



Rapid Set® UltraFlow® 4000/8, hot strip discharge grouting table (E. Chicago, IN)

HOT STRIP DISCHARGE TABLE GROUTING

UltraFlow® 4000/8
Best Solution on Short Turnaround, High Temperature Projects

Location:
East Chicago, IN

Date:
December 2004

Size:
Two sections approx 2' x 50' x 4" each

Owner:
Ispat-Inland Steel Company (Now Mittel Steel)

Engineer:
Superior Engineering

Contractor:
Graycor Industrial Contractors

Supplier:
Calumet Lumber, East Chicago Indiana

Product:
Rapid Set® UltraFlow® 4000/8

During the course of normal operations at Ispat-Inland Steel's mill, several sections of the 64" hot strip discharge table came loose due to broken anchor bolts and failed grout. A shut down was scheduled and Superior Engineering was contracted to engineer a short downtime fix.

Anchor bolts could be reinstalled using epoxy anchoring adhesive because the adhesive would be shielded from the high temperatures of over 450 degrees by the grout material. Due to the short down time, a conventional precision grout could not be used. Using a conventional precision grout would mean waiting at least 15 days for it to fully hydrate. If not, the moisture still trapped within the grout would expand when exposed to the high temperatures, turn to steam, and cause the grout to essentially self-destruct.

Superior Engineering contacted CTS Cement Manufacturing Corporation to discuss a solution. Rapid Set UltraFlow 4000/8 precision grout was recommended since it exceeds 4000 psi in just 8 hours and hydrates very quickly. This high-performance CSA-cement based formulation made it the best solution for a short turnaround project with high temperature exposures.

Graycor Industrial Constructors performed the work and the project was completed on schedule. Graycor was pleased with the high flowability, long working time and ease of use of UltraFlow.

