

Global Excellence  
Strengths, Solutions, Advantages







# TIONS - ADVANTAGES

INTEGRATED  
PRE-MATERIAL  
SUPPLIERS

SECURE  
LOGISTICS

RISK  
MANAGEMENT

TRUSTED  
COLLABORATION  
WITH SUPPLIERS

PIPE

## CENTURIES OF EXPERIENCE

EUROPIPE has over a hundred years of experience in manufacturing large-diameter pipes. Shortly after the turn of the 20th century, our pipe mill in Mülheim began manufacturing pipes with outside diameters exceeding 24”.

This heritage is reflected first and foremost in the tens of millions of tonnes of large-diameter pipes that have left our factories’ doors since then. However, it also has tangible effects on quality as well. Generations of our employees’ families have worked in our mills, some of them are already fourth generation. This has created a work ethic that values quality and exacting workmanship above all.

Combined with the long and rich history of our shareholders as plate suppliers, which, in the case of Aktien-Gesellschaft der Dillinger Hüttenwerke, stretches back to 1685, we feel confident in saying that the ability to produce the highest-quality steel pipes to an excellent technical standard is deeply ingrained in our corporate DNA.



Pipe welding at the Mülheim mill, Germany – today

## SHAREHOLDERS

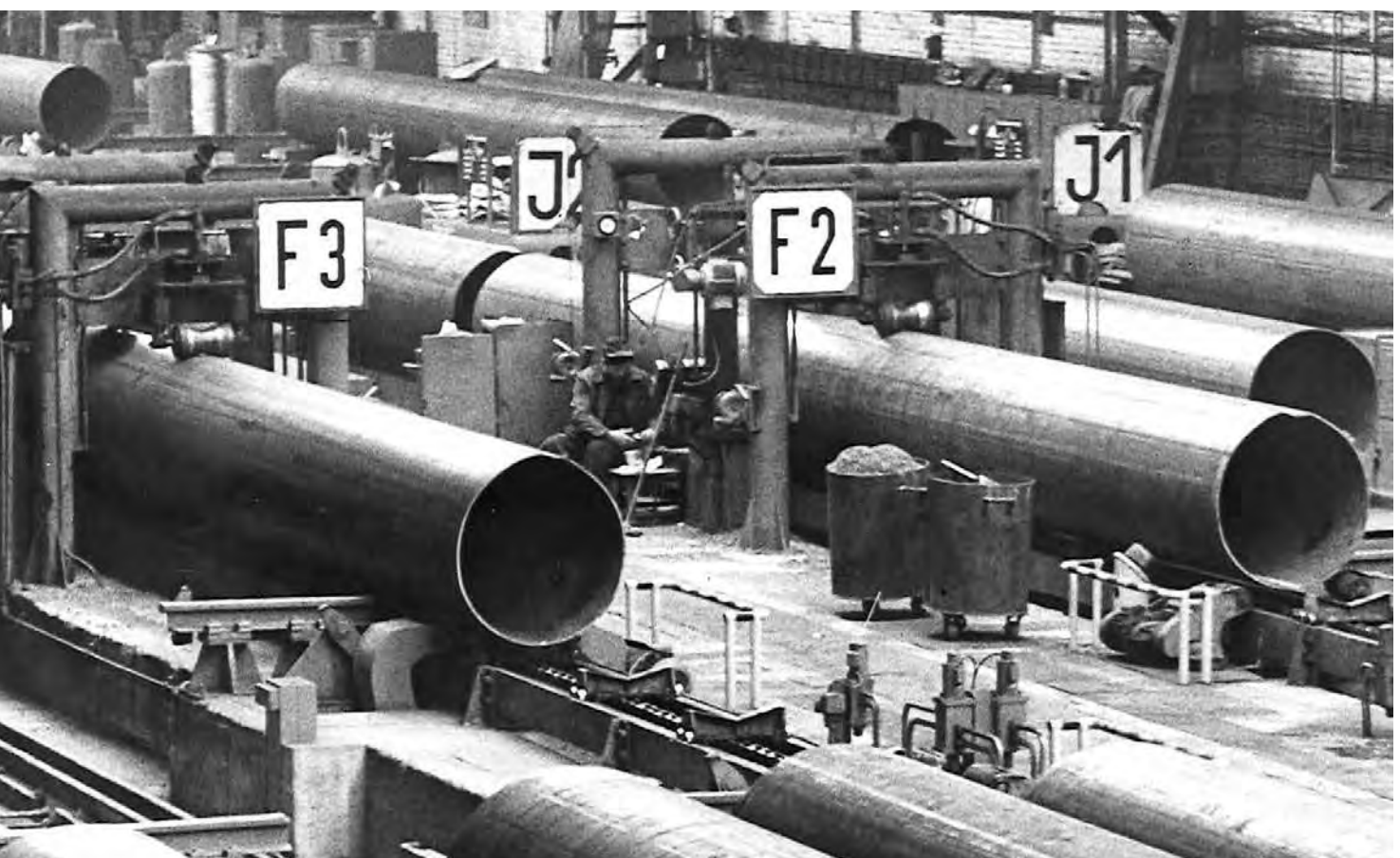
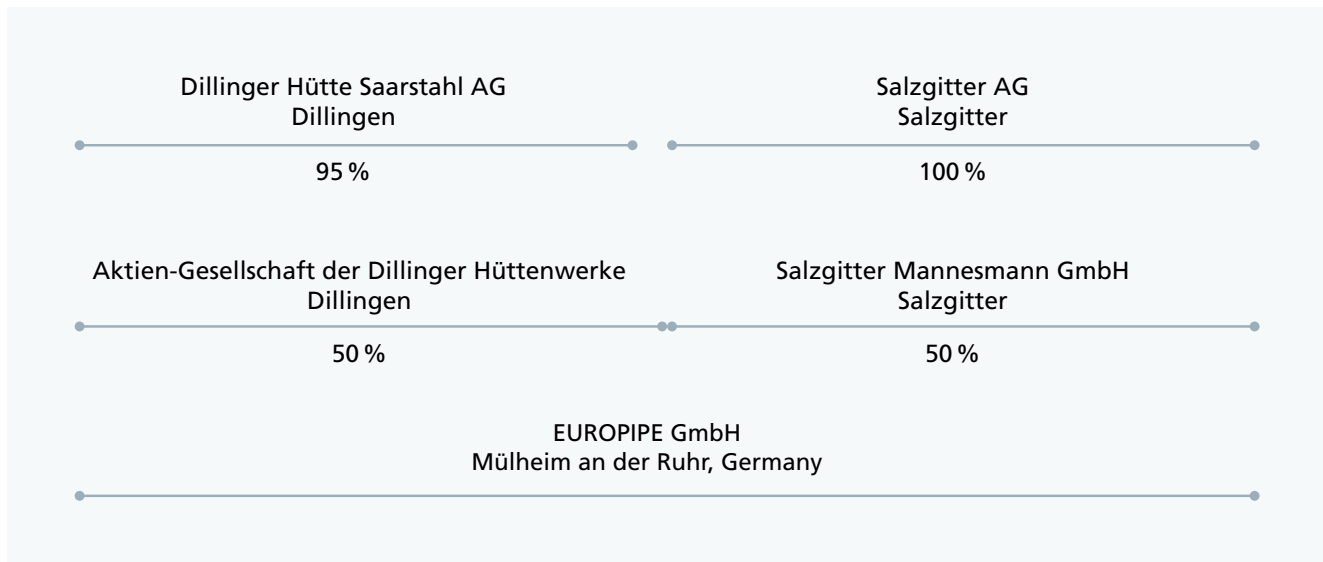
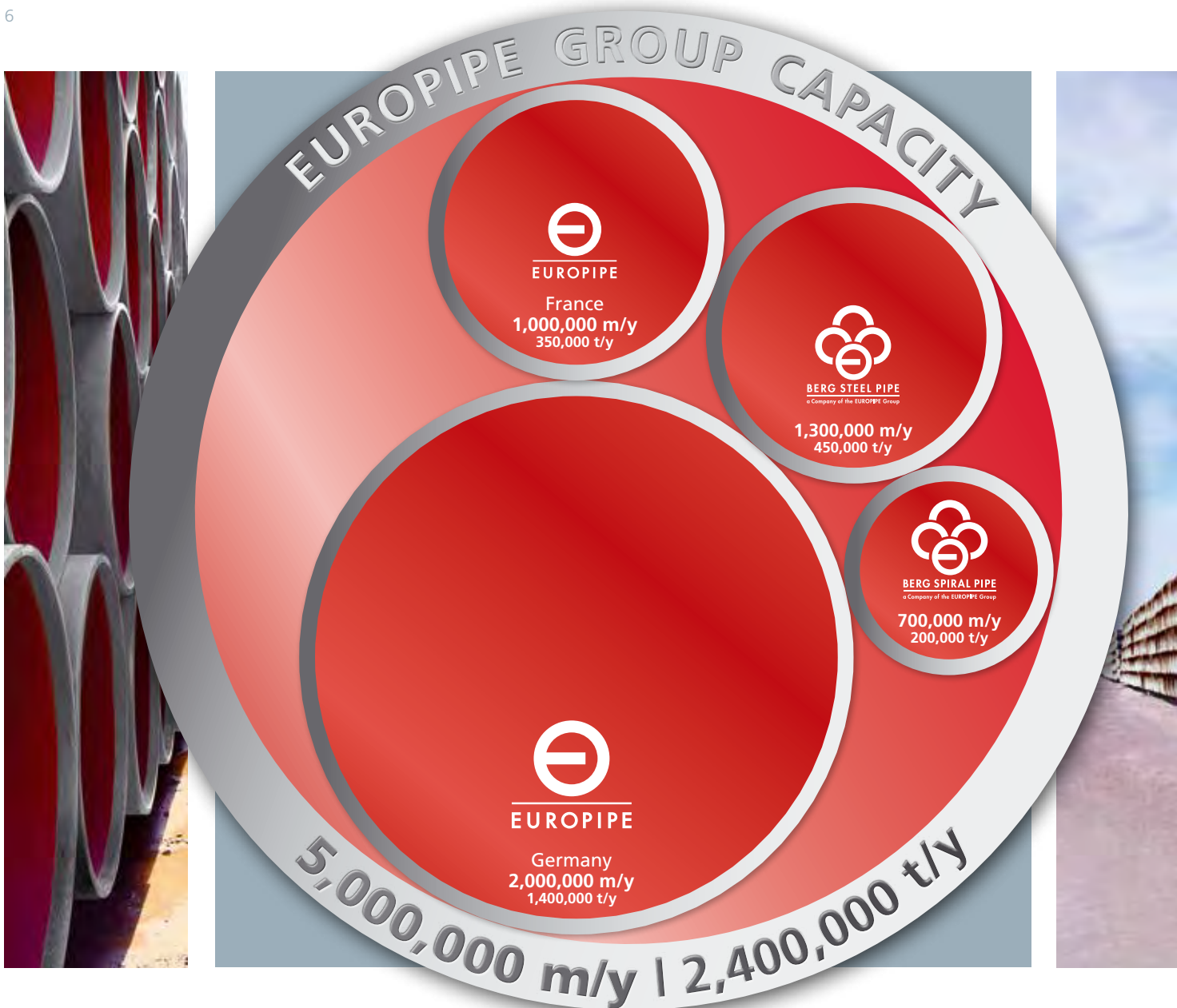


Photo kindly provided by Salzgitter AG Archive

Large-diameter pipe mill in Mündelheim, Germany – 1964



## UNIQUE CAPACITY

Whatever the size, location or technical requirements of our customers' projects, EUROPIPE delivers even under the tightest of deadlines. The Mülheim pipe mill is the largest and most productive in our industry, this means our overall capacity is unmatched. Annually 5,000 km (2.4 million tonnes) of large-diameter pipes can be produced in our four pipe mills. All of these pipes are produced to the same exacting quality standards. For us, capacity is not the theoretical addition of pipe tonnage in an ideal production mix but is derived from tried and tested, live production data.

During the Nord Stream project for example, the Mülheim mill produced 5,500 tonnes or 6 km of pipes per day, while still maintaining reserve capacity.

In addition, the global EUROPIPE manufacturing system allows parallel pipe production for single projects at various locations, all producing the same high quality. A case in point for our capacity: three EUROPIPE mills produced large-diameter pipes for the Gulfstream project concurrently in order to meet the required deadline.



Sometimes the pipes also require a high quality coating. This is why all EUROPIPE Group mills have either an integrated pipe coating facility or large, trusted coating partners nearby. All coating plants are sized so as to be able to match the capacity of their respective Group pipe manufacturing facilities. For example, the wholly owned subsidiary MÜLHEIM PIPECOATINGS has a capacity of more than eight million square metres of inside and outside coating per year.

The EUROPIPE system reduces supply chain complexity and allows great flexibility when delivering pipes for many large projects at the same time – bare or coated.

## INTEGRATED PRE-MATERIAL SUPPLIERS

All of the pre-materials that EUROPIPE uses in its European mills is produced in the two steel works and three plate-rolling mills of our two shareholders, Aktien-Gesellschaft der Dillinger Hüttenwerke and Salzgitter AG. The combined capacity of the plate-rolling mills is more than double the capacity of the EUROPIPE mills in Germany and France. Our shareholders guarantee plate capacity and plate supply, which is especially important during times of high demand.

In addition, the pre-material also has to be customised, as most of today's projects have very specific and unique technical requirements.

The ability to exactly transfer customer demands to technical pre-material briefings is a key success factor. Furthermore, it is crucial that the pre-material supplier is able to turn these specifications into matching steel plates. And last but not least, the supply chain from steel production and plate rolling

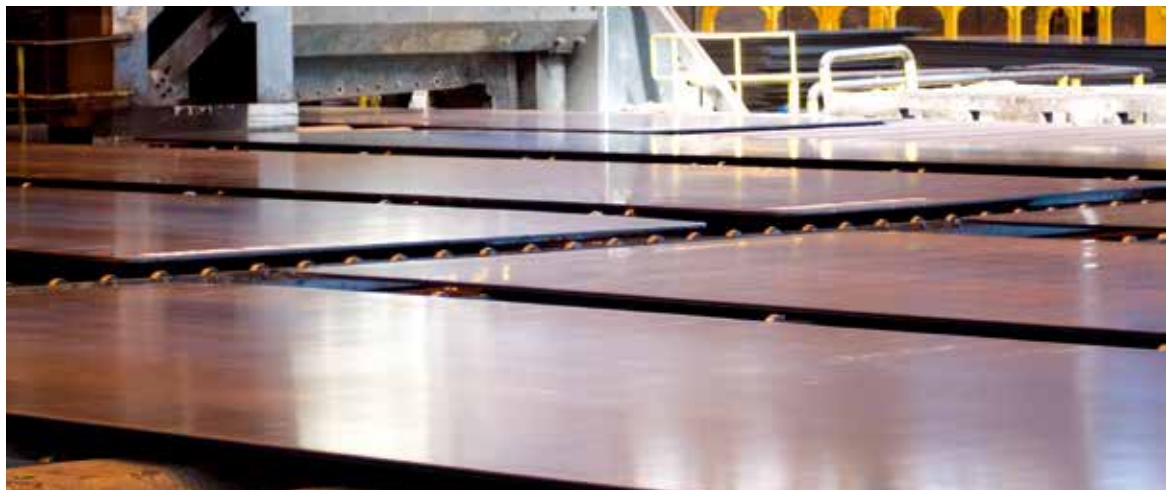


Steel making at the Hüttenwerke Krupp Mannesmann mill



to pipe manufacturing and coating must be fully integrated. The successful fulfilment of all three factors gives EUROPIPE an unrivalled ability to adapt its products to even the most demanding technical requirements.

Experts from EUROPIPE and our plate mill partners are organised in permanent working groups that examine methods for enhancing our already advanced processing technology and develop tailored new material solutions in all process steps from steel to coated pipes.



Top: Slab cutting at Aktien-Gesellschaft der Dillinger Hüttenwerke, Dillingen · Bottom: Plates at Salzgitter Mannesmann Grobblech



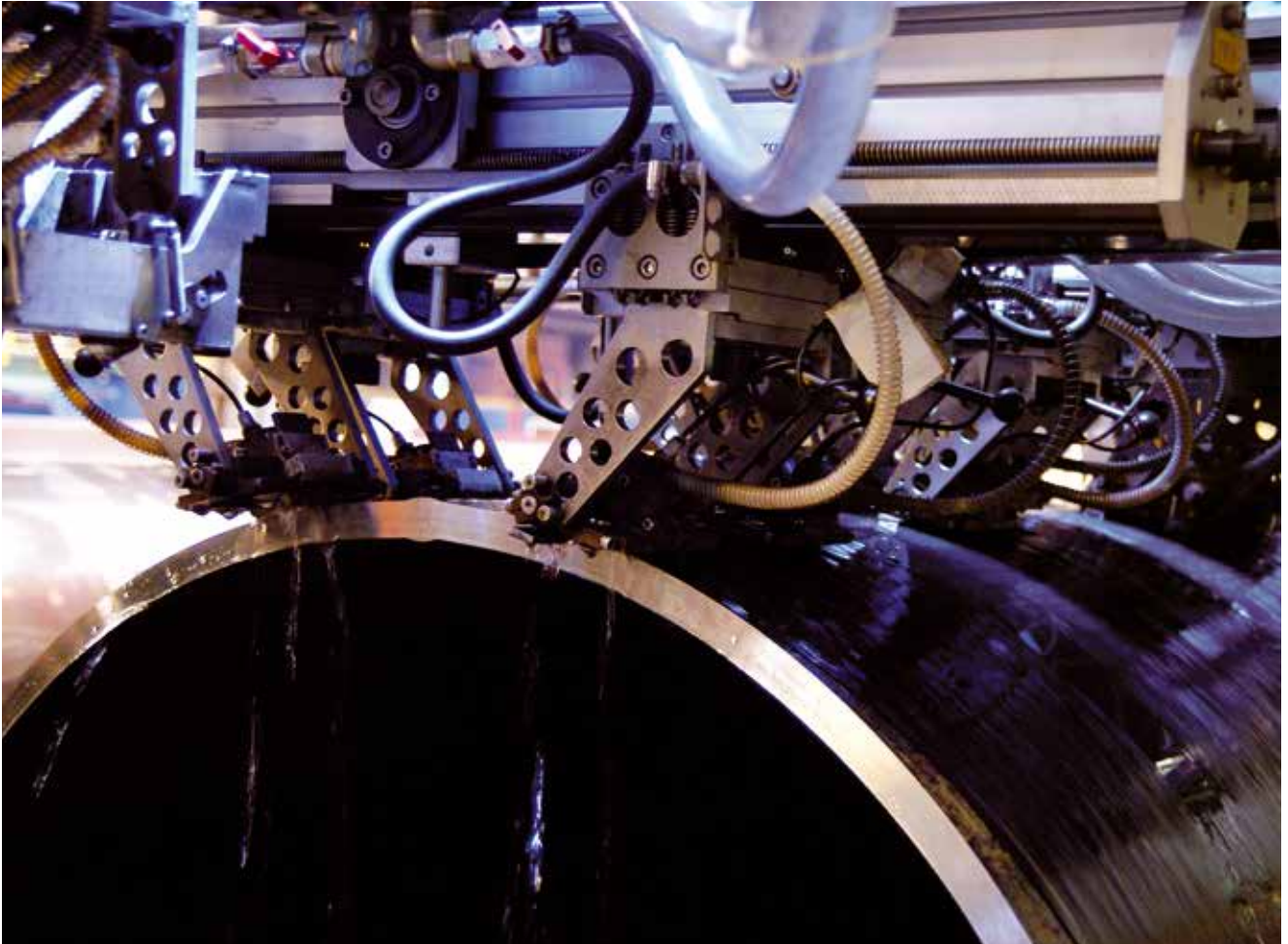
E-FLORAD: Filmless radiography

## EXCELLENT QUALITY

The ability to convert steel plates into perfectly round pipes in consistently best-in-class quality requires stable processes in every aspect of the value chain. In the EUROPIPE manufacturing process at least half of the steps are related to quality testing, documentation and inspection. These steps are part of our comprehensive quality management system, which is based on API Q1 and ISO 9001, a standard to which we have been certified in all of our manufacturing facilities since 1983. We check that this standard is met at all times and constantly improve our processes based on objective measurements and audits. The same is true for our primary supply chain partners.

We are all certified according to ISO 9001, ISO 14001 and OHSAS 18001.

For the EUROPIPE Group, quality is a competitive advantage, because over and above fulfilling the stipulations set out in the quality standards, we strive to have the most efficient quality system in our industry as well. We are proud to have developed several systems that have pushed technological boundaries in the field of quality management. Take the E-FLORAD system for example. It was the first large-scale filmless radiography system in the pipe industry and a quantum leap in image quality and management for testing the welded seams at



Ultrasonic testing at the Mülheim large-diameter mill, Germany

the ends of pipes. We recently developed the new ultrasonic testing system. It is the first automated testing machine for the entire longitudinal weld seam by ultrasonic means. Our system is unrivalled in its accuracy and speed. Our customers trust in our permanent investment into technology and our constant fine-tuning of quality control stages.



Pipe storage site at Mukran, Germany for the Nord Stream pipeline

## SECURE LOGISTICS

At EUROPIPE we make sure that every pipe reaches its destination safely and securely anywhere in the world, right up to and including the final storage yard.

Every logistics centre in the EUROPIPE Group's manufacturing facilities has storage and loading capacity that corresponds to the capacity of its pipe mill. Up to five goods trains can be completely filled each day – 5,000 tonnes of large-diameter pipes come from the Mülheim mill alone.

For overseas projects, there are approximately 100,000 tonnes of storage capacity available at three ports of departure (Bremen and Brake in Germany, Dunkirk in France). The unloading capacity at the ports is up to seven pipe trains per day, with a loading capability of up to 800 pipes per day and per ship. This enables ships to be loaded with up to 40,000 tonnes of pipes. Oncarriage by road to the final storage place is of course also possible, with up to 100 HGV loads per day.

In the event of disruptions to the supply chain, we use alternative routes that are already in place. In addition, we organise and coordinate transfer facilities along the transportation route. We meet the highest security and quality standards to prevent the pipes from being damaged during transport. This applies to both the storage yards in our pipe mills and the storage areas along the pipe laying site. We use the most modern pipe handling equipment, such as vacuum traverses and System 88 to ensure smooth transport on trucks or by train. In addition, EUROPIPE has a comprehensive network of surveyors worldwide, who support our clients with a best-in-class logistics infrastructure.



## FINANCING SUPPORTED

Pipeline projects are technically and logistically demanding, in addition they also have numerous legal and commercial complexities as well. EUROPIPE has been the market leader in the large-diameter pipe segment for decades and therefore has a certain amount of experience and expertise in these matters.

In the planning stage, we support customers with our existing contacts. Our active network in the financial community can bring significant benefits to our customers, while our partners

appreciate the insight we can deliver in the business case. We work with public and private export credit agencies. Long-term relationships and a good standing with these institutions make things easier when their services are required. Throughout our history, we have never had a client credit loss, which is looked upon favourably.

This also applies for all types of project securities, such as performance bonds or liability insurance. We have never had

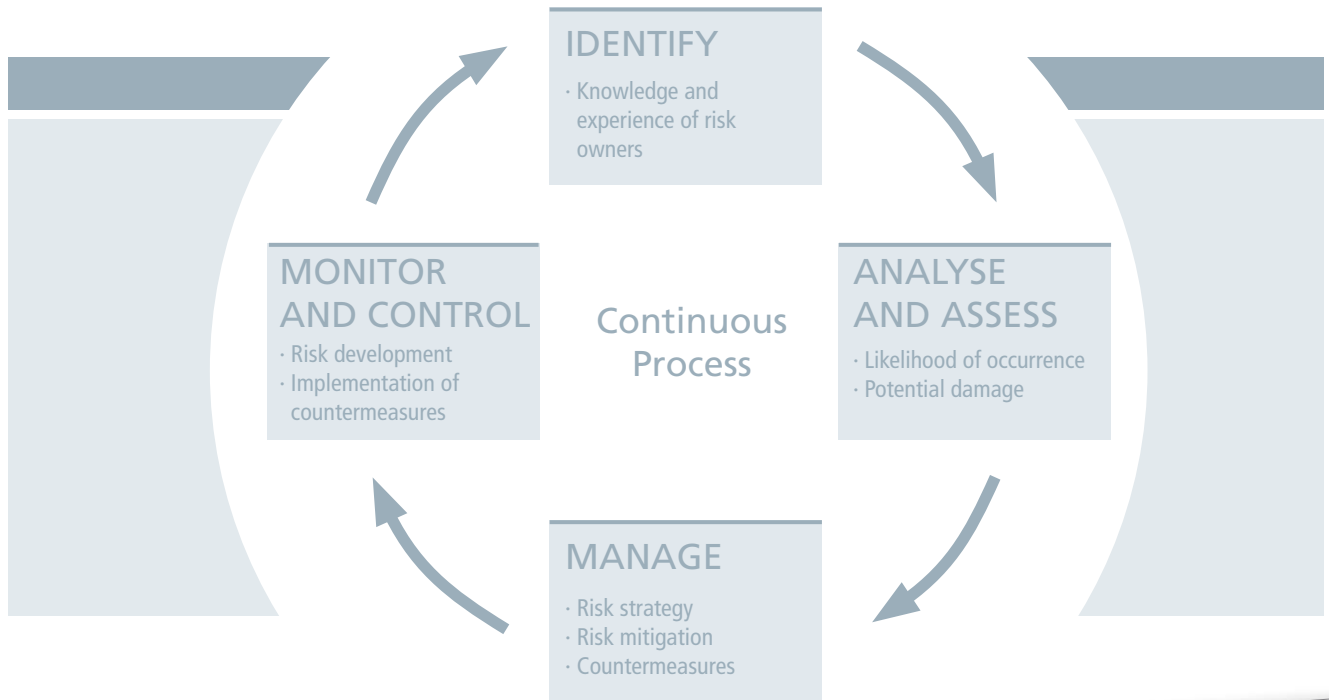


a claim lodged against us due to non-delivery or defective products, therefore we are generally able to obtain insurance cover for our pipeline projects.

Fast, proper, detailed and complete handling and documentation of all required project paperwork ensures the smooth flow and finalisation of a project, including all taxation and customs matters.

Taken together, a project in which EUROPIPE is the large-diameter pipe supplier is a project with a significantly reduced risk profile, making it easier to finance.





# Risk Report

EUROPIPE GmbH

■ KeyRisk



**Risk (ID: 9039): Insufficient or no spare parts available in case of equipment breakdowns**

Last modified: <b>06.02.2012</b>	Year: <b>2012</b>	Category: <b>Production &gt; Maintenance</b>
Strategy: <b>Risk: reduce</b>	Characteristic: <b>latent</b>	
Risk owner: <b>General Manager Production</b>	Risk owner II: <b>General Manager Maintenance</b>	

		Gross	Global Likelihood of occurrence: 10 %	very low	critical
↑	Best Case	20.000 EUR	highly probable		
	Likelihood of Occurrence	90% (global 10%)	probable		
●	Expected Case	150.000 EUR	fairly improbable	↑	
	Likelihood of Occurrence	9% (global 10%)	improbable		●
↓	Worst Case	600.000 EUR	highly improbable		↓
	Likelihood of Occurrence	1% (global 10%)			
<b>Gross Evaluation</b>					<b>600.000 EUR</b>
- Provisions					
- Transfer-actions					
- Impact-decreasing actions					
<b>= Net Evaluation</b>					<b>600.000 EUR</b>

**Description of subject**  
 The likelihood of this risk is considered to be very low as spare part levels have been analysed for all key components of the production area. Min and max levels have been determined for all spare parts of the respective equipment in close cooperation with Risk Management. Reorder levels consider the procurement lead times as well as Risk Management. Reorder levels have been furthermore divided into...



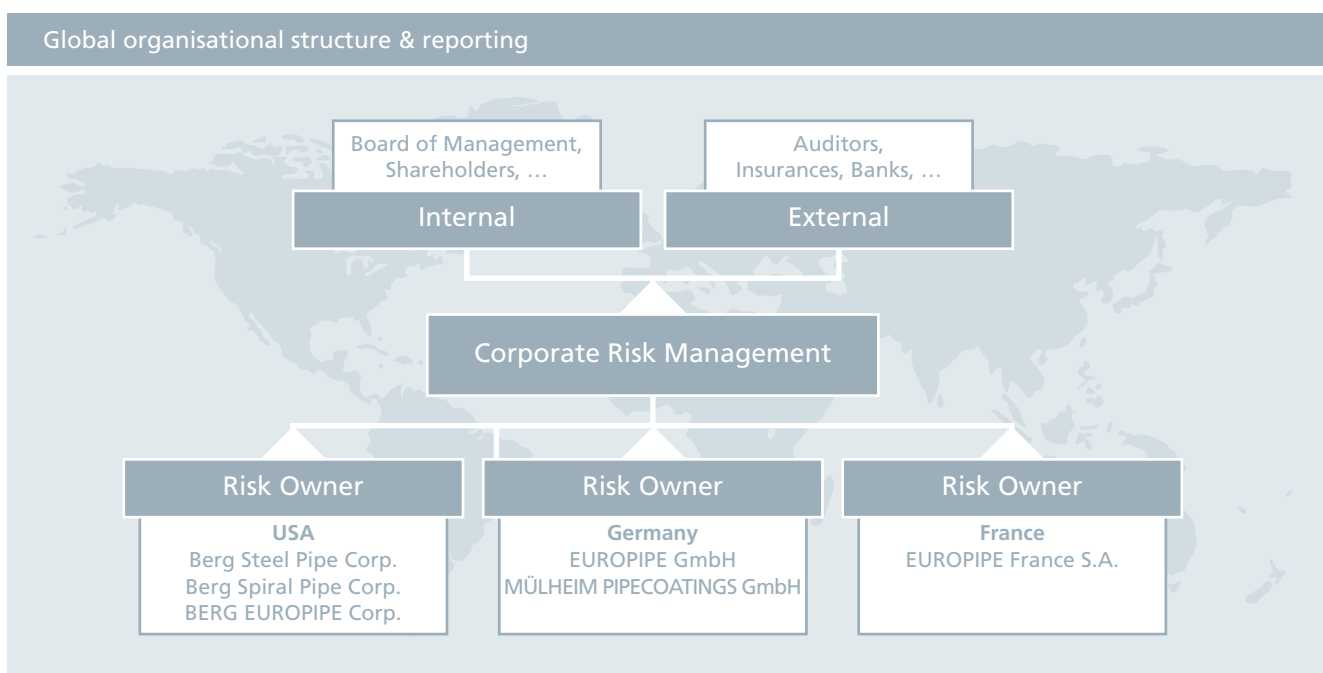
## RISK MANAGEMENT

EUROPIPE Group has implemented a Risk Management System that allows the detection of risk factors and opportunities at an early stage. After identification, analysis and assessment of risks, measures are taken that reduce the likelihood of risks occurring and any possible consequences if they do. The processes used in EUROPIPE's Risk Management System are based on ISO 31000 Risk Management.

Risk factors as well as countermeasures are systematically captured and controlled for all business segments on a continuous basis. Local Risk Owners, who report to corporate Risk Management, are nominated at each subsidiary. Due to its organisational structure Risk Management processes are carried out across the whole group. The systematic approach is supported by a global IT-based Risk Management Information System (RMIS).

As a company acting internationally with technically demanding products EUROPIPE is exposed to various internal and external risks. Besides tackling external risks, Risk Management at EUROPIPE is commonly used as a preventive tool to avoid potential operational issues. Its function is to identify risks as well as to introduce and monitor mitigating countermeasures related to production, such as avoiding accidents or ensuring a continuous supply of pre-material. For instance, Risk Management has analysed the availability of spare parts of key equipment in order to ensure that a sufficient level is on hand and thus, to ensure a smooth and continuous production.

EUROPIPE believes that we should attack risks before they can attack us. With this approach Risk Management at EUROPIPE preserves sustainable company values.



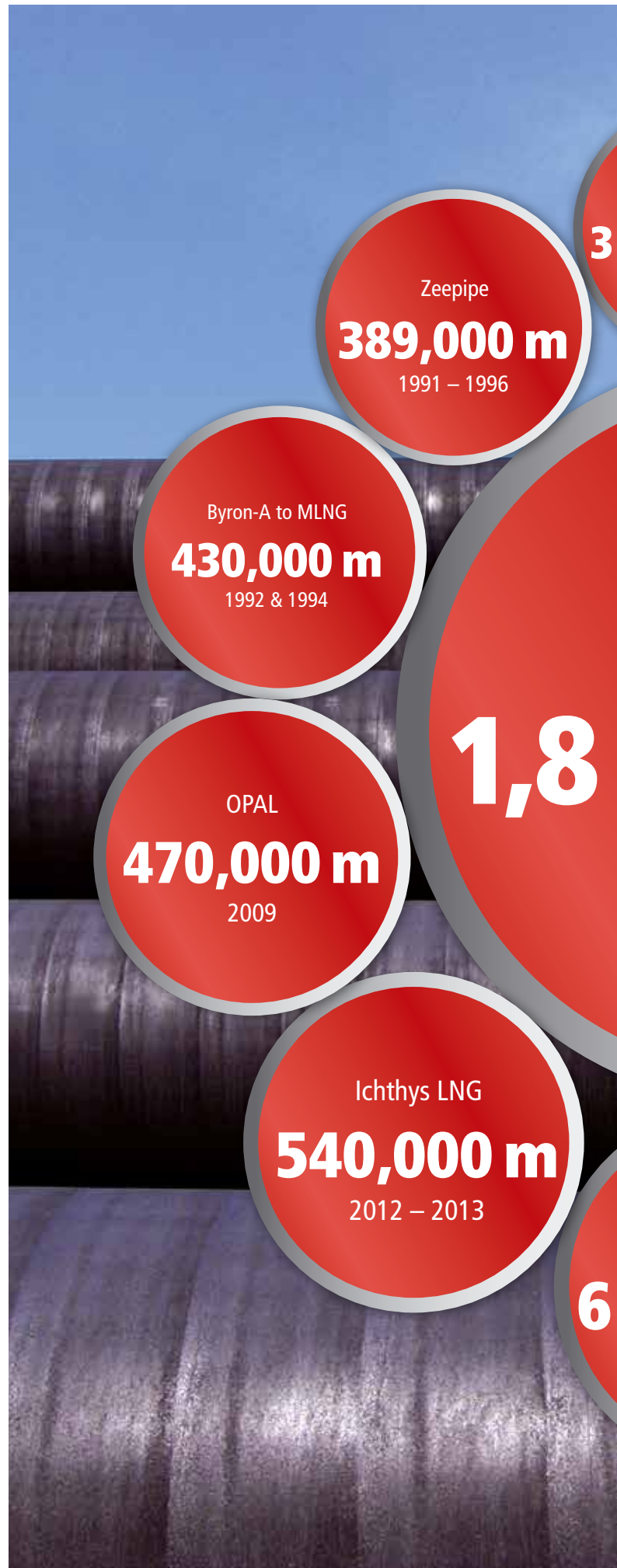
## EXTENSIVE EXPERIENCE WITH ULTRA-LARGE PROJECTS

The pipeline industry has created a new class of pipeline project: the ultra-large project class. These projects are significantly more complex in terms of capabilities in technology, logistics, delivery reliability and deadlines compared to standard projects.

The requirements of these types of projects play to the strengths of the EUROPIPE Group. We provide the largest capacity in the pipe industry plus resilient manufacturing systems which can withstand high utilisation for sustained periods of time as well as a global quality system.

More than one third of the 18 million tonnes that we have produced since 1991 have been for just ten ultra-large projects. We also maintain reserve capacity for other projects, even when producing or coating pipes for an ultra-large project. During production for the largest of these projects, the Nord Stream pipeline, we were in fact able to complete another ultra-large project, the OPAL pipeline, at the same time. And all of this with just a single pipe mill, our Mülheim mill.

We operate to the same exacting quality standards in all of the Group's pipe mills, which allows us to even share production between the manufacturing facilities. During the Gulfstream project, in which we supplied nearly 450,000 tonnes (> 1,000 km) of pipes in a record time of only seven months, we leveraged this capability by supplying the project from three of the Group's pipe mills.



Europipe  
Development

**70,000 m**  
1993

Asgard Development

**244,500 m**  
1998

Jamal Pipeline

**1,200,000 m**  
1997 – 1999

Nord Stream I & II

**38,000 m**

2008 – 2011

Gulfstream

**1,044,000 m**  
2001

Langeled

**835,000 m**  
2006

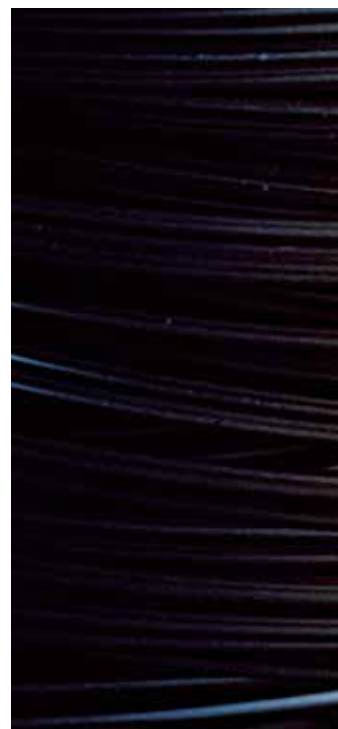
Alliance Pipeline  
Project

**30,000 m**  
1998 – 1999

## TRUSTED COLLABORATION WITH SUPPLIERS

In addition to our pre-material suppliers, we also work with a number of key suppliers from the consumables and capital goods sectors. However, the approach is the same: we collaborate closely with a select group of companies who are able to translate our technical requirements into their products so that we can produce large-diameter pipes of superior quality. This is true for consumables such as welding wires, where we specify in great detail the design and composition of the wires, as well as for all of our production and quality assurance machinery. Here, we always try to push the technical boundaries ever further, firstly to make better products, but also to create long-term competitive advantages. This means that we invest in new machinery built externally, but always keep the key expertise, in terms of software or tools, in-house.

Collaboration with our suppliers usually focusses on either increasing productivity and quality or adapting a process to changes in requirements as a result of improved input materials. The welding process for high-strength steels for example has very different requirements than those for standard steel grades. As we have been dealing with the challenges of manufacturing pipes using X80 or X100 virtually from day one, we can use our decades of experience in this field to specify customised welding wires or welding equipment. It is the same for capital goods. Our investment in a new crimping press, which uses a force of up to 11,000 tonnes to crimp X80 steel plates up to 50 mm, is another example. This was the result of a close cooperation between the supplier and EUROPIPE, in which we still retain key intellectual property rights. The collaborative approach creates competitive advantages for us and significant added benefits for our clients.





Top: Crimping press at the Mülheim large-diameter mill, Germany · Bottom: Welding material



**EUROPIPE**

## Gulfstream

Mobile – St. Petersburg in six months.

Customer	Gulfstream Gas
Usage	Onshore / Offshore
Medium	Gas
Steel grade	X65 / X70 · LSAW
Total length	1,044 km
EUROPIPE & BSPC length	1,044 km
EUROPIPE & BSPC tonnage	442,000 t
Size	30" / 36" x 25.2 - 34.9 mm
Year	2001

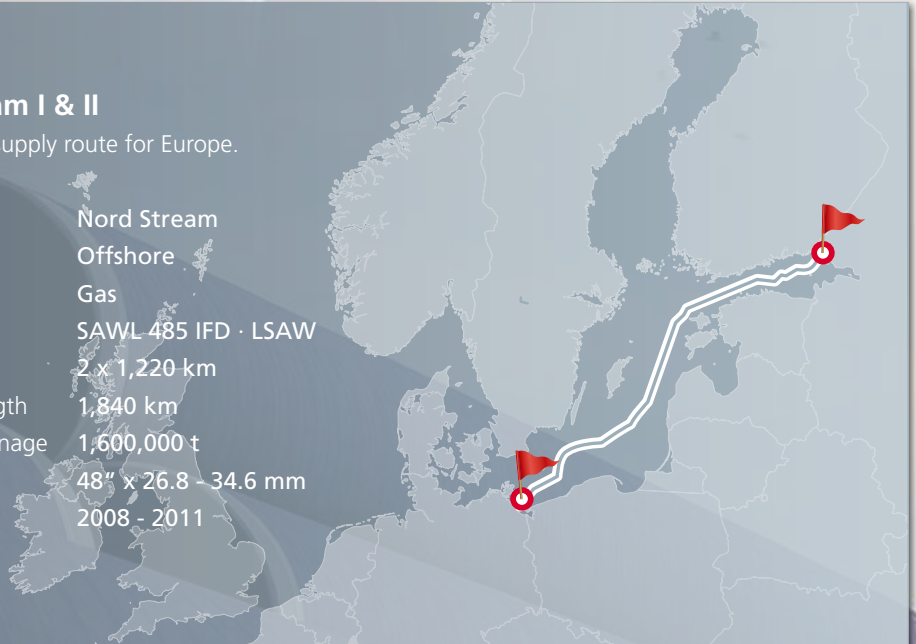




## Nord Stream I & II

The new gas supply route for Europe.

Customer	Nord Stream
Usage	Offshore
Medium	Gas
Steel grade	SAWL 485 IFD · LSAW
Total length	2 x 1,220 km
EUROPIPE length	1,840 km
EUROPIPE tonnage	1,600,000 t
Size	48" x 26.8 - 34.6 mm
Year	2008 - 2011

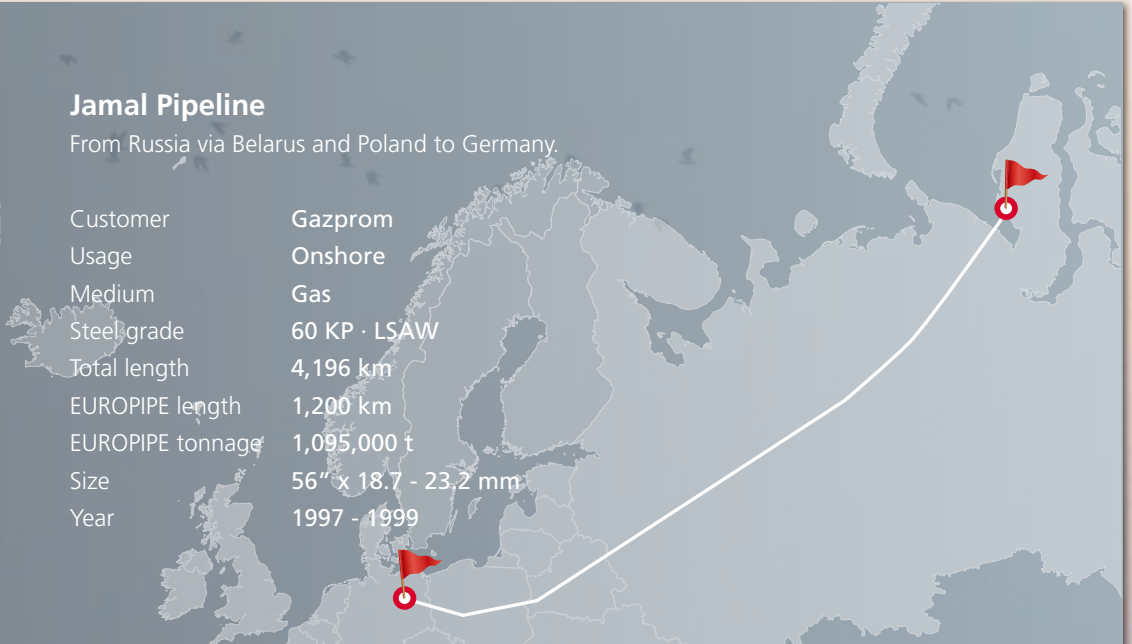




## Jamal Pipeline

From Russia via Belarus and Poland to Germany.

Customer	Gazprom
Usage	Onshore
Medium	Gas
Steel grade	60 KP · LSAW
Total length	4,196 km
EUROPIPE length	1,200 km
EUROPIPE tonnage	1,095,000 t
Size	56" x 18.7 - 23.2 mm
Year	1997 - 1999







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