



aspen|aerogels®

RESILIENT

FLEXIBLE

DURABLE

HIGH-PERFORMANCE

HYDROPHOBIC

REUSABLE

THIN

THERMAL INSULATION

for POWER GENERATION FACILITIES

Pyrogel®
HPS

INSULATION...ADVANCED

REDEFINING THERMAL INSULATION

Representing the pinnacle of insulation design, Pyrogel® HPS is engineered to provide exceptional thermal performance and value at service temperatures up to 650°C (1200°F). Uniquely, it sustains thermal protection while resisting the traditional enemies of thermal insulation—heat, water, and mechanical damage.



Sustain heat rates, protect assets, and reduce maintenance costs.

Pyrogel's tough, resilient format can be reused for lower cost of ownership.

WHY USE PYROGEL HPS IN THESE POWER GENERATION APPLICATIONS?

Turbine Blankets



- Permits access to key turbine components with ultra-thin, single-layer blankets
- Allows for blankets that are 50% lighter and 65% thinner than those made with fibrous insulation
- Lasts longer because it resists heat, footfalls, and tool strikes
- Supports uniform casing temperatures in a tough, durable format

High-Energy Pipework



- Offers fast, efficient application, especially on large-bore steam piping
- Won't crack, sag, or settle. Reuse it following inspection and maintenance
- Resists vibration due to start-up and water hammer—where rigid insulations can become damaged
- Resolves mechanical clashes, reduces weight, and promotes increased racking density
- Allows for pre-insulation, saving time and expense

Expansion Joints



- Eliminates clashes at wall penetrations and in space-challenged boiler locations
- Resists liquid water for optimized and sustained performance over the life of the asset

Balance of Plant (BOP)



- Delivers maximum thermal protection for vessels, as well as steam and condensate pipework
- Prevents corrosion under insulation (CUI) during intermittent operations
- Reduces lead time, labor, and maintenance expense due to its versatile, reusable format

ADVANTAGES – SPACE & SPEED

Pyrogel HPS delivers safe and efficient thermal protection with designs that are 2-5 times thinner than competing insulations. For plant designers and operators, Pyrogel HPS helps to avoid mechanical clashes, increase racking density, and ensure continuity of thermal protection. The unique format promotes faster application rates, particularly on large-bore pipe and vessels.

Check out the other products in our Pyrogel range

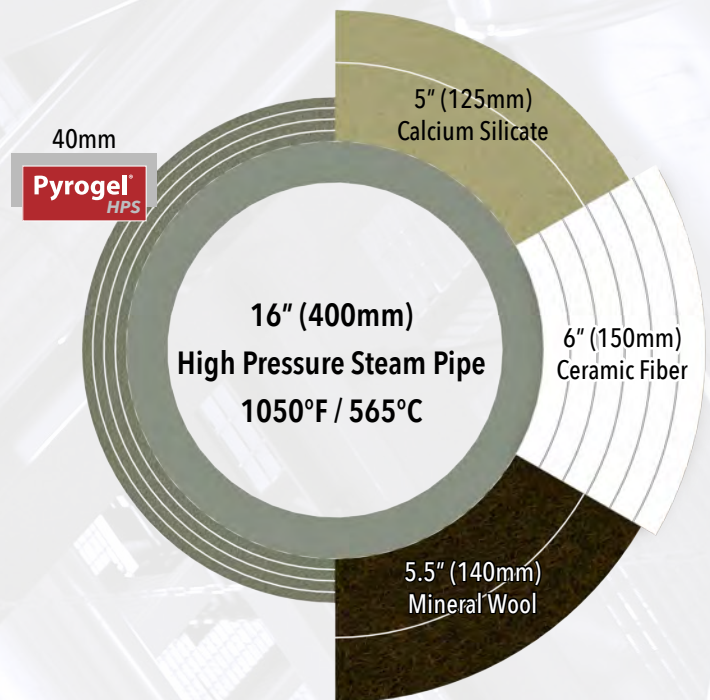
Pyrogel[®]
XTF

Passive Fire Protection

Pyrogel[®]
XTE

Thermal Insulation

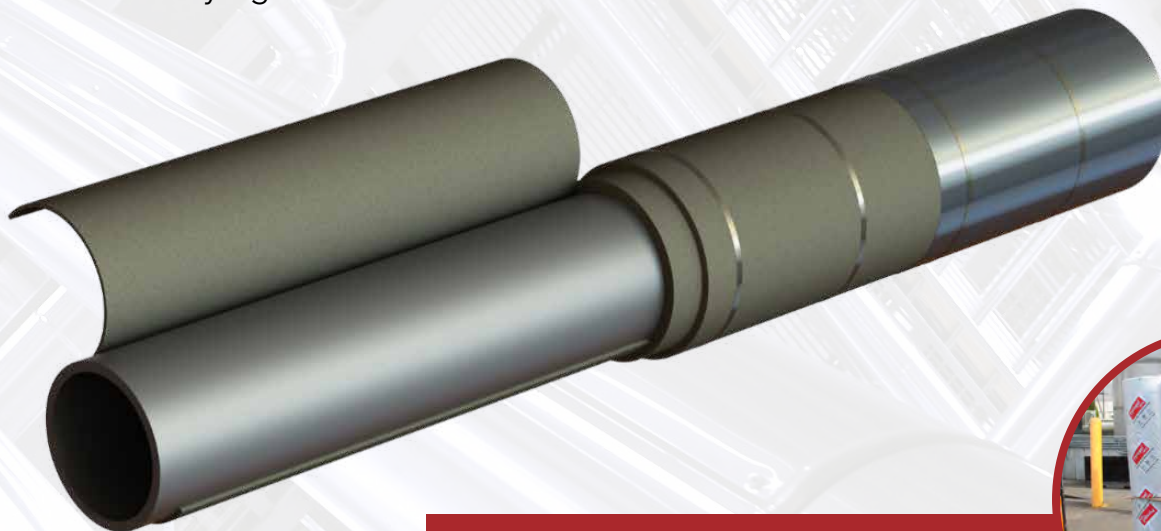
Visit aerogel.com/pyrogel for more information.



All systems provide the same energy efficiency

ADVANTAGES – DURABILITY & VERSATILITY

Pyrogel HPS is durable, maintaining its shape and location even after vibration, footfalls, tool strikes, or exposure to high temperatures. Unlike rigid pipe shells, a single roll of Pyrogel HPS can be used to insulate any surface in your facility, from the smallest condensate line to the largest vessel. This versatile format means no more waiting for long lead-time items during an outage. Skip the wait and choose Pyrogel HPS.



Pyrogel HPS is available in either 850 sqft bulk rolls or convenient, easy-to-handle, 80 sqft Pony Rolls for added flexibility.



Our Commitment

For almost two decades, Aspen Aerogels has built a reputation for resolving thermal insulation's toughest challenges. When it gets too hot, too wet, or too tough for other thermal insulations, facility operators turn to Pyrogel.

If failing thermal insulation on turbines, piping, or equipment is negatively impacting safety, heat rate, and your maintenance budget, then get in touch with Aspen Aerogels today.

Our globally-renowned technical services team is available to assist with a Pyrogel solution tailored to your needs.

- **Problem Diagnosis**
- **Thermographic Inspections**
- **Trial Installations**
- **Lunch and Learns**
- **Specifications**
- **Contractor training**

The background of the slide is a photograph of a large industrial facility, likely a power plant or refinery, with complex piping, metal structures, and large storage tanks under a clear blue sky. A large red diagonal banner is overlaid on the bottom half of the image.

THINNER, TOUGHER, RESILIENT & REUSABLE HIGH-TEMPERATURE THERMAL INSULATIONS

Gas Turbine • Steam Turbine • Boiler • Pipework • BOP