

# PREMANT

Pre-insulated steel pipe system



# Heat insulated - reliable - monitoring possible

PREMANT



Brugg Rohrsysteme provides integrated solutions from heat uncoupling all the way to the end consumer. Our complete range of products contains rigid pre-insulated steel pipes, flexible pipe systems as well as accessories for any application. Together with our service package - from engineering to production, delivery and assembly - we are a qualified systems supplier for district and local heating networks.

## The application

PREMANT is the trademarked name for a pre-insulated steel pipe system for transporting district heating. It is a pipe system for channel-free, direct ground installation. Tried and tested for decades, it is now seen as the industry standard for local and district heating systems and in industrial applications.

## The construction

The PREMANT district heating pipeline, depending on the intended application, features one or two steel carrier tubes, welded, seamless or galvanized, or made of stainless steel. The PREMANT district heating pipeline is therefore well-suited for transporting heating water, domestic hot water, condensate and other fluids.

## Excellent heat insulation

The PREMANT district heating pipeline is heat insulated by a hard polyurethane foam which can be heated up to 144° C. A PE-HD plastic jacket pipe ensures external protection. All three components make up a fixed unit. This pipe system is therefore a member of the composite pipe family.

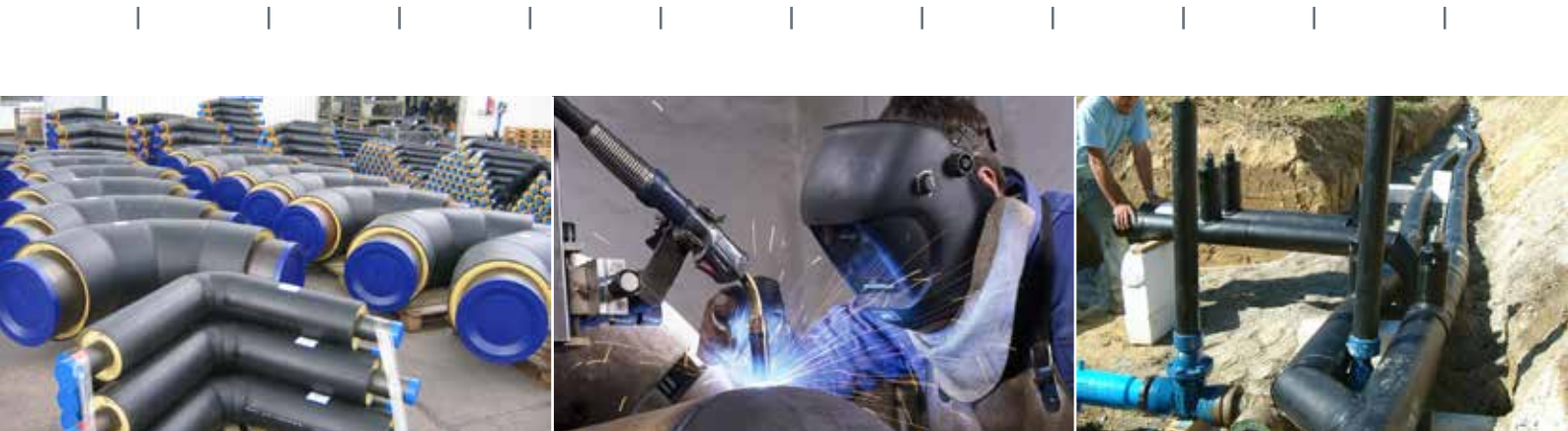
## PREMANT – the advantages at a glance

- Excellent heat insulation\*
- Large range from DN 20 to DN 1000
- Operating temperature up to max. 144°C
- Operating pressure up to 25 bar
- Various insulation foam and monitoring wire systems
- Available as heating, cooling, sanitary water and fire class pipe
- Standard EN 253, 448, 488, 489
- ISO 9001, 14001

\* Heat insulation with pentane-driven PUR foam creates enormous energy-saving potential ( $\lambda_{50} = 0.0260 \text{ W/mK}$ )

# Low planning effort

PREMANT



**Our pipes are available in dimensions DN 20 to DN 1000.**

**You can select the type of foam insulation, carrier pipe and the system of monitoring wires.**

**We can quickly react to fulfil your requirements with our modern production facilities.**

## **Standard parts**

Thanks to state-of-the-art infrastructure, we can deliver rods and standard moulded parts directly from stock.

## **Curved pipes**

You can optimise your route with individually curved pipes.

## **Special parts**

You can explore new paths with technical solutions. We deliver the special parts you need.

## **Short delivery times**

Do you need a customised moulded part?

We deliver special parts in record time!

There are three insulation thickness classes of PREMANT district heating pipelines. The pipe units can be delivered in 6 + 12 m (or 16 m) lengths, depending on the dimensions. The construction units and all associated moulded parts such as curved pieces, T-pieces and fixed points are pre-assembled at the factory. This results in a module system with easy planning and assembly.

## **Assembly**

Circumferential welds connect all components on the construction site. Welding seams and welding ends are then insulated with connecting sleeves.

If desired, we can support the system users in the planning phase with our system experience. With our trained assembly specialists or in collaboration with appropriately trained specialist companies, we perform all types of pipe laying work as well as drilling, repairs and renovations.

If necessary, we can do this within the hour.

# Electric fusion sockets - innovative technology

PREMANT



The connection of the pipes is the weak link in a district heating system, which is why post-insulation of the highest quality is necessary. Our electric fusion sockets are setting new standards in socket technology. They ensure force-locking, waterproof and firmly bonded post-insulation due to the homogeneous welding to the pre-insulated steel pipe.

## EWELCON® Welding Sheet

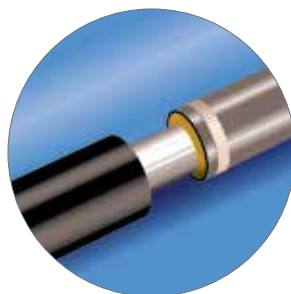
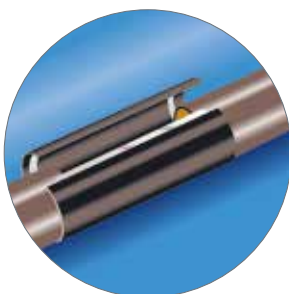
For repairs and reconstruction up to jacket dimensions of 1200 mm.

## EWELCON-S® Welding Sleeves

For new projects or insulating pipes with jacket dimensions of up to 450 mm.

## EWELCON® electronically controlled welding process

The 100% heat-seal for your pipe system.



# Extensive range of products

for your application

## Selection of carrier pipes



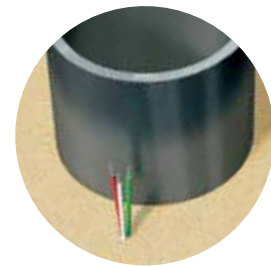
- One or two carrier pipes
- Steel P235TR1/GH
- Plastic and composite material
- CrNi steel
- cast iron

## Selection of foam systems



- PUR insulation (pentane-driven)
- PUR insulation (CO<sub>2</sub>-driven)
- Fire protection insulation

## Selection of monitoring wire systems



- Brandes
- Nordic/EMS

## PREMANT

Nominal width	Steel pipe d x t	Insulation thickness 1		Insulation thickness 2		Insulation thickness 3		Delivery length	Volume per medium pipe
		UNO	DUO	UNO	DUO	UNO	DUO		
DN	mm	mm	mm	mm	mm	mm	mm	m	l/m
20	26.9 x 2.6	90	125	110	140	125	160	6	0.37
25	33.7 x 2.6	90	140	110	160	125	180	6	0.67
32	42.4 x 2.6	110	160	125	180	140	200	6 / 12	1.09
40	48.3 x 2.6	110	160	125	180	140	200	6 / 12	1.46
50	60.3 x 2.9	125	200	140	225	160	250	6 / 12	2.33
65	76.1 x 2.9	140	225	160	250	180	280	6 / 12	3.88
80	88.9 x 3.2	160	250	180	280	200	315	6 / 12	5.35
100	114.3 x 3.6	200	315	225	355	250	400	6 / 12 / 16	9.01
125	139.7 x 3.6	225	400	250	450	280	500	6 / 12 / 16	13.79
150	168.3 x 4.0	250	450	280	500	315	560	6 / 12 / 16	20.18
200	219.1 x 4.5	315	560	355	630	400	670	6 / 12 / 16	34.67
250	273.0 x 5.0	400	-	450	-	500	-	6 / 12 / 16	54.33
300	323.9 x 5.6	450	-	500	-	560	-	6 / 12 / 16	76.80
350	355.6 x 5.6	500	-	560	-	630	-	6 / 12 / 16	93.16
400	406.4 x 6.3	560	-	630	-	670	-	6 / 12 / 16	121.80
450	457.2 x 6.3	630	-	670	-	710	-	6 / 12 / 16	155.25
500	508.0 x 6.3	710 (670)	-	800	-	900	-	6 / 12 / 16	192.75
600	610.0 x 7.1	800	-	900	-	1000	-	6 / 12 / 16	278.80
700	711.0 x 8.0	900	-	1000	-	1100	-	6 / 12 / 16	379.37
800	813.0 x 8.8	1000	-	1100	-	1200	-	6 / 12 / 16	496.98
900	914.0 x 10.0	1100	-	1200	-	-	-	6 / 12	627.72
1000	1016.0 x 11.0	1200	-	-	-	-	-	6	776.00

# Pipe systems for the future

District heating - Industry - Petrol stations - System packages



### Your partner for pipe systems

We are the people you should talk to when you need to find efficient solutions for transporting liquids. With our project engineers, development department, in-house production unit and our professional team of fitters, we have the know-how and the resources to look after your projects competently and reliably. For all types of heating systems, petrol station construction, industrial plant construction and system packages.

### Customer-specific solutions

Brugg is the full service provider in the field of single-wall, double-wall and insulated pipe systems. This know-how allows us to manufacture project-specific customised items.

### Give us a call!

Our engineers would be pleased to advise you and find a made-to-measure solution.

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