HEGGEL® Corr 280

Advanced High-Temperature Protective Coating

You Build, We Protect!

Description:

HEGGEL Corr 280 is an advanced ceramic coating system with high-temperature anticorrosion capabilities. It provides exceptional resistance to thermal shock, cycling, and abrasion. **HEGGEL Corr 280** is designed to withstand temperatures of up to +250°C, making it ideal for applications requiring robust thermal resistance.

Characteristics:

- High temperatures resistance up to +250°C
- Self-priming thin film application in one coat
- Outstanding abrasion resistance
- Exceptional resistance to thermal shock and cycling
- Curing at ambient temperature

Application Areas:

- Suitable for insulated equipment's external surfaces prone to corrosion
- High temperature services
- Flue Gas Desulphurisation (FGD) Unit

Application Data:

Finish	Slight texture and semi-gloss		
Colour	Yellow, Cream and White		
Number of Coats	1		
Practical Consumption	Approx. 0.83 kg/m^2 @400 microns DFT		
Typical Dry Film Thickness	300 - 400 microns		
@Temperature	**20°C**	**30°C**	**40°C**
Pot Life	40 min	30 min	25 min
Tack Free / Drying Time	4 hrs	-	-

Note 1: The practical consumption and DFT are subject to specific project conditions and will adjust accordingly to ensure optimal results. Please consult HEGGEL!
Note 2: All the provided values are approximate and should be used as guidelines for specifications.

Technical Data:

Title	Standard	Value
Density (Mix)	-	1.50 g/cm^3
Mixed Viscosity	20°C	32,000 cPoise
Solids Content	-	100%
Compressive Strength	BS6319: Part 2:1983	111.31 MPa
Salt Spray Test	ASTM B117 Tested on heat aged samples 1000 hours	No damage
Adhesion Strength	ASTM D4541	25 MPa
Temperature Cycling	Ambient to 250°C-50 cycles	No damage
Continuous Temperature Resistance	-	250°C
Intermittent Temperature Resistance	-	300°C

Packaging:

5 kg and 15 kg kits

Storage:

12 months in sealed original tins under dry and cool conditions at temperatures between 5-30°C. Protect from heat and freeze!

1. Surface Preparation

To achieve the best outcome, it is recommended to prepare the surface by performing grit blasting to eliminate rust and any previous coating. Afterward, scrub the surface with HEGGEL Metal Cleaner and wash it with high-pressure water to eliminate any chemical residue and soluble salts. Allow the substrate to dry completely before repeating the grit blasting process, using angular grit to achieve a blast profile of 75 microns and a cleanliness level of SA 2.5. Finally, ensure that any remaining dust and grit are removed. Immediate coating of the prepared surface is crucial to prevent oxidation and contamination.

2. Mixing

To ensure optimal performance of the product, thorough mixing is essential. Make sure both base and hardener components are kept below 30°C before mixing and always keep the materials in a shaded area before, during and after mixing. To ensure a smooth and consistent mixture, thoroughly blend the Base until all settled particles are evenly dispersed. Add the hardener into the mixture and continue to mix for an additional 3 minutes. The usability of the mixed material lasts for a duration approximately equal to the pot life. Refrain from mixing a quantity of material that exceeds what can be used within the pot life span.

3. Environmental Conditions

Prior to the application of the coating, make sure that the temperature of the surface is no less than 18°C, the temperature of the air is at least 3°C above the dew point, and ensure the relative humidity is less than 90%. External heating may be required if the substrate temperature falls below 15°C, in order to increase the temperature. Be careful to prevent recontamination of the surface which is prepared from close sources. Avoid applying the coating in windy conditions unless there is no other choice.

4. Application Tools

Brush Grade / Roller:

Application of the mixture can be performed using natural bristle brush, approx. 7.5 cm wide and bristles no more than 5 cm long.

Spray:

Single component 70:1 airless spray unit with 32 - 35 thou reversible fluid tip giving 65º spray fan angle. Minimum output fluid pressure at spray tip must be at least 5000 psi.

5. Application

To ensure proper coating, it is recommended to apply a stripe-coat to all welds before spraying. Aim for a total dry film thickness (DFT) of approximately 300-400 microns. Frequently monitor the wet film thickness with the help of a wet film thickness gauge. After application, clean the equipment thoroughly using xylene, acetone or MEK for proper maintenance.

6. Quality Control

During the holiday test, a high voltage DC tester is utilized, set at 1500 Volts. The dry coating thickness is examined using an inductance type electronic dry film thickness tester.

inspect the integrity of the coating applied with utilizing a high voltage DC tester set at 1500 V. An inductance type electronic dry film thickness tester can be employed to provide a quantitative assessment of the dry coating thickness.

7. Repairing Defects

Any pinholes, misses, or thin areas of the coating are identified for repair and marked with a distinctive marker pen. To ensure optimal overlap bonding, the defect area and the surrounding coating should be roughened.

8. Curing Time Schedule

After approximately 240 minutes the applied coating would be touch dry at 20°C. A minimum curing period of 5 days at 20°C should be provided before exposing to the service conditions.

9. Safety Measures

The material safety data sheets of the individual components, the safety instructions on the packing (label) as well as the legal requirements for handling hazardous materials must be observed.

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