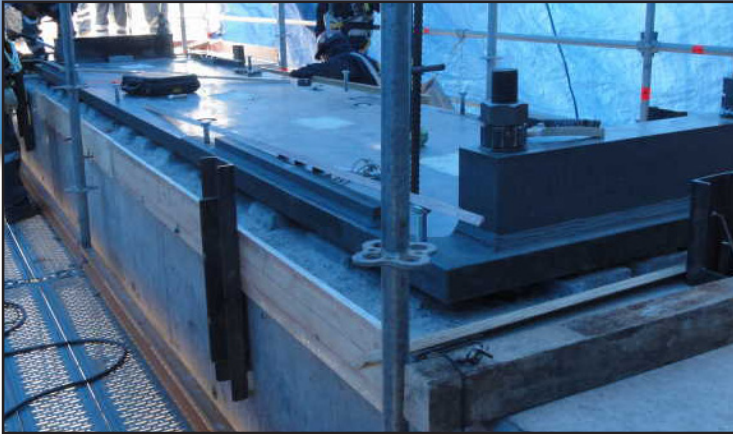


S L U T I O N S S



PROJECT:

*Tintaya-Antapaccay
Expansion (Peru)*

OWNER: XSTRATA COPPER

YEAR: 2010-2013

The Details

PROJECT CONTRACTOR:

Bechtel – GyM

PROJECT ENGINEER:

Bechtel

MARKET/ENVIRONMENT:

Mining

SUBSTRATE:

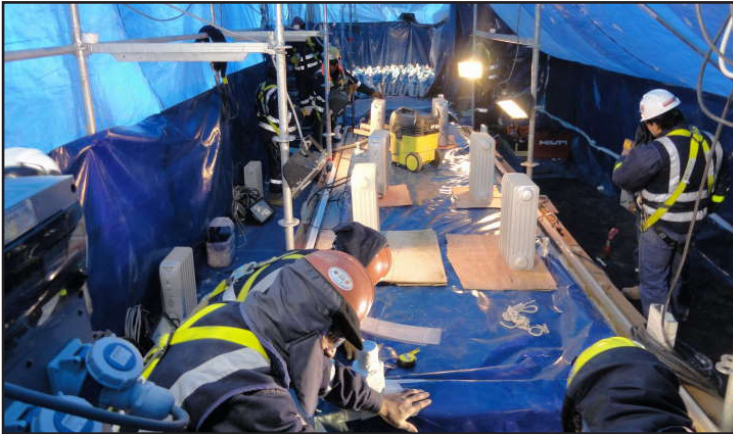
Concrete

PRODUCT USED:

Five Star® DP Epoxy Grout

SIZE OF PROJECT:

590 Kits



The Challenge — In July 2010 the Xstrata plc Board approved the development of the Antapaccay copper project as a major long-life brownfield expansion to the Tintaya copper mine in southern Peru. Their first project encompassed the grouting of 6 soleplates, 1 SAG mill and 2 Ball Mills at the Tintaya-Antapaccay site in Peru.

The Solution — Project contractor, Bechtel, chose **Five Star® DP Epoxy Grout** for its high-strength, superior creep resistance and fluid consistency. Using approximately 150 kits of Five Star® DP Epoxy Grout, 12 workers completed the application in 90 minutes using vertical axis mixers.

The additional grouting of 3 engines and brakes in the mills will occur in May 2012 and will require another 440 kits of Five Star® DP Epoxy Grout.



FIVE STAR

Specified by the World's Best™

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 pur-ose 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.).

Five Star Products, Inc.

750 Commerce Drive • Fairfield, CT 06825-5519 USA
Phone: +1 203-336-7900 • Fax: +1 203-336-7930

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