

District Energy



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A Seamless Piping Solution for Industrial & Residential Applications

Pexgol is a PE-Xa cross-linked polyethylene line pipe has many features that make it an excellent, cost-effective alternative to other pipe materials.

Pexgol Energy, our flagship is PE-X pre-insulated pipe specially designed for buried or surface applications. Developed with cutting-edge technology, Pexgol Energy is crafted to cater to a wide range of temperature and pressure resistance needs, making it suitable for:

- Combined Heat and Power (CHP) Systems
- Bio Energy and Steam Condensate Return Systems (SCRS)
- Transporting potable water distribution systems
- District heating / cooling networks
- Refrigerated water / HVAC applications



Benefits of Pexgol Systems

We pride ourselves on pushing the boundaries of innovation, creating products that embody quality and resilience. **Pexgol Energy**, being a perfect exemplar, is set to revolutionize the way systems are designed and operated in the energy transfer industry.

The Pexgol advantage



Durability

Pexgol Energy pipes are engineered to withstand demanding conditions, providing reliable service under the harshest environments.



High-quality Insulation

Our pipes offer an insulating solution that is both lightweight and flexible, ensuring easy handling and installation.



Long Coil Lengths

Pexgol Energy provides extended coil lengths up to 355 mm (14"), dramatically reducing the number of underground joints and protecting against heat loss.



Energy Efficient and Cost Saving

The material properties of PE-X include lower thermal conductivity compared to metal pipes, meaning less heat is lost to the surrounding environment as the hot water travels through the pipe.



Versatile Replacement Option

Pexgol Energy serves as a direct replacement for carbon steel and exotic pipe materials, offering a more affordable and durable alternative.



Easy Installation

With the ability to snake around barriers, obstacles, and corners, Pexgol Energy is **faster and more straightforward** to install than traditional piping solutions.

Insulation Options

Pexgol provides different types of insulation for its pipes. Clients can choose according to the project necessities:

- Polyurethane rigid foam
- Urethane foam
- Cross-linked PE foam
- Half shells insulation

The products are designed, manufactured and sold in accordance with the ISO 9001 quality system certification.

Fittings & Connections

FLANGED COUPLERS

Available sizes from diameters 63 mm to 710 mm. The flange are ANSI150 compatible and have oval holes designed to fit other international standards. The couplers can be used for the full range of temperatures and pressures, the same as Pexgol pipes from class 10 to 30.

The GP flanged couplers consist of either two halves or four quarters, depending on the pipe size and comes with EPDM gasket.



PE-XA ELBOWS

PE-X elbows are produced from Pexgol pipes of class 15 to class 30 in all diameters up to 710 mm according to a proprietary process. PE-X elbows can be supply with flared-ends (up to 500 mm) or with plain ends for electrofusion, GP flange coupler connection, Mechanical double connector, etc.



The length of each leg can be different. The elbows are supplied with fixation device to allow a tolerance of -2° and ± 25 mm in length.

PE-XA FLARED ENDS

Pexgol pipes with diameter up to 500 mm are available with flared ends. The ends of the Pexgol pipe are heated and flared by a proprietary process. The final pipe end is similar to a stub end.

The loose flange is usually mounted over the pipe during the flaring process. Alternatively, split flanges can be supplied to be mounted later.

Pexgol prepares flanges conforming to different standards.



ELECTROFUSION FITTINGS

Electrofusion fittings are used to connect Pexgol cross-linked polyethylene pipes. The pipes and fitting are joined by electrofusion welding, creating a leak-proof seal. During the electrofusion process, a current is transported through a heating wire.

The surrounding material (around the wire) is melted, welding the pipe to the fitting.

Service temperature for the PE 100 electrofusion fittings is limited to 40°C. For higher temperatures reinforced electrofusion couplers "series 1" (up to 70°C) and "series 2" (up to 90°C) can be used according to temperature requirement .

Pexgol approves and supplies the following fittings systems and installation tools: Plasson, Friatec, GF/Wavin.



Pexgol Pipe Specification

PE-Xa Pipe		Maximum Length per coil (m)
Outside diameter (mm / inch)	Class	
63 (2")	12	4500
63 (2")	15	4500
63 (2")	19	4500
63 (2")	24	4500
63 (2")	30	4500
75 (2,5")	10	N/A
75 (2,5")	12	3300
75 (2,5")	15	3300
75 (2,5")	19	3300
75 (2,5")	24	3300
75 (2,5")	30	3300
90 (3")	10	N/A
90 (3")	12	2000
90 (3")	15	2000
90 (3")	19	2000
90 (3")	24	2000
90 (3")	30	2000
110 (4")	12	1300
110 (4")	15	1300
110 (4")	19	1300
110 (4")	24	1300
110 (4")	30	1300
125 (4")	12	1000
125 (4")	15	1000
125 (4")	19	1000
125 (4")	24	1000

PE-Xa Pipe		Maximum Length per coil (m)
Outside diameter (mm / inch)	Class	
125 (4")	30	1000
140 (6")	12	760
140 (6")	15	900
140 (6")	19	900
140 (6")	24	900
140 (6")	30	900
160 (6")	12	450
160 (6")	15	620
160 (6")	19	620
160 (6")	24	620
160 (6")	30	620
180 (6")	12	400
180 (6")	15	450
180 (6")	19	500
180 (6")	24	500
180 (6")	30	500
90 (3")	15	2000
90 (3")	19	2000
90 (3")	24	2000
90 (3")	30	2000
110 (4")	12	1300
110 (4")	15	1300
110 (4")	19	1300
110 (4")	24	1300
110 (4")	30	1300
125 (4")	12	1000
125 (4")	15	1000
125 (4")	19	1000
125 (4")	24	1000

PE-Xa Pipe		Maximum Length per coil (m)
Outside diameter (mm / inch)	Class	
125 (4")	30	1000
140 (6")	12	760
140 (6")	15	900
140 (6")	19	900
140 (6")	24	900
140 (6")	30	900
160 (6")	12	450
160 (6")	15	620
160 (6")	19	620
160 (6")	24	620
160 (6")	30	620
180 (6")	12	400
180 (6")	15	450
180 (6")	19	500
180 (6")	24	500
180 (6")	30	500

Note:

Pexgol pipes for district energy applications are available in diameters from 63 mm (2") to 355 mm (14") as coils or as straight section of 11.8 m for all diameter up to 710 mm.





Pexgol PE-Xa Pipes

Pexgol PE-Xa cross-linked polyethylene line pipe has many features that make it an excellent, cost-effective alternative to other pipe materials:

- Excellent chemical and corrosion resistance (chemical agents, slurries, toxic materials, radioactive materials).
- Reduced installation costs with long-length coils/spools.
- Improved flow capacity due to smooth interior surface.
- High resistance to abrasion and UV exposure.
- Wide working temperature range.



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