



ISG STEEL MILL CHARGE CAR APPROACH TRACK REPAIR

Grouting Completed in Only 7 Hours

Project Type:

Industrial

Application:

Grouting

Location:

Burns Harbor, IN

Project Date:

October 2004

Project Owner:

Mittal Steel (formerly Bethlehem Steel,
International Steel Group)

Contractor:

Martin & McAuliffe Contractors

Project Size:

8 ft. x 20 ft. x 4 in. thick

Product:

Rapid Set® UltraFlow® 4000/8

In October 2004 the ISG Steel Mill needed their basic oxygen furnace (BOF) charge car approach track repaired. The tracks allow all the feed materials for the BOF to be moved from stock to the furnace. The poor condition of the track was causing many problems for the mill.

Martin & McAuliffe Contractors evaluated the project and provided a schedule for the work. The mill would allow a maximum of 48 hours downtime for the BOF track repairs. Tom Roff, Project Manager for Martin & McAuliffe, evaluated the work to be done and concluded that a new base plate was needed. The base plate was to be 8 ft. by 20 ft. and 2 in. thick. After evaluating the time available for the removal of the old plate, installation of new anchor bolts and installation of the new plate, less than 12 hours would be available for grouting of the plate and for the grout to gain strength.

Tom Roff contacted Calumet Lumber for suggestions. After review of the job site conditions, Calumet Lumber suggested Rapid Set UltraFlow 4000/8 be used. The specifications called for grout to be placed 2 in. thick and allowed for a 10-hour cure window. As the project progressed it became apparent that additional grout would be needed, now to be placed at 4 in. instead of 2 in., and that the cure window for the grout to reach structure strength was reduced from 10-hours to only 8-hours.

PROJECT PROFILE

Calumet Lumber delivered the UltraFlow grout and the project was completed with only 7 hours remaining for the grout to gain strength. Martin & McAuliffe had such confidence in UltraFlow that the site was turned back to the mill personnel on time, after only 7 hours. Loaded charge cars were traveling across the rails within minutes and the mill was able to continue operating as scheduled.

Tom Roff said, "UltraFlow was easy to install, helped keep a critical project on time, and performed exactly as had been stated."

CTS Cement Manufacturing Corporation manufactures Rapid Set professional-grade cement products for concrete repairs and new construction projects. Contractors, owners, engineers and architects choose Rapid Set to eliminate problems they have with other concrete repair materials, to save time and money, when superior durability is required and results need to be aesthetically pleasing. For more information about CTS Cement and Rapid Set, please visit www.CTScement.com.

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