

Wencon Hi-Temp

The high performance coating product for repair and protection in high temperature and aggressive environments.

- High temperature resistance
- Good chemical resistance
- Excellent mechanical wear properties
- Strong adhesion to all metal surfaces
- Fully machinable

General information

Wencon Hi-Temp is a high performance two-component, liquid epoxy coating developed for applications in high load areas. It provides a smooth non porous surface, which is resistant to high temperatures, light chemical aggression and wear as well as bimetallic corrosion.

Wencon Hi-Temp offers resistance to oil, water, saltwater and wide range of acids and alkalis as well as a range of solvents. Heat resistance ranges from 160° C (320°F) in corrosive and heavy load environments and up to 300° C (570°F) when applied as a filling compound.

Wencon Hi-Temp is a double coat system and is consequently supplied in two different colours, yellow and green.

Application areas

Wencon Hi-Temp is ideal for protection of tanks, pumps and valves against chemical and mechanical aggression, corrosion and bi-metallic corrosion. Typical applications are coating of surfaces rebuild with Wencon Cream, including repair of lining on inert gas systems, fresh water generators, hot pipes and heating coils.

Mixing

The Wencon products are designed to be simple to use and cost effective. Easy mixing ratio (1:2 by volume) reduce waste to a minimum and high specific volume gives high coverage rates.



Product numbers:

No. 1050	Wencon Hi-Temp, yellow, 0,5 kg (1,1 lb) unit
No. 1060	Wencon Hi-Temp, green, 0,5 kg unit (1,1 lb)

IMPA no.

812345
812346

ISSA no.

75.553.12
75.553.13

WENCON®

GENERAL DESCRIPTION

Two-component solvent free liquid epoxy coating for protection against wear, bi-metallic corrosion and chemical aggression at high load areas and temperatures.

SURFACE PREPARATION

The surface must always be dry, clean and degreased

Applying to new steel surface:

- shot blasing to SA 2,5
- profile 75 microns

Repairing old steel surface:

- shot blasting to SA 2,5
- sweat out water and salts
- profile 75 microns

MIXING RATIO

Mix by volume 1:2. Mix until an even colour is obtained.

POT LIFE

Depending on amount mixed and temperature. Mixed in small amounts, the pot life is approximately 20-40 minutes at 20°C (68°F)

APPLYING

Wencon Hi-Temp is liquid and is applied by brush, roller or spatula.

OVERCOATING

Wencon Hi-Temp is a double coat system. The overcoating time can vary from one to three hours depending on temperature. The second coat must be applied whilst the first coat is still tacky. If full curing has occurred a light sandblasting or grinding is necessary prior to the second coat

CURING TIME

Curing will take place in 10-24 hours at 20°C (68°F)

MACHINABILITY

After curing, the product can be machined, drilled and worked like metal.

REDUCED CURING TIME WITH INFRARED

This product is tested with and suitable for infrared curing. Curing with infrared radiation can reduce curing time significantly. Result can vary, depending on circumstances and equipment used.

COVERAGE RATE

Theoretical: 0,86 kg per m² (0,17 lb/sq. ft.) at 600 microns

Practical: 1,0 kg per m² (0,20 lb/sq. ft.)

TECHNICAL DATA

Hardness Shore D: 82 (DIN 53505)

Tensile strength: 13,8 N/mm² - 1960 p.s.i. (DIN 53454)

Compressive strength:

Modulus of elasticity: 4284 N/mm² - 610,000 p.s.i. (DIN 53454)

Rcrack: 96 N/mm² - 14,000 p.s.i. (DIN 53454)

Shear adhesion: 22,40 N/mm² - (ASTM D1002)

Adhesion to steel: 3,4 N/mm² - (ISO 4624)

SPECIFIC VOLUME

680 ccm per kilogramme (43,5 cu inch/kg)

TEMPERATURE RESISTANCE

Corrosion: 160°C (320°F)

Light load: 220°C (430°F)

As filler: 300°C (570°F)

CHEMICAL RESISTANCE

The compound is resistant to oil, water, salt-water and most diluted acids and alkalis as well as a range of solvents.

SHELF LIFE

At 20°C (68°F) : 3 years

HANDLING PRECAUTIONS

Read the Wencon Instruction for Use and the Material Safety Data Sheet.

QUALITY TEST

Poretest and test of layer thickness can be tested with normal electronic instrument like high voltage and high frequency.