



Project Details

Reported

Project Name	Unplanned Outage Support
Location	Combined Cycle plant ir North East USA
Plant Output	~500 MW
Insulation Contractor	Anchor Insulation
Insulation Material	Pyrogel HPS - <i>Pony Roll</i> format (80ft ² per roll)
Time Savings	10%



Project Description

An event that resulted in damage to the existing removable insulation blankets on a gas turbine led to an unplanned outage at a combined cycle generating facility. Exiting the outage and restarting the plant was contingent upon re-making the insulation blankets and applying them to the turbine as quickly as possible.

The facility's contractor, Anchor Insulation, selected Pyrogel HPS to accelerate fabrication and facilitate easier installation of critical, high-temperature insulation blankets for the turbine combustors which operate at up to 800°F (427°C). The class-leading thermal conductivity of Pyrogel HPS resulted in a thinner solution than the incumbent glass fiber system, enabling faster installation and better access to the instrumentation in the tight spaces around the combustors.

The combined benefits of Pyrogel HPS allowed the insulation contractor to complete the time sensitive task 10% earlier than anticipated.

THE PYROGEL® ADVANTAGE

Speed of Installation

• Selection and use of convenient, easy-to-handle, Pyrogel HPS pony rolls enabled a rapid response to the outage - fabrication began within hours of the outage notification.

• Pyrogel HPS required the same number of layers for fabrication, but these layers were 60% thinner than the incumbent glass fiber insulation, making the pads thinner, lighter, and easier to fabricate.

• The thinner Pyrogel HPS pads installed more easily in the narrow spaces around the turbine combustors. This allowed the contractor to finish their work quickly and the plant to restart sooner, recuperating more of their lost revenue due to the unplanned outage.

Efficient Performance

Pyrogel HPS is the most efficient and durable insulation material available today. Being 50 to 80% thinner and lighter than competing products, Pyrogel HPS fits where nothing else will. In the space challenged combustor zone, Pyrogel HPS facilitates improved access to instrumentation and greater clearances for future inspection and maintenance.

Reduce Maintenance Costs through Reusability

Pyrogel HPS resists the three enemies of thermal insulation: heat, water and mechanical abuse, rendering it fully reusable up to its maximum use temperature of 1200°F. Pyrogel HPS is ideal for HEP, turbine, and other frequently-inspected systems.

Ease of Construction

Pyrogel HPS comes in an easy-to-use, flexible-blanket format that can be easily cut and shaped to cover any piece of pipe or equipment in a power plant, often allowing for reduced insulation time. Pyrogel's versatility often allows for reduced insulation time and Pyrogel's versatility is particularly important for small maintenance jobs, temporary fixes and projects in remote locations.

Tech Services

Aspen Aerogels' global Technical Services team offers comprehensive assistance for your project, from initial design and specification, to training and site start-up. Contact us today for further information.





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We were able to slide the Pyrogel HPS pads into place more easily than the glass fiber pads. Not having to force the pads into place saved time and avoided damage.

> - Anchor Insulation Contractor

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