



Installation Story #34 Foamfrax® Insulation

Industry:	Steel
Location:	Midwest United States
Installation Date:	August 2006
Type of Unit:	Roller Hearth Furnace
Operating Temperature:	2250°F
Scope of Job:	3" Foamfrax Grade III HD 6" Foamfrax Grade I



The existing ceramic fiber module lining in the entrance section of this roller hearth furnace had deteriorated due to chemical attack. Foamfrax Grade III HD was chosen for the hot face material in this application because its 72% Al_2O_3 content and higher density provided good flux resistance properties.



Initially, 6" of Foamfrax Grade I Insulation, 8 pcf density was installed.



Once the 3" hot face of Foamfrax Grade III HD was installed, the lining was troweled smooth and scored on approximate 2' centers.



After 6 months of service, the Foamfrax composite lining system shows no signs of degradation or chemical attack.

The Foamfrax composite lining system installed in this application had two major benefits: chemistry and economics. The mullite chemistry of the Foamfrax Grade III HD significantly improved the flux resistance of lining system. Also, because it was installed as a composite system, the higher-priced mullite fiber was only used on the hot face surface. The installation speed inherent to the Foamfrax technology afforded the customer the benefit of doing this work during the monthly maintenance shutdown.