



FIELD REPORT

Protecting Supercomputers: Aquatherm is the Answer

Housing some of the most advanced computing systems in the world comes with exceptional responsibility. For that reason, the construction of large-scale datacenters must be approached with detailed precision. Canadian contractor Groupe Noel was the mechanical contractor tasked with outfitting the first phase of eight for a company that specializes in data processing and energy recovery.

A COOLING SYSTEM TO COUNT ON

When dealing with high levels of data processing, a tremendous amount of heat is generated. For that reason, the importance of a reliable cooling system is both critical and complex. The system reaches into the computer housing rooms and



Pre-Fabricated Spool for Flanged Connections

into the equipment itself to keep them cooled down. Evacuating the residual heat from the supercomputers must be without failure.

Groupe Noel worked with ISCO-AH McElroy to secure Aquatherm polypropylene piping for this project. The project owner's needs and specifications required the material used to be reliable and long-lasting, making it an ideal fit. Aquatherm can be installed more quickly than traditional pipe systems. "Aquatherm also keeps the building clean, which is key in this type of project where there is little tolerance to dust," explained project manager Stéphane Beaulieu.

ISCO-AH McELROY ADDS VALUE

ISCO-AH McElroy supplied a range of pipe sizes from ½-inch SDR 7.4 up to 14-inch SDR 11. The light weight of the pipe allowed them to innovate their standard methods of installation. "We needed to adapt to [the material] seeing as it is different than the pipe material we typically install," Beaulieu explained. "We developed new working methods and pre-fabricated many pieces at our workshop to move the project along more quickly."

The scope of the project includes two buildings and four phases for each building, so staying on schedule was an integral piece of the puzzle. "In today's context of supply chain issues and shortages, we are impressed that this reality is virtually non-existent at ISCO-AH McElroy," Beaulieu said. "They are a good, proactive team that found solutions to all situations."

TEAM TRAINING

As Aquatherm was a new material for this contractor, ISCO-AH McElroy also provided training to the technicians to help them better understand the material along the way. ISCO-AH McElroy also delivered proper documentation to make sure everyone working on the project fully understood how to work with Aquatherm to make the construction of this datacenter a success.



Installation of Main Lines on Site



Pre-Fabrication of Main Line Spools in Shop



Pre-Fabricated Main Line Spools