



GOLAN PIPES SCANDINAVIA

 **Pexgol**





Golan Pipes Scandinavia – Setting the Standard in Pipe Solutions As the trusted market leader in our field, Golan Pipes Scandinavia delivers high-performance piping systems that combine durability, precision, and environmental responsibility.

With 25 years of proven expertise and a commitment to innovation in Denmark, we supply industries across Scandinavia with solutions that outperform in the harshest conditions.

Our reputation is built on quality, reliability, and long-term partnerships, making us the first choice for businesses that demand the best.

Our product portfolio serves a wide range of sectors, including Aquaculture, construction, energy, water management, infrastructure, and heavy industry.

Each pipe is manufactured using advanced production technology, strict quality controls, and sustainable practices that not only meet but often exceed both industry regulations and client expectations. We work closely with engineers, contractors, and industrial operators to understand their challenges and deliver tailored solutions that provide measurable value over the entire lifecycle of a project.

At Golan Pipes Scandinavia, we lead the market because:

- **Unmatched Quality** – Our pipes are engineered for maximum durability, precision, and performance in even the toughest environments.
- **Innovation First** – We invest in advanced technology and continuous R&D to stay ahead of industry demands.
- **Sustainable Commitment** – We meet the highest environmental standards while delivering cost-effective, long-lasting solutions.





Internal & External Support in Denmark



Eksportchef/Export Manager

Dennis Nymark
dny@golan.dk
0045 6341 0604



Teknisk support/technical Support

Thomas Bang Jørgensen
tj@golan.dk
0045 6914 7734



Application Engineer

Shiran Corol
Sco@golan.dk
0045 6024 2681



Ekstern Salg Danmark

Henrik Tejlgaard
ht@golan.dk
0045 2835 7811



Intern salg Danmark/eksport

Mette Langkjær
ml@golan.dk
0045 6341 0608



Salgschef/Sales Manager Produktchef/Product Manager

Martin Have
mh@golan.dk
0045 6441 7732

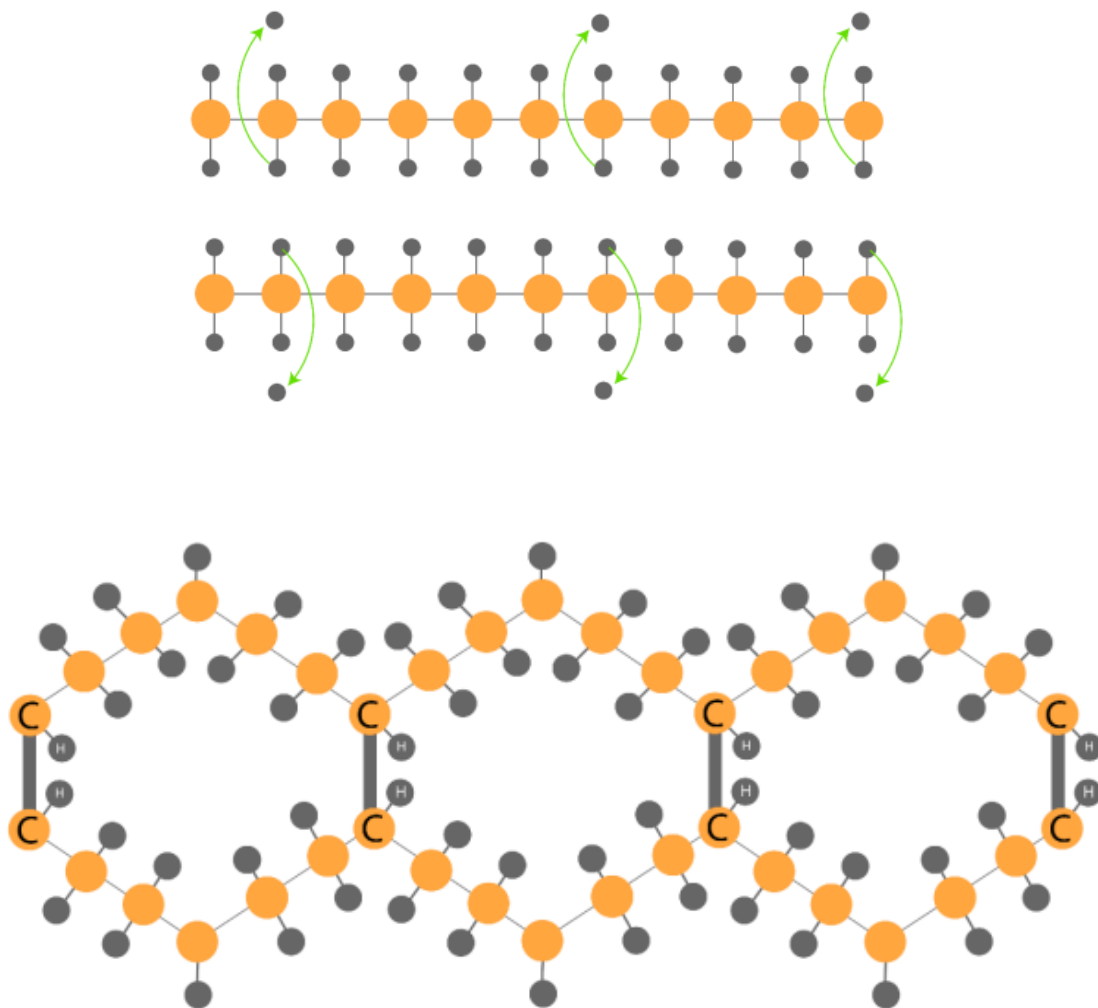


Pexgol's PE-X (crosslinked polyethylene)

Pexgol PE-X pipes are designed to meet the tough demands of the mining, paper, and chemical industries.

Made from high density polyethylene, the pipes go through a special crosslinking process that creates a strong three-dimensional molecular structure.

This makes them highly durable, reliable, and built to last in the most challenging conditions.



Allowable Working Pressures

Allowable working pressures [bar] for water conveyance in Pexgol pipes,
 with a safety factor $C = 1.25$

Design Temperature	Class 10	Class 12	Class 15	Class 19	Class 24	Class 30
	Pipe series (S)					
	7.6	6.3	5	4	3.2	2.5
	Standard Dimension Ratio (SDR)					
	16.2	13.6	11	9	7.4	6
10 °	11.20	13.50	17.00	21.40	26.90	33.89
20 °	9.90	11.90	15.00	18.90	23.80	29.99
30 °	8.80	10.60	13.30	16.80	21.10	26.59
40 °	7.80	9.40	11.80	14.90	18.70	23.56
50 °	7.00	8.30	10.50	13.20	16.70	21.04
60 °	6.30	7.50	9.50	11.90	15.00	18.90
70 °	5.60	6.70	8.50	10.70	13.40	16.88
80 °	5.10	6.10	7.50	9.50	12.00	15.12
90 °	4.50	5.40	6.80	8.60	10.90	13.73
95 °	4.10	4.90	6.40	8.10	10.30	12.98
100 °	3.5	4.2	5.5	7.0	9.0	11.2
105 °	2.8	3.4	4.5	5.5	7.0	8.7
110 °	2.40	2.90	3.80	4.70	5.90	7.43

Allowed Pressures

- For closed valve: 1.25 times the nominal pressure.
- For water hammer: 2.5 times the nominal pressure.
- Vacuum resistance: 100% from class 15 onwards.

Roughness Coefficient

- Absolute roughness: 0.0006mm
- C factor in Hazen-Williams equation: $C=155$

Natural Bending Radius

Pexgol pipes offer excellent flexibility with natural bend radius ranging from 3D to 30D, depending on pipe OD and Class. This adaptability reduces the need for fittings, enabling simpler, faster, and more cost-effective installations in diverse layouts.





Superior Mechanical and Abrasion Resistance

The molecular structure of PE-X grants these pipes exceptional resistance to a wide range of chemicals, making them ideal for transporting various abrasive fluids, chemical agents, slurries, and even toxic or radioactive materials encountered in mining operations.



Temperature Resilience

Designed to withstand extreme temperature variations, Pexgol pipes operate efficiently in environments ranging from -50°C (-58°F) to 110°C (230°F), ensuring consistent performance under diverse conditions.



Energy-Efficient Fluid Transport

The smooth internal surface of Pexgol pipes reduces frictional losses, leading to more efficient fluid transport and significant energy savings: Up to 4.5% less than HDPE and up to 12% less than Steel.



Eco-Friendly and Cost-Effective

The robustness of PE-X reduces the need for frequent replacements, aligning with sustainable mining practices and reducing operational costs.



Adaptable and Flexible Design

The inherent flexibility of Pexgol pipes, combined with their availability in long coil lengths, facilitates easy handling and installation, even in challenging mining environments. Fewer joints are required, which minimizes installation time and risks, streamlining the entire process.

Pexgol's Solution for the Mining Industry

Slurry Applications

- **Efficient Slurry Transport:**

Pexgol pipes are designed for reliable transport of tailings and mineral concentrates, built to withstand the harsh conditions of slurry applications.

- **Exceptional Wear and Corrosion Resistance:**

With up to three times the abrasion resistance of HDPE and twice that of steel, Pexgol pipes also resist a wide range of chemicals, slurries, and even toxic or radioactive materials ensuring long service life.

- **Temperature and Energy Efficiency:**

High temperature tolerance and low energy loss make Pexgol pipes a cost-effective solution, reducing operating expenses and boosting system efficiency.

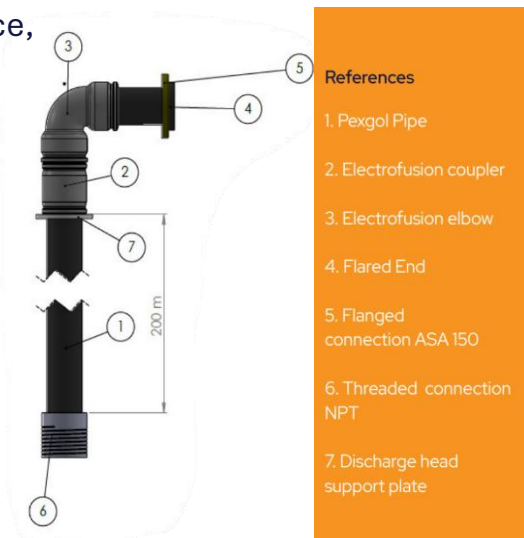
Service Lines for Mines

- Installing pipes in underground mines for drainage, compressed air, and the transport of cement slurries or pastes is often complex and costly, especially when materials require frequent joints and additional steel cables for support.
- Pexgol pipes offer a more efficient solution. Their high tensile strength allows for longer, continuous sections without the need for frequent joints or extra reinforcement. **This results in faster, safer, and more cost-effective installation, while ensuring reliable performance in the demanding conditions of underground mining.**



Boreholes

- **Versatile Usage:** Specifically designed for underground mines, Pexgol pipes efficiently transport various materials.
- **Reduced Installation and Operating Costs:** Thanks to our long coil lengths, Pexgol pipes require far fewer joints, making installations faster, safer, and more efficient. Fewer joints also mean less maintenance, lower equipment costs, and long-term savings throughout the system's life cycle.
- **Available in a single piece:** Up to 300 m with electrofusion and mechanical connectors ensuring leakage-free use.
- **Supports total system weight:** heavy pump, motor, water column, cables and its own weight.
- Pexgol doesn't require threaded connections.
- 50 years operational lifetime.



Dewatering

- **Tailored for Challenging Conditions:** Pexgol pipes are particularly suited for dewatering in less-than-ideal field conditions, offering high pressure tolerance in a lightweight design.
- **Mechanical Strength and Flexibility:** the pipe inherent flexibility and resistance to strain and water hammer make it resistant to failure, while the pipe corrosion resistance ensures long term integrity without the need for extensive maintenance.
- Can be used multiple times.
- Does not require supports.



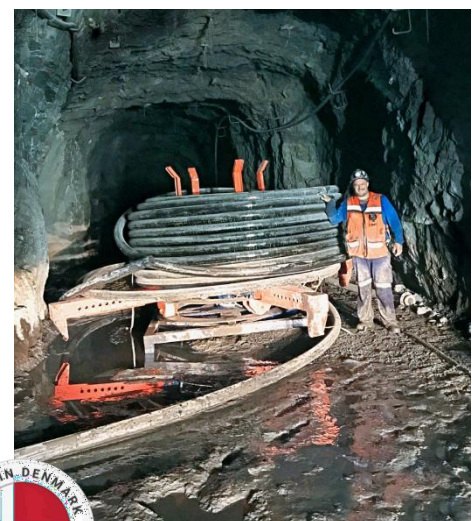
Processing Plants

- Ideal for Hydrometallurgy: Pexgol pipes meet the demands of various hydrometallurgy processes such as leaching and metal recovery. offer corrosion resistance to substances like H_2SO_4 and H_2S , good wear resistance, and low adherence, which is essential for scale forming solutions.
- Operational Advantages: the pipe ability to handle high temperatures (up to $130^{\circ}C$), flexibility, and mechanical strength make it suitable for most conditions in plant pipelines.
- Low adherence due to low superficial roughness (ideal for scale forming solutions).
- Good flexibility and mechanical resistance (impact, scratching).
- Can be supplied in lengths longer than any other pipe type.
- Internal abrasion can be monitored by standard ultrasonic devices.
- Efficient fittings and easy to install.



Compressed Air

- Enhanced Air Delivery Systems: In underground mining, Pexgol pipes ensure safe and efficient compressed air transportation. Our long coils and resistance to high temperatures and impact make our pipes ideal for deep underground applications.
- Installation and Operational Benefits: The inherent flexibility and high strain resistance of Pexgol pipes reduce the risk of air leaks and enhance installation security, contributing to overall mine safety

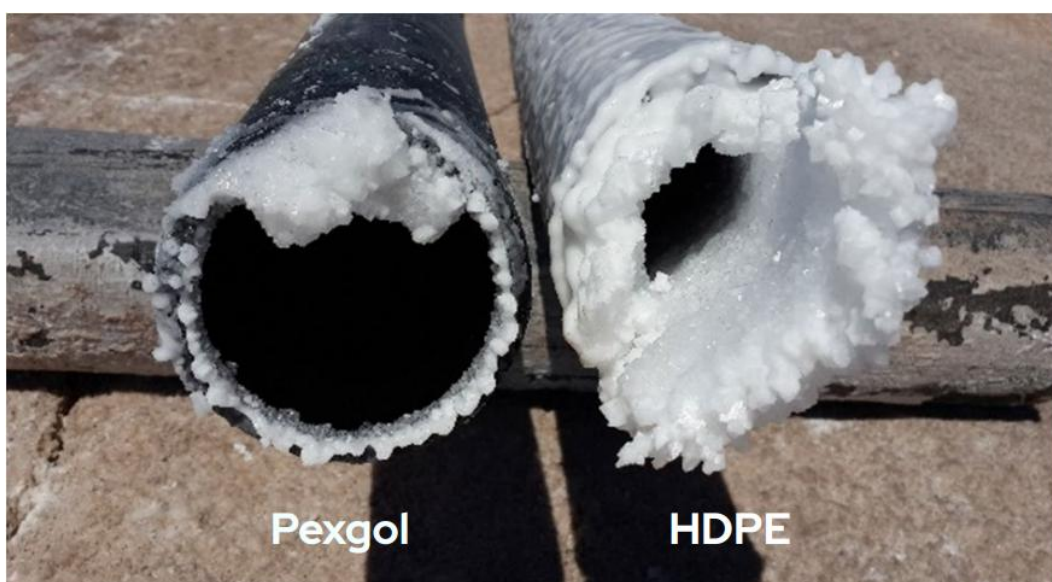


Brine Processing (Non-Metallic Mining)

Pexgol can enhance the production process of lithium, magnesium, potash and table salt. Pexgol's unique pipes, with their smooth internal surface, broad range of working temperatures, and enhanced wear resistance, emerge as the superior choice for these challenging applications.

Advantages Unique to Pexgol in Brine Processing

- **Temperature Adaptability:** Capable of functioning efficiently in temperatures ranging from -50°C to 110°C.
- **Ultra-Smooth Internal Surface:** This feature reduces maintenance, lowers costs, and prevents brine from sticking to the pipe walls.
- **UV Resistance and Long Length Sections:** Pexgol pipes offer UV resistance and are available in continuous sections, reducing the likelihood of leaks and coupling issues.
- **High Abrasion Resistance:** Their greater abrasion resistance minimizes the risk of fissures and leaks, crucial in the brine processing environment.



Pexgol Solution for other Industries

In pulp and paper operations, efficiency and cost control are critical. Pexgol pipes provide a superior alternative to traditional materials, cutting expenses from installation to long-term maintenance.

Pulp & Paper Industry:

- **Stock Preparation & Paper Making:** Chemically inert, compatible with additives like rosin, starches, titanium dioxide, and waxes; reliable for fresh and white-water systems.
- **Water Handling:** Reduces limescale buildup, cutting maintenance in recycling processes.
- **Bleach Plant Operations:** Resists aggressive chemicals such as chlorine dioxide and hydrogen peroxide, outperforming steel and stainless steel.
- **Chemical Recovery:** Handles acids, bases, and abrasives (e.g., caustic soda, lime, sodium systems) with high durability.
- **Corrosion Resistance:** Withstands harsh chemicals for longer service life.
- **Hydraulic Performance:** Smooth flow reduces energy use.
- **Abrasion Resistance:** Protects against wear in demanding conditions.
- **Thermal Efficiency:** Low conductivity saves energy and extends durability.
- **Lightweight & Easy to Install:** Faster, simpler, and more cost-effective installations.

Chemical Industry:

Processing plants in the chemical sector demand piping systems that can withstand aggressive chemicals and extreme temperatures. Traditional options such as alloys, lined carbon steel, HDPE, and FRP—often fall short, leading to corrosion, leaks, and costly replacements.

- **Pexgol provides a stronger, more reliable solution.**
Our pipes are up to **3× more resistant than HDPE** and **2× more resistant than steel**, making them exceptionally durable in the harshest chemical environments. Backed by over 40 years of proven performance, Pexgol systems excel in handling acid waste, toxic and corrosive fluids, slurries, industrial waste, high-temperature media, and abrasives.
- **Proven Resistance to Aggressive Chemicals:**
Sodium Hypochlorite, **Hydrochloric Acid**, Sulfuric Acid, **Phosphoric Acid**, Sodium Chloride, **Caustic Soda**, Bromine Acid, **Lime Slurry**, Brine, Sulfates



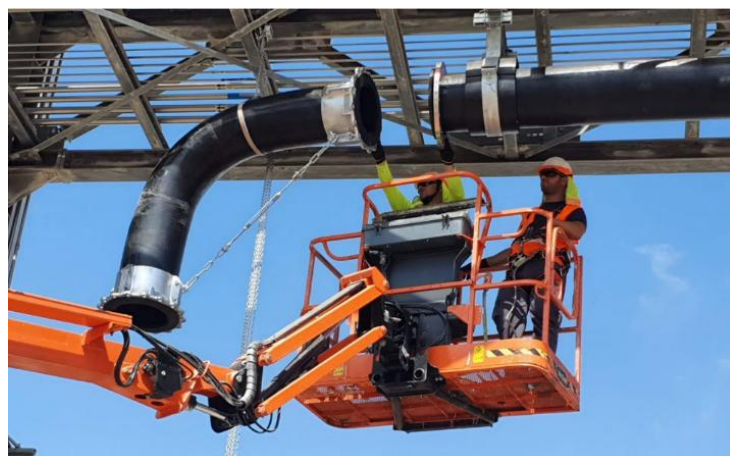
❖ Textile Industry

In the textile industry, from spinning and weaving to knitting, embroidery, and garment production, Pexgol PE-X pipes ensure efficient compressed air distribution with consistent flow, pressure, and air quality.

Their proven resistance to acidic and chemical conditions, including low-pH water and caprolactam acid, makes them a durable, research-backed choice for demanding textile environments.

❖ Advanced Wastewater Management

For advanced wastewater treatment, Pexgol PE-X pipes deliver unmatched durability and efficiency for MBR plants, resisting harsh chemicals, high pressures, and fouling while ensuring uninterrupted performance. Their flexibility and proven longevity reduce costs, downtime, and maintenance by setting a new standard for sustainable wastewater infrastructure.



❖ Fertilizer Plants and Phosphoric Acid Transportation

Pexgol PE-X pipes deliver superior resistance to corrosion, abrasion, and thermal stress, making them ideal for fertilizer plants and phosphoric acid transport. Their durability and efficiency provide a long-lasting, cost-effective alternative to conventional piping systems in these highly demanding environments.

❖ Potassium and Magnesium Processing Plants

In the challenging world of potassium and magnesium processing, Pexgol PE-X pipes set the benchmark for reliability and resilience. Backed by decades of global success, they deliver consistent efficiency and durability where conventional systems fall short.

Environmental Sustainability with Pexgol

Reduced Material and Maintenance Costs

The unique properties of Pexgol pipes, including their resistance to corrosion and abrasion, result in lower material costs over time compared to exotic alloys and RLCS. Additionally, the reduced need for maintenance contributes to a lower overall environmental footprint.



Eco-Friendly Installation and Operation

Pexgol pipes can be installed quickly and efficiently, requiring fewer resources and less energy. This eco-friendly installation process, combined with the pipes' ability to withstand harsh mining environments, ensures sustainable operation from start to finish.



Long-Term Durability and Reduced Waste

Pexgol pipes are engineered for a lifespan of over 50 years, significantly reducing the need for frequent replacements and minimizing waste. This longevity is a testament to our commitment to sustainable mining practices.



Energy Efficiency

Our pipes offer up to 20% energy savings compared to traditional pipe materials. This efficiency is crucial in large-scale mining operations, where energy consumption has a direct impact on the environment.

Minimizing Environmental Disruption

The flexibility and resilience of Pexgol pipes allow for installation in diverse and challenging terrains, reducing the need for extensive land alteration and preserving the natural environment.

Resource Conservation

By preventing internal material buildup and offering superior wear resistance, Pexgol pipes ensure the efficient use of resources, reducing wastage and promoting sustainable resource management in mining operations.

Fittings and Connections

We offer a full piping solution that includes all kinds of fittings and accessories to provide an easy, cost-efficient quick installation.

**Electrofusion Fittings
EF Coupler**



GP Flange Coupler



**Split Flange for Flared
End**



PE-Xa Elbow



CS PE-X lined Fittings



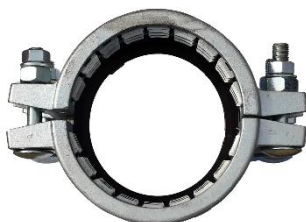
PE-Xc Fittings



PE-Xa Reducer



**Mechanical Double
Connector**



Victaulic



**PE-Xa Flared End
Connectors**



Transportation

A standout advantage of Pexgol PE-X pipes is their exceptional flexibility, made possible by their unique cross-linked molecular structure. This advanced design allows the pipe to return to its original diameter after uncoiling the pipe, ensuring easier handling, faster installation, and reduced project downtime.

Thanks to this flexibility, Pexgol pipes can supply longer lengths than most other suppliers, minimizing the number of joints required. Fewer joints mean lower installation costs, fewer potential leak points, and improved long-term reliability. To fit diverse project requirements, Pexgol pipes are shipped in coils or straight sections, giving maximum convenience and adaptability.

Pexgol PE-X pipes are available in a wide range of diameters:

- 20 mm (¾") to 355 mm (14") supplied in coils or straight sections of 11.8 m.
- 400 mm (16") to 710 mm (28") supplied in straight sections of 11.8 m.

With longer lengths, superior durability, and unmatched flexibility, Pexgol pipes provide a smarter, more cost-effective piping solution outperforming conventional alternatives.





Lollandsvej 16
DK- 5500 Middelfart
Info@golan.dk
+45 6441 7732



Pexgol PE-X Pipes

Pexgol PE-X Pipes cross-linked polyethylene line pipe have many features that make it excellent, cost-effective alternative to other pipe materials:

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

