S & L U T I ON S

PROJECT:

TATA Structural Steel
750 ID Fan Base Plate Grouting

OWNER: TATA Steel, Labrador, Canada

YEAR: August 2015





The Details

PROJECT CONTRACTOR:

Sunny Corner Enterprises

PROJECT ENGINEER:

BBA Engineering

MARKET/ENVIRONMENT:

Metals & Mining

SUBSTRATE:

Prepared Concrete

PRODUCT USED:

Five Star® DP Epoxy Grout

SIZE OF PROJECT:

24 Units (48 ft³)

The Challenge — Grouting of the main drive and supporting bearings for a fan base. TATA Steel needed a product that could withstand a low temperature of 16°C (60°F) and maintain tight tolerances. Prior to Five Star® being awarded this job, grouting was originally done using a competitive epoxy grout. Excessive exothermic reaction in the material caused the grout to badly warp, leaving a foamy surface and poor effective bearing area.

The Solution — Five Star® DP Epoxy Grout was chosen as a replacement to the competitive product due to its ability to work in low temperatures, superior effective bearing area, ease of installation, high strength, and superior creep resistant properties. Five Star® DP Epoxy Grout was poured into prepared concrete bases and the project was successfully completed in two days.

DP EPOXY GROUT

Dual-Purpose, Deep Pour Precision Grout; Standard/High Flow

PRODUCT DESCRIPTION

Five Star® DP Epoxy Grout is the only expansive, non-shrink, low exothermic epoxy system for machinery grouting. This versatile, dual purpose product is formulated for single, large volume placements and may be used as thin as 1/2 inch (13 mm) in depth. Five Star® DP Epoxy Grout is a three component, 100% solids, solvent-free system formulated to provide high-strength and superior creep resistance combined with the highest effective bearing area. Five Star® DP Epoxy Grout exhibits positive expansion when tested in accordance with ASTM C 827.

ADVANTAGES

- Permanent support for machinery requiring precision alignment
- Low exothermal properties with early strength development
- Long working time

- Solvent-free clean up
- Adjustable flow for various conditions
- Expansive, non-shrink per ASTM C 827
- Superior creep resistance
- · Chemically resistant
- 95% effective bearing area (EBA) when following proper grouting procedures
- Excellent adhesion to steel

USES

- Large volume applications
- Foundation rebuilds and skid mounted equipment
- Precision alignment under dynamic load conditions
- Vibration dampening for rotating equipment
- Aggressive chemical environments
- Support of tanks, vessels and rotating equipment
- Installation of anchors and dowels
- Wind turbine baseplates
- Available for Nuclear Safety
 Zone Applications¹
 - ¹Compliant with NRC 10CFR50 Appendix B and ASME NQA-1 Quality Programs

FIVE STAR® SERVICES

- Design-A-Spec[™] engineering specification assistance
- Technical on-call center with field and project experienced staff
- Field support representatives for on-site consultation
- Corporate research laboratory available to customize products for unique applications



For worldwide availability, additional product information and technical support, contact your local Five Star® licensee, distributor, local sales representative, or you may call the Five Star Products' Engineering and Technical Service Center at 1-800-243-2206 (from the U.S.) or +1 203-336-7900 (outside the U.S.).



60 Parrott Drive • Shelton, CT 06484-4733 USA Phone: +1 203-336-7900 • Fax: +1 203-336-7930



