

Wencon Ceramic Coating

The versatile and cost effective coating product for general repair, maintenance and protection of surfaces, exposed to excessive wear.

- Strong adhesion to all metal surfaces
- High wear resistance
- High temperature resistance
- Efficient double coat system
- High coverage rate

Wencon Ceramic Coating is a two-component, liquid epoxy coating suitable for a wide range of applications. It provides a smooth non porous surface, which is resistant to bi-metallic corrosion, light chemical aggression, corrosion and erosion as well as impingement.

Typical applications are coating of surfaces rebuild after deterioration and protection against wear, corrosion and bi-metallic corrosions. Wencon Ceramic Coating has a high abrasion resistance, making it suitable for applications on propeller nozzles, rudders, thruster tunnels and housings. In addition, the product also offer high temperature resistance, which makes it ideal for applications on gas scrubbers, condensers and end-covers.

Wencon Ceramic Coating offers resistance to oil, water, saltwater and most diluted acids and alkalis as well as a range of solvents. Heat resistance ranges from 220° C (428°F) in corrosive and heavy load environments and up to 320° C (608°F) when applied as a filling compound.

Wencon Ceramic Coating is a double coat system and is consequently supplied in two different colours, light grey and light 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:

No. 1017 Wencon Ceramic Coating, light grey
0,5 kg (1,1 lb)

IMPA no.

812593

ISSA no.

N/A

No. 1018 Wencon Ceramic Coating, light green
0,5 kg (1,1 lb)

812594

N/A



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General description

Two component solvent free liquid epoxy coating for general repair, maintenance and protection of surfaces exposed to excessive wear.

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 Ceramic Coating can be applied by spatula or brush.

Overcoating

Wencon Ceramic Coating 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 20-30 minutes at 20°C (68°F)

Curing time

Curing will take place in 10-15 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.

Technical Data

Hardness Shore D: 81

Tensile strength: 25,4 N/mm² - 3614 p.s.i.
(DIN 53454)

Compressive strength

Modulus of elasticity: 3030 N/mm² - 431,000 p.s.i. (DIN 53454)

R_{crack}: 124 N/mm² - 18,000 p.s.i.
(DIN 53454)

Adhesion to steel: 28,90 N/mm²

Abrasion Resistance (Taber wear test): 21.9 (ISO 7784-1)

Specific volume

658 ccm per kilogramme (42 cu inch/kg)

Coverage rate

Theoretical: 0,91 kg per m² (0,19 lb/sq. ft.) at 600 microns

Practical: 1,2 kg per m² (0,25 lb/sq. ft.)

Temperature Resistance

Corrosion: 220°C (428°F)

Light load: 260°C (500°F)

As filler: 320°C (608°F)

Chemical Resistance

The coating is resistant oil, water, saltwater, most diluted acids and 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