SKL-LT

Low-Temperature Visible Penetrant

SPOTCHECK® SKL-LT is a water-washable and solvent-removable visible penetrant designed for use at low temperatures down to -15°C. It produces a vivid red colour contrast, and features outstanding penetrating characteristics.

SKL-SLT is highly reliable at locating surface-open flaws and discontinuities, and can be used on non-porous ceramics and similar materials.

FEATURES

- Low temperature operation
- Ultra-high sensitivity
- Excellent controlled washability
- Outstanding penetrating characteristics
- Vivid, high-contrast color
- Superior flaw resolution

SPECIFICATION COMPLIANCE

- ASME B & PV Code, Sec V
- ASTM E165

APPLICATIONS

Defect location: open to surface

Ideal for:

- Use at low temperatures (down to -15°C)
- Castings
- Forgings
- Welds
- Pressure vessels
- Tubular goods
- General metal work
- Leak testing

Ideal for:

- Cracks
- Leaks

COMPOSITION

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

PRODUCT PROPERTIES

Form and colour	Red liquid
Flash point	> 15°C
Density	0.77 g/cm^3
Viscosity	3 mm^2/s
Sulphur content	< 200 ppm
Chloride content	< 200 ppm

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	-15°C to 25°C
Coverage	20 - 30m^2 per litre
Cleaner/remover	SKC-S
Developer	SKD-S2
Accessories	Reference test block

SKL-SP2

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. At temperatures over 10°C, the minimum penetration time is 5 - 10 minutes. At low temperatures, the dwell time needs to be increased - see below:

Temperature (°C)	Dwell time (minutes)
+25	10 - 20
0	15 - 40
-10	20 - 60

IMPORTANT: At temperatures below 10°C, any water, moisture or ice on the test surface may negatively affect the result and should be removed prior to the test.

We recommend that you perform a reference test at the temperature at which the real test will take place, and compare this result at temperatures in excess of 5°C. Our reference test block (part no. 070C001) is ideal for this purpose.

For more information relating to the use of penetrants at low temperatures (< 10°C) and the relevant testing requirements, you may wish to refer to the standard EN ISO 3452-6.

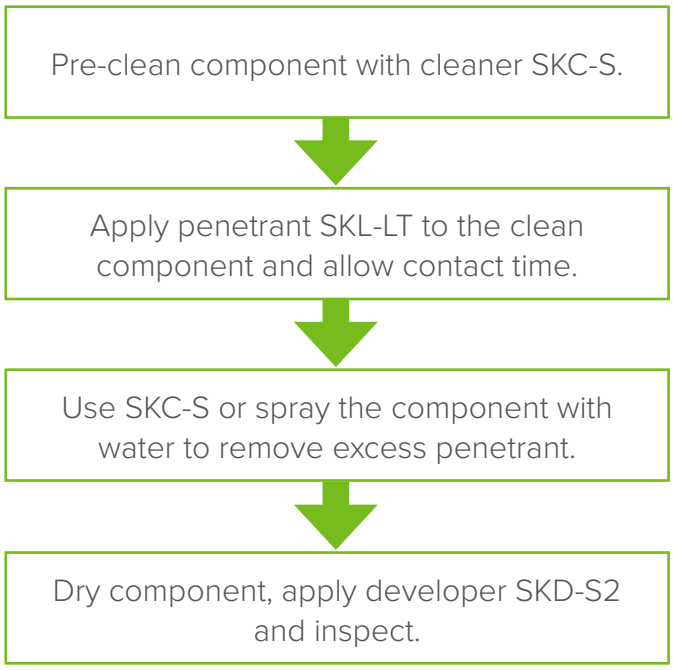
To remove the penetrant, wipe with a lint-free cloth dampened with our SKC-S cleaner. The solvent blend used in SKC-S makes it suitable for use at low temperatures, especially around 0°C or lower, where the use of water is impractical.

If you are using SKL-LT on smooth components at temperatures over 10°C, you can remove excess penetrant by spraying the component with clean water at 10°C to 40°C.

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. We recommend our solvent-based developer, SKD-S2, a quick-drying material applied by spraying. The component under test must be dry before developer is applied.

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.



SKL-LT

PACKAGING AND PART NUMBERS

055C081 (x 4)

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 **eu.magnaflux.com**.