CarboSeal® Restores Heating and Cooling Pipe in Milan

FIRST-OF-KIND INSTALL IN ITALY RESTORES LONG-TERM PIPE FUNCTIONALITY

CASE STUDY



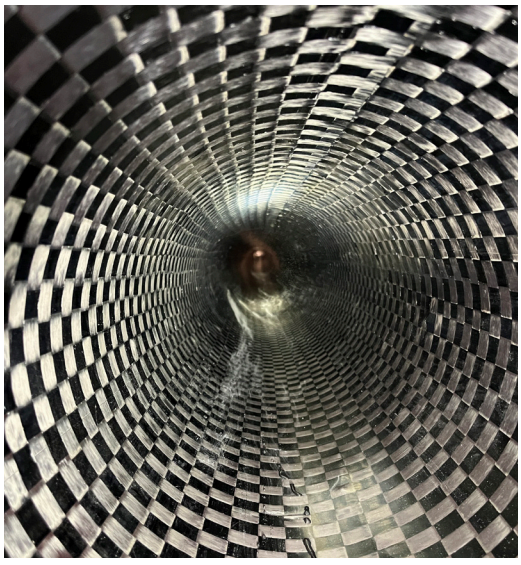
PROJECT SNAPSHOT

BKP PRODUCTS USED | CarboSeal®

THE CHALLENGE

A2A operates one of largest district heating networks in Italy. Among their assets is a 100m | 330 ft long section of DN300 | 12" steel pipe situated under a road just outside the University of Milan. This section was in poor condition, but excavation and replacement would be costly and disruptive. As part of a critical network serving both heating and cooling systems, the pipeline is exposed to significant temperature fluctuations throughout the year. These extreme variations place even more stress on the asset than a traditional district heating pipe experiences.





PROJECT OWNER
A2A

CONTRACTOR
Stucchi Servizi Ecologici S.r.l.

PROBLEM
A deteriorated district heating and cooling pipe was nearing the end of its service life

SOLUTION
A CIPP carbon fiber CarboSeal liner restored the pipe to complete functionality with limited surface disruption

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CASE STUDY



THE SOLUTION

CarboSeal was specifically developed to accommodate the thermal expansion characteristics of steel pipelines, making it an ideal solution for this application. Although the technology had never been used in Italy, A2A was committed to identifying cost-effective, environmentally sustainable rehabilitation solutions for its systems. After consulting with the CarboSeal team, the pipe in question was confirmed as a candidate for restoration with CIPP carbon fiber relining. The host pipe was inspected and prepared for rehabilitation, and a crew from Stucchi Servizi Ecologici S.r.l. managed the install.

THE RESULTS

The installation was successfully completed in May 2026. As a trenchless technology, Carboseal enabled the team to minimize digging, reduce environmental impact, and limit the duration and scale of any disruption to local traffic and aboveground activity near the University.

Moreover, this project was the first CarboSeal installation in Italy, and has served as a powerful proof point for future restoration of the country's district heating network systems.



CarboSeal minimises disruption to the environment and community.



The restored pipe has returned to full service without issue.