Ice is Cool
PU is Cooler

District cooling with PU insulation made of Elastopor® H
District cooling is always a challenge! But with the pipe insulating material Elastopor H it’s child’s play. With Elastopor H you save big money, every minute of the day – for decades.
the Insulation Inside the Pipe

Lasting reliability

If we need to protect ourselves from the cold, we simply put on another layer. If, however, we want to keep out the heat, we are like babes in the wood, or we would be without properly functioning district cooling pipes.

Perfect thermal insulation inside the pipe system is key to perfect cooling in hot environments. Only the best and most tried materials accomplish this difficult task on a long-term basis. One such insulation material is made of polyurethane by Elastogran. Day in day out it remains cool for decades to come, ensuring pleasantly cool water even for the most remote end-user.

Excellent insulation values

With its unbeaten thermal conductivity value of 0.022 W/(m*K), the comprehensive portfolio of Elastogran’s pipe insulation material Elastopor H has made a name for itself all over the world. From Greenland to Cape Horn, PU insulation made by Elastogran has been field tested on all continents: for district cooling, district heating and oil pipelines.

Elastogran

Around the globe, pipe insulation manufacturers appreciate the reliability and quality associated with Elastogran and its products.

As long as their customers cannot overheat, pipe manufacturers can also keep their cool. The solution is simple: only use the best insulation materials available, best of all, use Elastopor H by Elastogran.
### Elastogran’s rigid foam PU/PIR systems for pipe insulation

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### Elastogran is made in Germany
- Leading supplier of high-temperature systems for pipe systems for over 30 years
- Initiator and patent owner of innovative processes, blowing agents and PU foams
- Fully-equipped technical lab for all kinds of trials
- Test devices for many key system properties

### Elastogran pipe insulation: it’s all you need
- Reliability, delivery reliability, punctuality
- Comprehensive service
- Product guarantees for up to 30 years
- German engineering
- World-wide operations
- Local distribution partners (we speak your language)
- BASF subsidiary

### You can put your trust in Elastogran
- High-tech chemistry and
- Easy processing

### Elastogran: product guarantee
30-year guarantee for PU foam with temperatures up to 161°C and 10-year guarantee for PIR foam with temperatures of up to 180°C.

### Elastogran: cost-effectiveness
Elastogran products do not come cheap, but quality always pays off. And one thing is for sure: Elastogran only supplies top quality materials.

More benefits of Elastogran products:
- Low reject rates
- Little down time
- Production keeps on running
Elastogran is one of the world’s leading enterprises in the field of the specialty plastic material polyurethane (PU). Elastogran’s headquarters in Lemförde, Germany are home to the international technology centre of the BASF polyurethane world.
Pipe Insulation Made of Spray Foam in a Continuous Manufacturing Process

Spray foam is the measure of all things. For perfect thermal insulation manufacturing in the continuous spray process — using microcellular foam. A further advantage: the enormous flexibility during the production of different and, particularly, large pipe dimensions.

Pipes manufactured in the continuous spray process can be employed in all areas of application, such as district cooling and heating, oil pipelines and industrial applications.

The systems of the Elastopor H portfolio are particularly suited for the continuous spray process. Every tonne of Elastopor H is the result of over a decade of Elastogran’s expertise of customised system solutions, tailor-made to meet the requirements of our clients. Our maxime: ‘We keep on going until things flow smoothly’. — Elastogran has been successfully supplying its satisfied customers with material for their conti spray plants for years.

Go for experience — go for Elastopor!

The process of spray foaming (Continuous Manufacturing Process)

1 The fluid pipe is fixed
2 The fluid pipe rotates and is coated with Elastopor H
3 Two coats for sufficient thermal insulation

«Continuous» applications in the United Arab Emirates (Dubai — Green Community)
Pipe Insulation Made of Foam in the Pipe-in-Pipe (PIP) One-Shot Manufacturing Process

The traditional PIP-One-Shot processing method is ideal for the reliable manufacture of pipes of varying dimensions. Without great changes to the production process, PIP enables the production of pipes with both very small to very large diameters to be produced. Production using the PIP method is also ideal for thermal insulation – thanks to its microcellular foam and a wide range of blowing agents.

Pipes manufactured by means of the PIP-One-Shot method can be used in all areas of applications, such as district cooling/heating, oil pipelines and industrial applications. The systems of the Elastopor H portfolio can also be used for the discontinuous PIP process. Elastogran has been supplying Elastopor H for over 30 years, always keeping ahead of developments by expanding its portfolio with innovative developments and new patents. This has put the materials among the product leaders of their kind.

Go for experience – go for Elastopor!

The discontinuous manufacturing process (PIP)

1. Insulation between fluid and casing pipe
2. The mixing head fills the cavity with PU foam
3. PU insulation between pipes: the finished product

Discontinuous pipe production in the United Arab Emirates
Flexible pipes are the crème de la crème of pipe systems because they can be bent and adapted to the topography of their surroundings. This way, obstacles can easily be bypassed and targets reached without having to detour. Not only does this look good – it also considerably reduces pipe laying costs. The jacket foam medium pipes with these advantages contain the materials: copper, steel and PEX (cross-linked polyethylene).

Pipes manufactured and pre-insulated in the caterpillar process stand out due to their highly microcellular foam and low thermal conductivity (0.023W/(m*K)). Elastogran has mastered the fine art of reconciling the two ›souls‹ of PU foam for flexible pipes with Elastopor H.

It is rigid enough to withstand strain yet flexible enough to enable pipes to be bent.

Go for experience – go for Elastopor!

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**Insulation of Contiflex Pipes in the Caterpillar-Process**

*This is how the process works:* the foaming plant carries the liquid foam to a foil which is drawn through the pipe-shaped caterpillar together with the medium pipe. Then a polyethylene coat is extruded onto the pipe. Finally, it is cooled and cut to size.

**The production of Contiflex pipes (Caterpillar-Process)**

**Coiled up Contiflex pipes for the United Arab Emirates**
Elastogran is Polyurethanes

Elastogran is one of the leading enterprises in the field of the special plastic material polyurethane (PU). For over 40 years the BASF subsidiary has been operating highly successfully in the market and has developed into a Europe-wide operating market and innovation leader for PU specialties.

The Elastogran product portfolio comprises high-quality
- PU base products
- PU systems and
- PU special elastomers

Based on the principle “We help our customers to be more successful”, Elastogran develops individual tailor-made solutions for its customers as well as creating its own product applications. In the European Economic Area Elastogran operates the PU business of BASF with a network of over a dozen close-to-the-customer operating polyurethane System Houses.
At Your Service: The Global BASF/Elastogran Pipe Insulation Team

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