

# Wencon Hi-Temp

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

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

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 bi-metallic corrosion.

Typical applications are coating of surfaces rebuild after deterioration including repair of lining on inert gas systems, fresh water generators, hot pipes and heating coils, protection of tanks, pumps and valves against chemical and mechanical aggression, corrosion and bi-metallic corrosion.

Wencon Hi-Temp has been developed for use in marine, offshore and industry and is suitable for a wide range of applications where high performance characteristics are required.

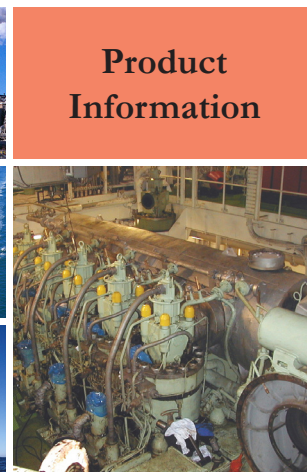
Wencon Hi-Temp offers resistance to oil, water, saltwater and wide range of acids and alkalis as well as a range of solvents. Heat resistance ranges from 160° C (320°F) in corrosive and heavy load environments and up to 300° C (570°F) when applied as a filling compound.

Wencon Hi-Temp is a double coat system and is consequently supplied in two different colours, yellow and green. The product is liquid and is applied by brush, roller or spatula.

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 volumes give high coverage rates.

### Product numbers:

Product numbers:	IMPA no.	ISSA no.
No. 1050 Wencon Hi-Temp, yellow, 0,5 kg (1,1 lb) unit	812345	75.553.12
No. 1060 Wencon Hi-Temp, green, 0,5 kg unit (1,1 lb)	812346	75.553.13



No. 4 - 01.04.2013



## General description

Two component solvent free liquid epoxy coating for protection against wear, bimetallic corrosion and chemical aggression at high levels and temperatures.

## Surface preparation

The surface must always be clean and degreased

*Applying to new steel surface:*

- rounding (blunting) with radius 2mm
- shot blasting to SA 2,5
- profile 75 microns

*Repairing old steel surface:*

- rounding (blunting) with radius 2mm
- 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.

## Applying

Wencon Coating can be applied by spatula or brush.

## 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.

## 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)

## Curing time

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

## 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.

## Machine-ability

After curing the product can be machined just like metal.

## Technical Data

Hardness Shore D: 82

Tensile strength: 13,8 N/mm<sup>2</sup> - 1960 p.s.i. (DIN 53454)

*Compressive strength:*

Modulus of elasticity: 4284 N/mm<sup>2</sup> - 610,000 p.s.i. (DIN 53454)

Rcrack: 96 N/mm<sup>2</sup> - 14,000 p.s.i. (DIN 53454)

Adhesion to steel: 22,40 N/mm<sup>2</sup>

## Specific volume

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

## Coverage rate

Theoretical: 0,86 kg per m<sup>2</sup> (0,17 lb/sq. ft.) at 600 microns

Practical: 1,0 kg per m<sup>2</sup> (0,2 lb/sq. ft.)

## Temperature Resistance

Corrosion: 160°C (320°F)

Light load: 220°C (430°F)

As filler: 300°C (570°F)

## Chemical Resistance

The coating is resistant to oil, water, saltwater and a wide range of acids and alkalis as well as a range of solvents.

## Shelf life

@ 20°C: 3 years (68°F)

## Handling Precautions

Read the instructions for use and the Material Safety Data Sheet.

## Quality test

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