 Penetrant Inspection Kit	<p>The SK-3 Kit is a portable visible penetrant inspection kit that includes the following:</p> <ul style="list-style-type: none"> <li>• 2 x 400 ml aerosol cans of SKL-SP2 penetrant</li> <li>• 3 x 400 ml aerosol cans of SKC-S cleaner</li> <li>• 3 x 400 ml aerosol cans of SKD-S2 developer</li> <li>• 1 cloth</li> <li>• 1 set of instructions</li> <li>• 1 portable carrying case</li> </ul>		

### General Description

Our Spotcheck red colour-contrast penetrants offer maximum reliability in locating surface-open flaws and defects. They exhibit outstanding penetrating characteristics, producing vivid red indications of flaws which can easily be seen with the naked eye.

### Applications

Our red penetrants are used throughout industry wherever a visible penetrant inspection system is suitable for detecting surface defects. Typical applications include castings, forgings, leak testing, welds and general metal work.

The penetrants can also be used on non-porous ceramics and similar materials. However, we do not recommend them for inspecting plastic materials, as they may stain, soften or even dissolve the base material under test.

### Typical Properties (not a specification)

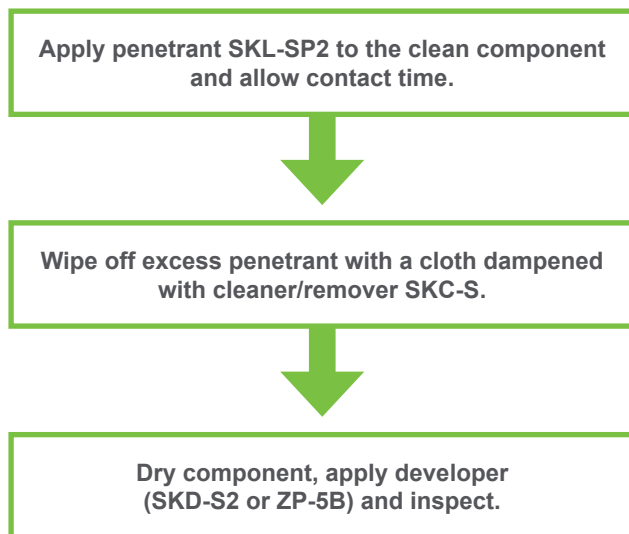
Property	SKL-SP2	SKL-WP2
Colour	Dark red	Dark red
Flash point	> 93°C (bulk product)	> 93°C (bulk product)
Density	0.85 g/cm <sup>3</sup>	0.88 g/cm <sup>3</sup>
Viscosity	3.8 mm <sup>2</sup> /s	8.0 mm <sup>2</sup> /s
Sulphur content	< 300 ppm	< 300 ppm
Chloride content	< 300 ppm	< 300 ppm
Corrosion	Meets AMS 2644	Meets AMS 2644
AMS 2644 class	Type 2 Method B, C, D	Type 2 Method A, C
Storage temperature	10°C - 50°C	10°C - 50°C
Usage temperature	Bulk: 2 °C - 65 °C. Aerosol: < 50°C	
Coverage	One aerosol covers approx. 12 -16 m <sup>2</sup> . One litre covers approx. 30 - 40 m <sup>2</sup> .	

# SPOTCHECK SKL-SP2, SKL-WP2, SK-3 KIT

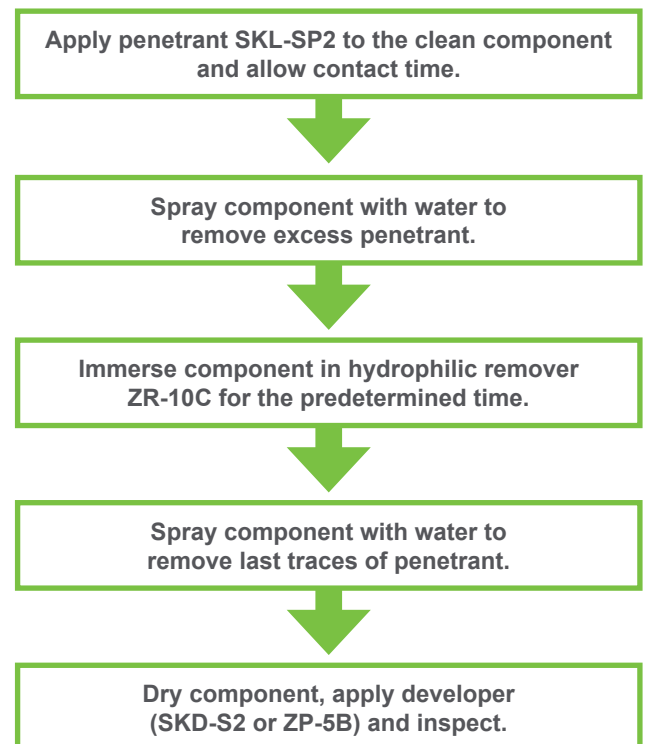
## General Method of Use

### SKL-SP2

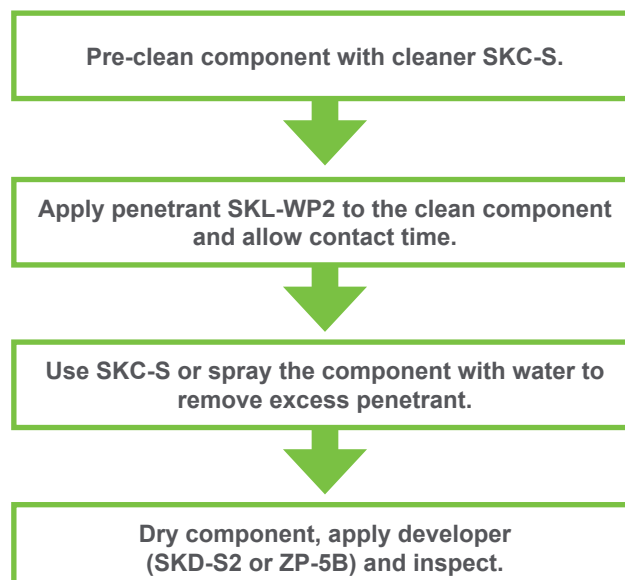
#### Solvent wipe method



#### Hydrophilic method



### SKL-WP2



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## General Method of 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 a minimum penetration time of 2 - 5 minutes. 10 minutes should be adequate for most situations, however, lower temperatures will thicken the penetrant and require a longer penetration time.

### Remove excess penetrant

- **SKL-SP2:** use a solvent wipe or by the hydrophilic remover method (see previous page).
- **SKL-WP2:** spray the component with clean water at 10°C - 40°C, or wipe with a lint-free cloth dampened with our SKC-S cleaner.

Once clean, **dry the component** should before applying a developer.

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. There are two types:

- **Solvent-based:** quick-drying materials which you apply by spraying.
- **Water-based (aqueous):** apply by dipping or spraying. To ensure penetrant sensitivity, parts should only be exposed to aqueous developers for short periods of time.

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.

## Recommended Products

Product type	Product Name(s)	Type
Cleaner/remover	SKC-S	Solvent-based
Emulsifier	ZR-10C	Hydrophilic
Developer	SKD-S2	Solvent-based
	ZP-5B	Water-based

## Specification Compliance

Specification	SKL-SP2	SKL-WP2
AMS2644F	✓	✓
ASME B & PV Code, Sec V	✓	✓
ASTM D129	✓	✓
ASTM E165/E165M	✓	✓
ASTM E1417/E1417M	✓	✓
EN ISO 3452-1	✓	✓
EN ISO 3452-2 (Sensitivity Level 2)	✓	✓
MIL-STD-2132D	✓	✓
MIL-STD-271F	✓	✓

## Availability

Unit	SKL-SP2	SKL-WP2
	Part numbers (if applicable)	
10 x 400ml aerosol	008A016	008A163
4 x 5 litre pack	005C076	055C071
25 litre container	N/A	055C072

The SK-3 Kit is available as follows:

- Complete SK-3 Kit - part number 008A038
- Carrying case only - part number 053C009

## Health and Safety

Read the relevant Safety Data Sheets for the individual products before use. Safety Data Sheets are available on request from your Magnaflux distributor or via the Magnaflux website:

[www.eu.magnaflux.com](http://www.eu.magnaflux.com)