A complete protective solution for your building structures...
National NextGen Rebar FBE is a flexible, corrosion resistant, fast-cure powder coating designed for the protection of concrete reinforcing steel bars.

National NextGen fusion bonded epoxy is extremely reactive and cures quickly to make a uniform hard film that provides incredible levels of protection to rebar structures. It is economical and easy to apply for rebar applicators.

PRODUCTS FOR REBAR COATING

**NextGen NP-F9700RC**

NP-F9700RC is a specially designed new generation thermosetting FBE powder for pre and post fabricated reinforcing steel bars. It provides very good corrosion protection, chemical resistance, and improved wet adhesion. It is a fast cure product applied on straight bars, dowel bars and baskets. It meets the requirement of ASTM A 775/A standard.

**NextGen NP-F9702RC**

NP-F9702RC is a specially designed FBE with increased flexibility as per ISO 14654-1999E for corrosion protection of steel reinforcing steel bars. It is applied to preheated bars as a dry powder which melts and cures in order to make a hard durable coating film. It provides outstanding flexibility and can be used in areas where high flexible coatings are required.

**NextGen Design for Rebar FBE**

- Optimum corrosion protection
- Excellent flexibility
- Outstanding adhesion
- Very good flow properties
- Excellent chemical resistance
- Strong cathodic disbonding resistance
- Fast curing for high speed application
- Can ship with minimum damage
- Economical
- NP-F9700RC Meets ASTM A 775/A
- NP-F9702RC Meets ISO 14654-1999E
**APPLICATION PROCESS**

National NextGen Rebar FBE with excellent coverage and transfer efficiency exhibits outstanding application properties delivering a uniform coating film with minimum cob webbing.

**Stage 1: Surface Preparation**
- Remove grease or oil contamination prior to blasting.
- Use steel shot or grit blast cleaning to SSPC-SP10 or NACE near white metal surface.

**Stage 2: Pre Heating**
- Preheat by using commonly used “induction heating” method to the recommended temperature range as per rebar size.

**Stage 3: FBE Coating**
- Apply powder on rebars by suitable electrostatic spraying system as per required DFT level.

**Stage 4: Water Quenching**
- Allow curing by residual heat, followed by water quenching.

**Stage 5: Holiday Test**
- Electrical inspection for holidays/pinholes after cooling the bars.

**CHARACTERISTICS**

Our high quality FBE powder provides optimum corrosion protection to steel reinforcing bars for long term structural performance. It meets the performance requirements as tested by 3rd party independent labs according to the international standards.

**Flexibility**
The mandrel bend test is completed to demonstrate the coating flexibility. Performance should indicate no cracks in the coating on the outer radius of the bars.

**Relative Bond Strength**
This test is used to determine the mean bond strength of the coated bars; which should not be lesser than 85% of the mean bond strength of uncoated bars.

**Abrasion Resistance**
Taber abrasion test is performed as per ASTM D4060 and results should indicate a weight loss of not more than 100 mg.

**Impact Resistance**
Impact resistance of the coated bars determined by falling weight test, requiring no shattering, cracking or bond loss.

**Cathodic Disbondment**
The effect of electrical and electrochemical stresses on the bond of coating to steel and integrity of the coating is assessed.

**Salt Spray Resistance**
The resistance of the coating to hot and wet corrosive environment is evaluated by exposing 250mm long coated steel bars to salt spray as per ASTM A 775/A.