



DISTRICT ENERGY PIPING SOLUTIONS

Energy-efficient solutions for district heating and cooling.



www.isco-pipe.com | 800-345-4726



ENERGY EFFICIENT SOLUTIONS

Each year facilities managers spend countless hours and millions of dollars repairing corroded pipes. Many aging systems consist of metal pipes that develop flow issues and leaks due to corrosion and tuberculation. While replacing a small section or repairing a random leak may seem affordable at the time, there comes a point when problems are too frequent and too costly. Maintenance, disruption of business and liability of safety add up to tens of thousands of dollars lost to downtime with each occurrence.

District energy thermoplastic piping solutions are extremely efficient systems that provide heating and cooling to commercial, industrial, institutional and campus facilities. At ISCO, we make district energy piping our business so you can stay focused on yours. Our piping systems provide long-term value to customers with a need for maximum reliability, resiliency and energy efficiency.

BENEFITS OF THERMOPLASTICS

-  **Ease of Installation**
-  **Leak Free**
-  **Lower Operating Cost**
-  **Long-term Pipe Integrity**
-  **Corrosion Resistant**
-  **Reduce Carbon Footprint**

DISTRICT ENERGY PIPING PRODUCTS

Tried and true results

"Some people may have doubts about plastic piping, especially when they're using it for the first time, but in my opinion this product is fantastic. As an engineer, it's important that the flow you design is going to remain the same over time. Because Aquatherm doesn't scale or corrode, it maintains the same flow over its entire lifespan."

- Tanner Bradley, P.E., Senior Engineer,
ACR Engineering
San Jacinto College, Houston, TX



"For years, we always did it with mechanical joints. Steel, direct burial, carbon steel pipe. But, just like anything else, it decays in the ground. On a normal day, we were losing up to 40-50 gallons per minute. We started off [replacing problem areas with HDPE and PE-RT] on domestic water and gradually started using it in our thermal system. [Since we made the switch] 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. We're doing our job right."

- Reuben Bernal,
Supervisor for Water Distribution
Texas A&M University



BENEFITS

- Lightweight and durable
- Corrosion, chemical and UV resistant—great for underground pipes
- Hydraulically smooth
- Fatigue and surge resistant
- Long-lasting and weather-resistant

HIGH-DENSITY POLYETHYLENE (HDPE)

HDPE is a polyethylene thermoplastic made from petroleum. It's one of the most versatile types of plastic pipe on the market, recyclable and can be used in either rigid or flexible form.

HDPE uses a unique heat fusion joining process during installation, giving it the lowest rate of leakages out of all pipe materials, including other plastic and metal. It is ductile, durable, leak free and virtually inert, making it highly resistant to cyclical fatigue and well suited for a broad range of demanding applications

APPLICATIONS



Industrial



Landfill



Energy



Marine



Chilled Water Solutions



Mining



Municipal



Golf Course Irrigation



BENEFITS

- Fast and easy installation -
- Long-lasting and corrosion-resistant
- Life-span of more than 60 years
- Chemical resistant
- High sustainability impact

AQUATHERM

A superior alternative to steel, Aquatherm is a long-lasting option for chilled water, heating and cooling, compressed air and industrial piping systems. Aquatherm Blue Pipe® won't corrode or weaken over time, and Aquatherm PP-RCT piping systems are made from the highest-quality polypropylene—lasting decades.

Aquatherm's heat-fusion connections are leak free, and the pipe will never scale or corrode, making it the ideal pipe for mission-critical applications. Heat fusion bonds both sides of a joint into a single, homogenous material, without chemical or mechanical connections—eliminating systematic weaknesses and fail points. Since the heat fusion bonding process requires no open flames, solder or glue, it's ideal for indoor applications. Also, it's considerably lighter than metal alternatives and much easier to install.

APPLICATIONS



Industrial



Hydronic heating water



Heating and cooling



Domestic water



Chilled water



Caustic/acidic fluids



Above ground applications



Processed air



Condenser water



Geothermal

BENEFITS

- Temp range of -49°F to 180°F
- Intermittent temperatures up to 203°F
- Most chlorine-resistant HDPE pipe available (CC3)
- >20 times PE4710 requirements for stress crack resistance
- Fusible, monolithic piping system
- Zero leakage

PLATINUMSTRIPE® 1800 SERIES PE-RT (BY PERFORMANCE PIPE)

Polyethylene of Raised Temperature (PE-RT) pipe significantly expands the operation window for polyethylene (PE) pipes with pressure ratings up to 180°F—meeting all your hot water needs. PE-RT pipe can handle temperature and pressure ranges greater than standard HDPE. With a 50-year design life, PE-RT has the same fusion parameters as standard PE4710 pipes and is pressure rated up to 167 psi at 180°F with no reduction in design life. This fusible monolithic piping system guarantees zero leakage and is compatible with most other piping systems. It is primarily used for hot water transmission systems for district energy, industrial, mining and oil and gas applications.

APPLICATIONS



Industrial



Energy



Gas Distribution



Trenchless



Geothermal



YOUR ALL-IN-ONE PIPING SOLUTIONS PROVIDER

Since 1962, ISCO Industries started in the back of a family hardware store and has since grown to become a worldwide leader in providing thermoplastic piping solutions. Whether it's new construction or replacing existing, corroded pipe, ISCO has what you need for your **district energy** solutions.

ISCO stocks and sells a wide variety of piping materials and provides custom fabrication. Through ISCO's global footprint and experienced staff, they offer piping solutions with engineered, cost-efficient packages that will deliver longer service life, while reducing the total cost of operations.





ISCO[®]

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