



Product Used

Pyrogel® 4250

Aerogel Insulation Stops Pipe Heat Loss, Improves Safety in Tight Spaces

Thin insulation avoids damage during pipe installation without cladding

Installation Partner

Agosti Isolazioni Termiche, Italy
(Search for Agosti on www.edilportale.com)

Challenges

- Insulate piping that has a process temperature of 120°C (248°F).
- The insulation objectives were to:
 1. Eliminate heat dispersion from the piping into the surrounding hall.
 2. Allow operators to unscrew the bolts without removing nor damaging the insulation.
 3. Reduce the surface touch temperature to a safe level using the thinnest possible insulation.
 4. Provide a finished surface that didn't require metallic cladding.

Aerogel Solution

- Agosti Isolazioni Termiche installed an aerogel solution of two layers of 4 mm **Pyrogel® 4250** using a specifically chosen adhesive that was tested prior to installation.
- The external surface was covered with layers of varnish that were tested prior to installation.

Benefits

- The end user observed a dramatic reduction of the external surface temperature with only an 8 mm insulation thickness, reducing heat loss and energy consumption significantly.
- The insulation was thin enough to avoid damage during pipe mounting/dismounting, with no metallic cladding required.
- The insulation was applied directly on the pipes, saving valuable time during mounting and dismounting.
- The insulation noticeably improved operator working conditions near the hot pipes.



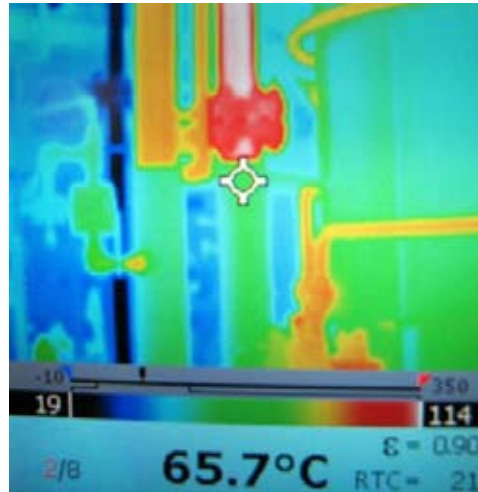
The Pyrogel insulation was easily painted to identify the fluid in the piping (gray for gas, green for hot water).



Operators work continuously in the web of pipes, often coming into contact with them. Aerogel insulation reduced the touch temperature to safe levels, dramatically reducing the risk of injuries.



The finished, painted surface protects the insulation during standard operations with no metallic cladding required.



Thermal imaging shows a safe surface touch temperature after Pyrogel 4250 is applied.