



Installation Story #9 Foamfrax® Insulation

Industry: Chemical Processing
Location: Western Canada
Installation Date: June 2001
Operating Temperature: 2150°F (1176°C)
Scope of Job: Ceramic Fiber Lined (Layered Blanket) Ammonia Reformer
3" (76mm), 8 PCF (128 kg/m³) Veneer of Foamfrax Grade II Fiber



After years of service, the hot face lining of this ammonia reformer had become devitrified and loose in some areas. Prior to the application of the Foamfrax Insulation, all loose/hanging fiber was removed. For the removal of any after service refractory material, refer to the product MSDS for proper material handling guidelines.



For optimal adhesion, the ceramic fiber substrate must be pre-wet with water before the Foamfrax is applied. In this instance, the anchoring hardware for the layered blanket lining was left in place and actually helps secure the Foamfrax Insulation.



The installation of Foamfrax Insulation allowed the customer to immediately put the reformer back on line. It was also a more economical option to removing and replacing the entire hot face layer of blanket and afforded the customer increased insulating value with the additional 3" of Foamfrax Insulation.



On vertical surfaces over existing refractory, troweling of the Foamfrax Insulation surface is optional. In this instance, a light layer of low density (very foamy) Foamfrax Insulation was applied and troweled smooth to finish the surface.

With the installation of Foamfrax Grade II Insulation, the following customer benefits were realized:

- **Turnkey Installation**
 - A specially trained Unifrax distributor/contractor was able to supply materials, equipment, and installation as a complete package.
- **Extended Service Life**
 - The Foamfrax Insulation upgrade provided extended service life for the reformer lining, and the customer avoided completely replacing the hot face blanket and the resulting costly downtime.
- **Installation Speed**
 - With installation rates in excess of 1000 board feet per hour, the reformer was available to go back in service within a very short period of time.