

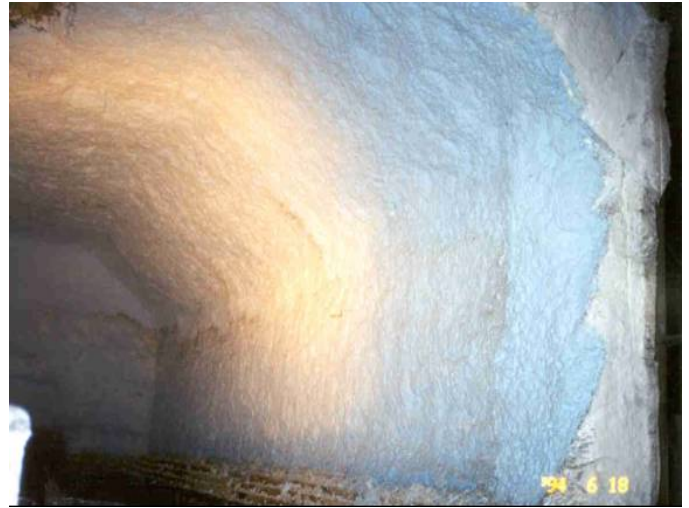


Installation Story #15 Foamfrax® Insulation

Industry:	Forging
Location:	Northwest United States
Installation Date:	July 2002
Operating Temperature:	2300°F (1260°C)
Scope of Job:	Batch Forge Furnace 3" (76mm) Foamfrax Grade II Fiber Over Ceramic Fiber Modules and Insulating Firebrick



The existing lining in this furnace consisted of ceramic fiber modules on the sidewalls and endwall with an IFB/bonded module roof. Due to the harsh operating conditions of this furnace, the sidewalls modules had begun to deteriorate. The bonded modules on the roof had started to spall off and the underlying IFB had begun to degrade. Prior to the installation of Foamfrax Insulation, the module surface was completely cleaned using a curry comb and all loose bonded modules were removed. A dilute preparation of Fiberstick™ cement was applied on all the installed surfaces.



The installation thickness of Foamfrax Insulation was maintained at 3” (76mm) thick across all the lining irregularities of the furnace so as to not exceed the 3” (76mm) maximum recommended thickness for veneers. The improved consistency of the refractory lining after the installation of Foamfrax Insulation provides balanced heating of the charge and results in higher quality forgings.

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

- **Turnkey Service**
 - A specially trained Unifrax distributor contractor was able to supply materials, equipment, and installation as a complete package.
- **Fuel Efficiency**
 - The additional lining thickness of Foamfrax Insulation served to further lower heat loss and provide a more uniformly heated product.
- **Extended Service Life**
 - The Foamfrax Insulation upgrade provided extended service life for the forge furnace and avoided a complete lining replacement and costly down time.
- **Installation Speed**
 - The complete Foamfrax Installation was completed in four hours, resulting in reduced furnace downtime and increased productivity.