IS 13620: 1993 Fusion Bonded Epoxy Coated Reinforcing Bars – Specification

Corrosion of reinforcement in concrete structures, particularly those located in the saline corrosion prone and industrially polluted area is one of the major problems encountered in the construction industry. Amongst the long term measures, one of the method for protection of concrete reinforcing bars against corrosion is **epoxy coating** on these bars by electrostatic spraying of fusion bonded epoxy powder. This standard is formulated to help the users to procure epoxy coated reinforcing bars of accepted quality.

In order to protect the deterioration of reinforcement due to corrosion, BIS had published this standard to specify various requirements of epoxy coatings. Steel reinforcing bars to be coated shall conform to **IS 1786**.

The standard provides various requirements for organic coating such as **coating materials, chemical resistance, accelerated corrosion test, adhesion of coatings, bond strength to concrete, abrasion resistance, impact and hardness test.** It prescribes the method for surface preparation and application of coating powder so as to ensure better finishing of the coated bars.

The standard lays down various requirements to be ensured by the coated bars such as thickness, continuity and adhesion of coatings. The standard also specifies permissible limits of damage in the coating and need for repair after coating application.