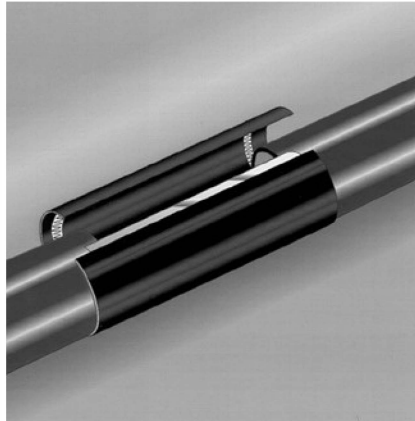
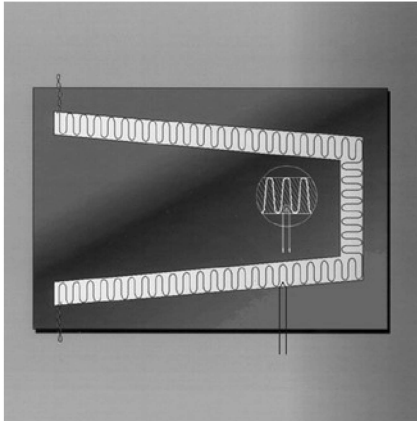


EWELCON® electro-welding joint

System description

| PRE 6.351



The EWELCON® electro-welding joint is the protected name for a welding joint from BRUGG Pipe Systems to produce joints which transmit force, and are watertight and gastight, for plastic pipes - mainly PE-HD casing pipes (pre-insulated plastic casing pipes (KMR)) in the district heating sector.

The EWELCON® electro-welding joint is a fully prefabricated HD-PE plate which is only placed ('wrapped') around the two ends of the plastic casing pipe immediately prior to welding. This simplifies the fitting procedure and plays a key part in the high and constant quality of the joint, even in difficult and confined installation locations. The weld seam area can easily be cleaned and dried.

These properties make the EWELCON® system especially suitable for repairs and refurbishments on existing pipes.

The 'inside' of the PE-HD plate in the EWELCON® electro-welding joint is fitted with a thermal conductor and a temperature sensor. The thermal conductor, a meanderform copper wire, forms a heating spiral with a width of approx. 27 mm. The position of the heating spiral is selected so that when the plate is placed around it, it completely surrounds the interior of the joint. During the welding process, the pipe and plate materials are plastified along the heating spiral, and are homogeneously mixed due to the high expansive pressure of the melts. After the melts cool down, the interior is sealed by a weld seam with a width of approx. 30 mm.

Together with the contact pressure for the weld surfaces, the weld bath temperature is the most important requirement for plastic weld seams of high quality.

This fact is consistently implemented in the EWELCON® system.

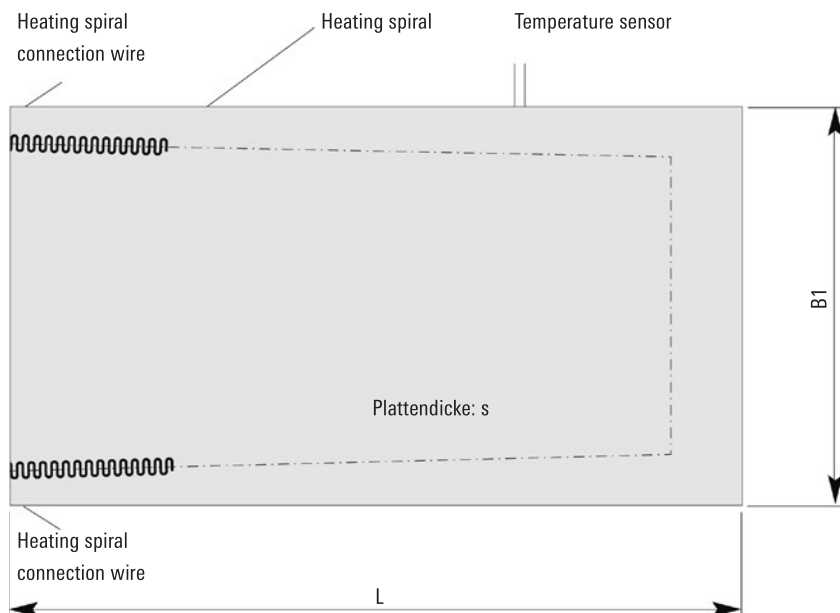
The required contact pressure is reliably applied by the clamping tool specially developed for this purpose.

The welding process is regulated by a microprocessor-controlled welding appliance. The temperatures of the weld bath and the thermal conductor are monitored and stored throughout the entire welding process. This method ensures that the weld bath temperature is largely independent of disruptive external influences (such as the weather) and thus comparable from one welding operation to the next.

Every joint produced is subjected to a thorough visual inspection and a tightness test, after which it is foamed and the filling and venting bores are sealed with weld plugs.

EWELCON® electro-welding joint

Technical data



Casing pipe Ø D mm	Width B1 mm	Length L mm	Thickness s mm	Weight		Packaging unit	
				B 700 kg	B 850 kg	B 700 Piece	B 850 Piece
90	700 or 850	450	4	1.2	1.5	18	18
110	700 or 850	515	4	1.3	1.6	18	18
125	700 or 850	560	4	1.5	1.8	18	18
140	700 or 850	610	4	1.7	2.1	16	16
160	700 or 850	675	4	1.9	2.3	16	16
180	700 or 850	740	4	2.1	2.6	16	16
200a	700 or 850	805	4	2.3	2.8	15	15
225	700 or 850	885	4	2.4	2.9	15	15
250	700 or 850	950	4	2.5	3.0	20/40/80	20/40/80
280	700 or 850	1050	4	2.7	3.2	20/40/80	20/40/80
315	700 or 850	1160	4	3.0	3.6	20/40/80	20/40/80
355	700 or 850	1290	4	3.3	4.0	20/40/80	20/40/80
400	700 or 850	1440	4	3.7	4.5	20/40/80	20/40/80
450	700 or 850	1600	4	4.2	5.0	20/40/80	20/40/80
500	700 or 850	1830	6	7.0	8.5	20/40	20/40
560	700 or 850	2020	6	7.7	9.5	20/40	20/40
630	700 or 850	2250	6	8.7	10.5	20/40	20/40
710	700 or 850	2580	8	13.2	16.0	20	20
800	700 or 850	2870	8	14.7	17.8	20	20
900	700 or 850	3190	8	16.5	20.0	20	20
1000	700 or 850	3510	8	18.0	22.0	10/20	10/20

Material: PE80 - DIN EN 32 162 (PE-HD)

Further dimensions on request.

Sleeves up to Ø 225 are pre-rolled for delivery

Sleeve widths: Standard width: B = 700; repair width: B = 850