

PB Saddle welding

Saddle welding fitting system for cold water application
non-insulated polybutene service pipes OD110 - 225mm



Required Tools

Cleaner

Tissues

hand-held welding device

heating bushes and heating spigots

Tent (depending on weather conditions)

Application Instruction

Application conditions and pipe preparation

- Ambient temperature: +5 to +40°C
 - No rainy or windy (≥ 3 bfr / 3.4-5.4 m/s) weather conditions
 - Service pipe is cut straight and without damage
 - Service pipe and fitting are free from dirt and condensation
- } use a tent to create correct conditions if required

IMPORTANT: This welding technique is only for Flexalen® PB Service pipes non-insulated sticks. Not for pre-insulated pipes for Hot water / Heating applications.



01.
Choose the right drill.
Drill for branch d25, d32
Drill for branch d40, d50



02.
Choose the right heating bushes for mainline/ branch combination



03.
Mark where the branch should be one the pipe

Important: Make sure the EVOH layer is removed for this section of the pipe!



04.
Minimum distance between two Saddles must be 300mm*, this is also the rule between saddle and other types of welding.

*See all regulations on page 3!

Disclaimer

All recommendations and information provided on this instruction leaflet are based on our knowledge and experience. Product specifications are intended as guidelines. Since conditions of service are beyond our control, users must satisfy themselves that products are suitable for the intended use. No guarantee or warranty is given or implied or that any use of products will not infringe rights belonging to other parties. We reserve the right to change product design and properties without notification.





05.
Drill with 300-350 r/min a hole in the PB medium pipe. Hold the drill at a right angle (90°) while doing so.



06.
Use pipe deburrer for removing burrs and chamfer for pipe 110mm.

Note; 125, 160 and 225mm medium pipe should be chamfered minimum 3-4mm.



07.
Clean the surface and hole of the medium pipe with cleaner suitable for PB..



08.
Clean saddle with suitable cleaner for PB



09.
Mount the correct heating bushes and align the marking.

Note: clean heating bushes after each welding with a dry tissue.

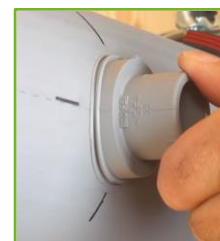


10.
Warm up welding saddle and medium pipe simultaneously.

See welding times in the table 1.



11.
After heating, an even molten area should be visible on the medium pipe.



12.
Immediately after heating, press the welding saddle onto the pipe. Do not turn/ twist the welding saddle here.

Note: Hold the saddle in place until the holding time has expired.



11.
Respect the minimum cooling time (see table below)



Welding parameters

Welding temperature: 260°C

Fitting dimension OD [mm] - d	For saddle on main pipe			For branch pipe on saddle		
	Warming up time [sec]	Holding time [sec]	Cooling time [min]	Warming up time [sec]	Holding time [sec]	Cooling time [min]
110-25	28-32	30	4	6	15	2
110-32	28-32	30	4	10	20	4
125-32	29-32	30	4	10	20	4
125-40	31-35	30	4	14	20	4
125-50	31-35	30	4	18	30	4
160-32	36-40	120	4	10	20	4
160-40	42-45	120	4	14	20	4
160-50	42-45	120	4	18	30	4
225-32	45-50	120	4	10	20	4
225-40	45-50	120	4	14	20	4
225-50	45-50	120	4	18	30	4



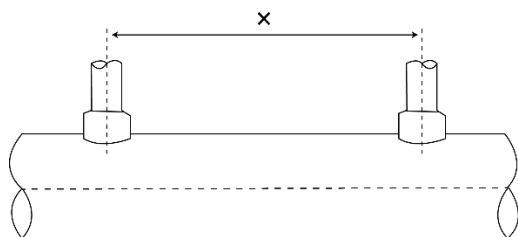
Installation regulation PB saddle welding

Distance between saddles

When positioning welding saddles on PB-1 pipes, the following distances should be taken into account:

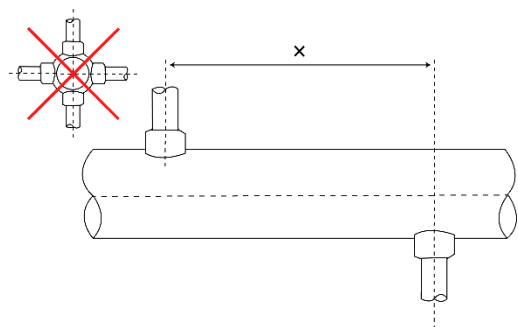
01. Distance between 2 saddles:

The minimum distance x between 2 welding saddles must be 30 cm.
This applies to pipe diameters $d110 - d225$ mm with all branches.



02. Distance between 2 saddles all around:

No weld saddles should be made around the same position.
The minimum distance x between the welding saddles all around must be 30 cm. This applies to pipe diameters $d 110 - d225$.



03. Distance between saddles and fitting or butt welding:

The minimum distance x between the welding saddles and a fitting or butt welding must be 30cm.
This applies for pipe diameters $d110 - d225$ with all branches.

