

FIELD REPORT

HOT AND COLD: A POLY FOR BOTH NEEDS AT TEXAS A&M



ISCO supplies HDPE and PERT for water lines at massive university.

Battling Leakage

Like many colleges and universities across the country, Texas A&M in College Station, Texas always turned to carbon steel pipe and fittings for their water lines. "For years, we always did it with mechanical joints," explained Reuben Bernal, the supervisor for water distribution at the school. "Steel, direct burial, carbon steel pipe. But, just like anything else, it decays in the ground." The team faced high leak rates and dealt with too frequent interruptions to service on campus. "On a normal day, we were losing up to 40-50 gallons per minute," Bernal said. They knew there had to be a better option.

About 10 years ago, the school decided to start replacing problem areas with polyethylene pipe. "We started off on domestic water and gradually started using it in our thermal system," said Bernal. The switch was so successful, essentially all steel pipe on campus has been replaced and new construction projects utilize polyethylene pipe.

HDPE and PERT: The ISCO Combination

While designing the university's new RELLIS Education and Research Campus, a high-tech, multi-institutional research, testing, and workforce development

campus, engineers once again specified polyethylene.

Building off an existing relationship, project managers worked with ISCO Industries and sales rep Hal Smith. ISCO provided 20 and 24-inch high-density polyethylene (HDPE) for chilled water lines and 12-inch PERT for the heating hot water lines. "ISCO has been very valuable to us," said Bernal. "Whenever we have issues, I know I can call them up. If there are any special fittings or anything they need to get, they'll come down and help us out."

For the first part of the project, the 12-inch PERT was installed with Gilsulate insulation as backfill. For phase two, pre-insulated PERT was used for the heating hot water piping.

PERT significantly expands the operation window for poly pipe with pressure ratings up to 180°F. It also allows intermittent operating temperatures up to 203°F. ISCO offers a full range of sizes, pressure capabilities, molded, and fabricated fittings.

PROJECT

RELLIS Campus Water Distribution Lines

LOCATION

Texas A&M College Station, Texas

THE NEED

Leak-free heating hot water and chilled water lines.

SOLUTION

**20 and 24-inch HDPE
12-inch PERT
Various fittings**





Proof of Performance

Texas A&M has become a leader among schools looking for a solution to leaking water systems. They've gone from losing 40-50 gallons per minute to only single digits. "You can look at our chart," Bernal said. "Every morning we get a reading and on campus, right now, it's at seven gallons per minute on chilled and 3.7 gallons per minute on heat. That's a huge drop, from what we were to what we are now, that's a huge change."

At the end of the day, the sole job of the water distribution crew is to make sure that they keep interruption to students and faculty to a bare minimum. "If they don't notice us, we're doing our job right," Bernal explained. "If we're out here having to cut service off to make repairs and they're out for a few days or an hour or 15 minutes, that's a big thing." With PERT and HDPE, they have the benefit of a leak-free system that won't corrode in the ground.

**See what ISCO can do for you at:
www.isco-pipe.com**

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