

BRUGG

Pipes

PREMANT

Pre-insulated steel pipe system



AFRICAN PEX PIPE SYSTEMS (PTY) LTD

PIONEERS IN INFRASTRUCTURE



HEAT INSULATED - RELIABLE - MONITORING POSSIBLE

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
- Norm 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

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!

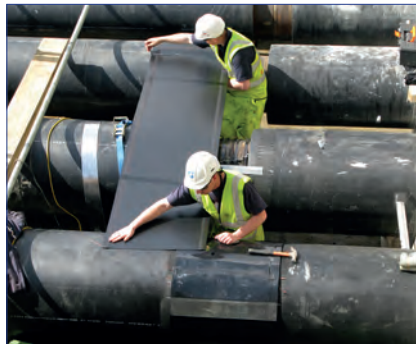
There are three insulation thickness classes of PREMANT district heating pipelines. The pipe units can be delivered in 6 +12 m (or 16 m) lengths, depending on the dimensions. The construction units and all associated moulded parts such as curved pieces, T-pieces and fixed points are pre-assembled at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

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.



BRUGG INDUCON fusion socket

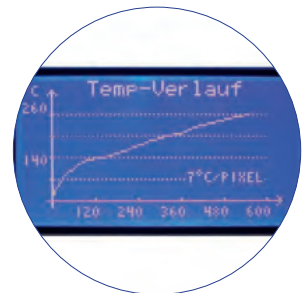
Contact-free welding process for PE sockets, induction-based, for post-insulation of pipes in new projects. The innovative technology enables high-strength circumferential and homogeneous welding seams without interruption.

EWELCON fusion socket

Pre-assembled HD-PE plate with heat conductor for post-insulation of piping in new projects as well as repairs and renovations up to a sheath dimension of 1200 mm.

Process-controlled welding process

The systems are firmly bonded in a controlled welding process.



EXTENSIVE RANGE OF PRODUCTS

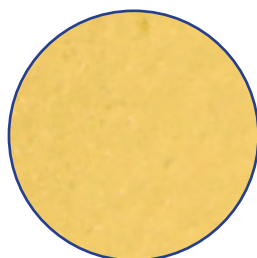
FOR YOUR APPLICATION

Carrier pipes



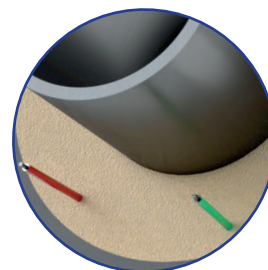
- One or two carrier pipes
- Steel P235TR1/GH
- Plastic and composite material
- CrNi-Steel
- Cast iron

Foam systems



- PUR-insulation (pentane-driven)
- PUR-insulation (CO2-driven)
- Fire protection insulation

Monitoring wire systems



- Brandes
- Nordic/EMS

PREMANT

Nominal width	Steel pipe d x s	Insulation thickness 1		Insulation thickness 2		Insulation thickness 3		Delivery length	Volume per medium pipe
		UNO	DUO	UNO	DUO	UNO	DUO		
DN	mm	D mm	D kg/m	D mm	D kg/m	D mm	D kg/m	m	l/m
20	26.9 x 2.6	90	2.7	110	3.1	125	3.4	6	0.37
25	33.7 x 2.6	90	3.1	110	3.5	125	3.8	6	0.67
32	42.4 x 2.6	110	4.0	125	4.3	140	4.7	6/12	1.09
40	48.3 x 2.6	110	4.4	125	4.7	140	5.0	6/12	1.46
50	60.3 x 2.9	125	5.8	140	6.1	160	6.6	6/12	2.33
65	76.1 x 2.9	140	7.1	160	7.6	180	8.2	6/12	3.88
80	88.9 x 3.2	160	9.0	180	9.6	200	10.3	6/12	5.35
100	114.3 x 3.6	200	13.0	225	13.9	250	15.0	6/12/16	9.01
125	139.7 x 3.6	225	15.9	250	16.9	280	18.7	6/12/16	13.79
150	168.3 x 4.0	250	20.5	280	22.3	315	24.0	6/12/16	20.18
200	219.1 x 4.5	315	30.5	355	32.5	400	35.8	6/12/16	34.67
250	273.0 x 5.0	400	43.5	450	47.0	500	51.3	6/12/16	54.33
300	323.9 x 5.6	450	56.2	500	60.5	560	66.1	6/12/16	76.80
350	355.6 x 5.6	500	63.7	560	69.3	630	76.3	6/12/16	93.16
400	406.4 x 6.3	560	81.0	630	88.0	710	97.7	6/12/16	121.80
450	457.2 x 6.3	630	93.5	710	103	800	113	6/12/16	155.25
500	508.0 x 6.3	710	108	800	118	900	133	6/12/16	192.75
600	610.0 x 7.1	800	140	900	154	1000	170	6/12/16	278.80
700	711.0 x 8.0	900	180	1000	196	1100	213	6/12/16	379.37
800	813.0 x 8.8	1000	223	1100	240	1200	259	6/12/16	496.98
900	914.0 x 10.0	1100	279	1200	298	-	-	-	627.72
1000	1016.0 x 11.0	1200	337	-	-	-	-	-	776.00

A BRUGG GROUP COMPANY

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