

The logo for RADPOL PIPES features a stylized red and white icon on the left, followed by the word "RADPOL" in large, bold, white capital letters, and "PIPES" in smaller, white capital letters below it. The background is a high-angle photograph of a city street with a construction site in the foreground, showing excavators and a dirt road. In the distance, a city skyline with various skyscrapers is visible under a clear blue sky.

RADPOL PIPES

Case Study

**District Cooling
Pipeline Installation
in Tallinn** – Delivered
Ahead of Schedule

Introduction

Tallinn, Estonia's rapidly growing capital, demands reliable and advanced infrastructure solutions.

A key project addressing this demand was the construction of an underground cooling pipeline along the major Lastekodu Street in the Kesklinn district.

Magma AS was chosen as the main contractor, with Radpol Pipes strategically selected as the supplier of complete pre-insulated piping systems.

Challenge

The project aimed to establish an efficient district cooling system, effectively delivering chilled water from the central cooling station on Masina Street through Lastekodu Street to the existing network in the city center at Liivalaia Street.

The critical challenge was to implement a pipe system capable of operating under intense conditions while meeting rigorous technical requirements and adhering to a demanding project schedule.



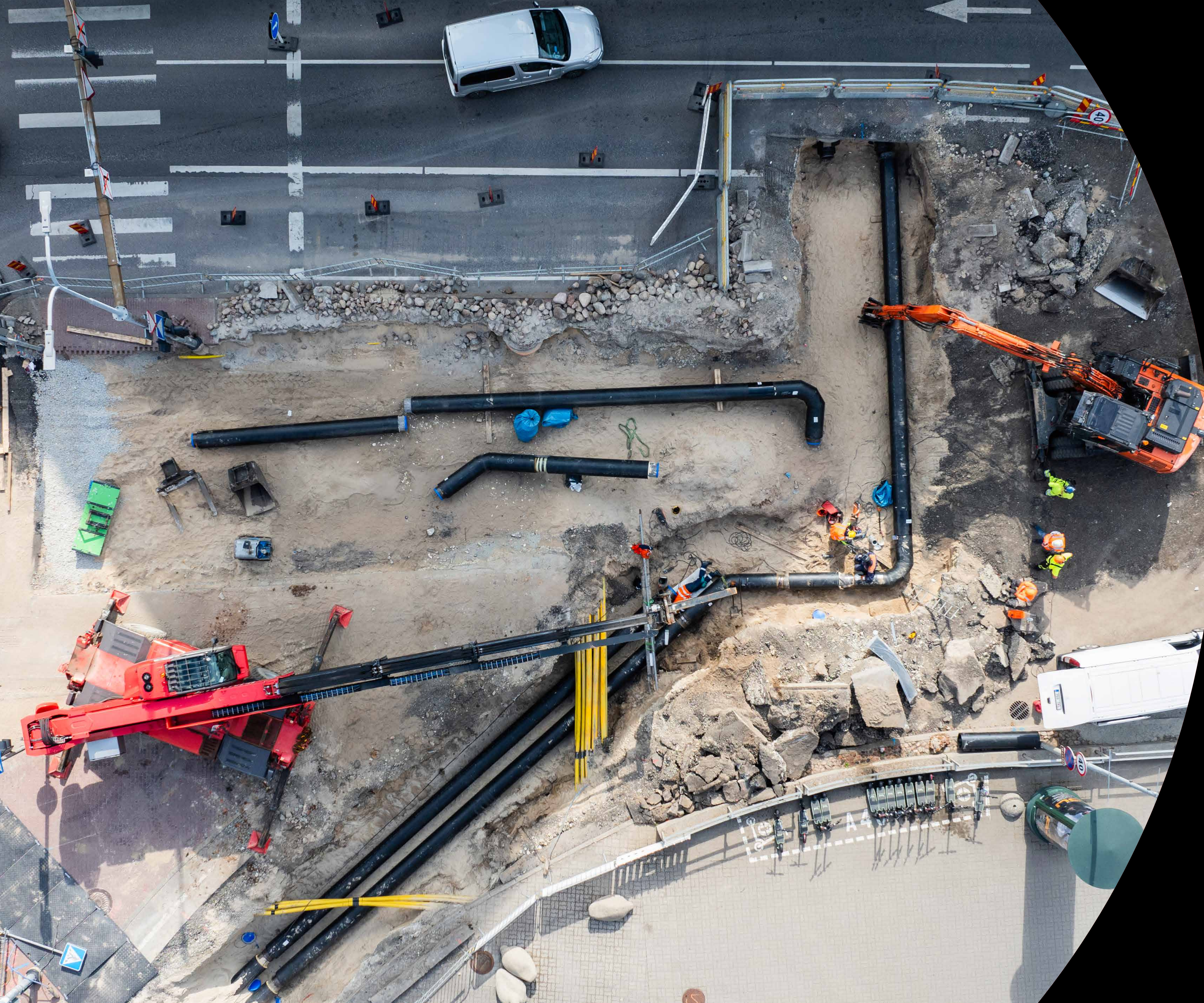
Solution

Radpol Pipes provided a technologically advanced system comprising pre-insulated cooling pipes and fittings, specifically DN600/710 (pipe nominal diameter/ internal diameter in mm), totaling 2600 meters.

For Radpol Pipes' cooling systems, $\lambda = 0.019$ W/mK and operational durability extends down to -60 °C.

The products supplied by Radpol Pipes are distinguished by their superior thermal efficiency, robust sealing, and superior insulation, significantly minimizing energy loss and maximizing cooling transmission efficiency.





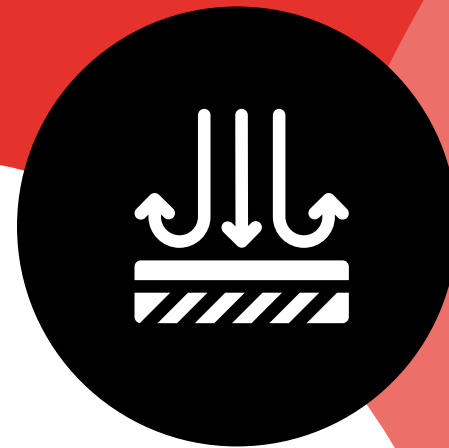
Execution

The works executed by Magma AS were closely coordinated with Tref Nord AS, responsible for asphalt paving and external communication infrastructure.

Thanks to exemplary teamwork and the reliable delivery from Radpol Pipes, the project was completed 5 weeks ahead of schedule.

This allowed for earlier operational commencement and substantially reduced inconvenience for local residents.

Benefits



Energy Efficiency – Radpol Pipes' pre-insulated pipes significantly reduced thermal losses, enhancing overall cooling system efficiency.



Durability and Safety – Radpol Pipes products ensure long-term reliability and minimize the risk of operational failure.



Sustainable Development – Reducing energy transmission losses aligns with Tallinn's environmental goals by lowering CO₂ emissions.



Accelerated Project Delivery – Completing the project 5 weeks early facilitated earlier system deployment and faster returns on investment.





**TOP
QUALITY
IN EVERY
LAYER.**

Summary

The cooling pipeline construction on Lastekodu Street in Tallinn serves as an exemplary case of effective collaboration between investors, contractors, and technology suppliers.

Radpol Pipes demonstrated outstanding technical and organizational capabilities, significantly contributing to the project's success and affirming its position as a leader in pre-insulated piping systems for cooling applications.

For more information
on advanced pre-insulated
solutions, visit:
www.radpolpipes.eu