

## aquatherm blue pipe of SOCKET AND ELECTRIC SOCKET WELDING

### AQUATHERM UNIVERSAL PEELING TOOLS

Follow carefully the order of working steps!

Cut the pipe at right angles to the pipe axis. Take care that the pipe axis is free from burrs or cutting debris and remove where necessary.

### FUSION TECHNIQUE

By using the aquatherm universal peeling tools the end pieces of the aquatherm OT (oxygen tight), UV (UV-resistant) and MS (multilayer stabl) pipes can be peeled. By the uniform removal of the outer layer of the pipe any extension of the pipe system by electrofusion socket or fitting is possible. The universal peeling tools are available in the sizes Ø20-Ø125 mm (Art.-No. 50479 - 50498). The peeling process is done either mechanically or manually. For the mechanical processing two attachment plates for pipe sizes Ø20-Ø63 mm (Art.-No. 50499) and Ø75-Ø125 (Art.-No. 50500) mm are available. For the mechanically processing of the electrofusion sockets the peeler is extended by an attachment (Art.-No. 50489-50498). The power drill should have a high torque.

### 1. INSTRUCTIONS FOR THE MECHANICAL PEELING PROCESS

- 1.1. The attachment plate is clamped with the hexagon bolt in the power drill.
- 1.2. The peeler is fixed with its screws in the slot matching the diameter of the attachment plate and rotated clockwise so that the peeler adheres to the attachment plate.
- 1.3. The peeling tool clamped on the chuck is set by the lead to the end of the pipe.
- 1.4. The peeling process starts with rotation of the peeling tool upon slight force in axial direction. The peeling operation is completed when the attachment plate strikes against the pipe end.
- 1.5. The pipe now can be welded by socket welding method.

### 2. INSTRUCTIONS FOR THE MECHANICAL PEELING PROCESS FOR ELECTROFUSION SOCKETS

- 2.1. The extension is centered with the peeler through the superimposed chamfer fit and fastened with three Allen screws.
- 2.2. The attachment plate is clamped with the hexagon bolt in the power drill and connected with the peeling tool (see photo 1.2.).
- 2.3. The peeling process starts with rotation of the peeling tool upon slight force in axial direction. The peeling operation is completed when the carrier plate strikes against the pipe end.
- 2.4. The peeling tool is withdrawn from the pipe and the E-socket welding process can start.

### 3. PEELING INSTRUCTIONS FOR MANUAL PEELING

- 3.1. For the manual peeling two handles are mounted at the peeling tool.
- 3.2. The peeling tool is pushed onto the untreated pipe up to the stop.
- 3.3. The peeling tool is turned clockwise as long as the marked peeling depth (see table) is reached.
- 3.4. If the specified/marked peeling depth (see table) is reached, the peeling tool is removed and the socket welding process can start. If the electric socket can be used as a sliding sleeve, the peeling depth for the electric socket welding (see table) must be doubled.

Clean again thoroughly. Without complete peeling of the fusion surface a homogeneous and tight welding connection is not assured.

Damages of the surface like axial grooves and scratches are not accepted in the fusion zone. Never touch peeled surfaces and protect them against dirt and grease. Start the fusion process within 30 mins after peeling.



**TABLE OF PEELING DEPTH:  
SOCKET AND ELECTRIC SOCKET WELDING**

Diameter	Peeling depth Socket welding	Peeling depth Electric socket welding
ø 20	16 mm	39 mm
ø 25	20 mm	43 mm
ø 32	22 mm	45 mm
ø 40	25 mm	50 mm
ø 50	28 mm	56 mm
ø 63	32 mm	65 mm
ø 75	34 mm	69 mm
ø 90	37 mm	77 mm
ø 110	42 mm	85 mm
ø 125	44 mm	90 mm



**aquatherm electrofusion device** Push the electrofusion socket onto the pipe end

## PROCESSING aquatherm blue pipe of PIPES

### aquatherm SADDLE PEELING TOOLS FOR aquatherm blue pipe of PIPES Ø 50-125 mm

Art.-Nr.	Abmessung
50921	for weld-in saddles ø 20 & 25 mm
50922	for weld-in saddles ø 32 mm
50924	for weld-in saddles ø 40 mm
50926	for weld-in saddles ø 50 mm
50928	for weld-in saddles ø 63 mm



Drilling through the pipe wall

### aquatherm SADDLE PEELING TOOLS FOR aquatherm blue pipe of PIPES Ø 160-250 mm

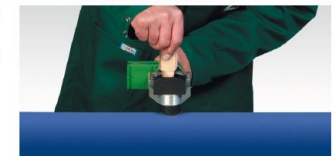
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Removal of the oxygen barrier layer

aquatherm green pipe-weld-in saddles are available for pipe outer diameter of 50 - 250 mm.

1. Weld in saddles are used for
  - branch connections
  - the substitution of a reduction-tee
  - branch connections in risers
  - sensor wells, etc.



The welding tool is inserted into the pipe wall ...

2. The first step is to drill through the pipe wall at the intended outlet point by using the aquatherm green pipe-drill

- branch 20/25 mm: Art.-No. 50940/50941
- branch 32 mm: Art.-No. 50942
- branch 40 mm: Art.-No. 50944
- branch 50 mm: Art.-No. 50946
- branch 63 mm: Art.-No. 50948



...heating-up of the elements

3. **IMPORTANT!**

The oxygen barrier layer of the aquatherm blue pipe of pipes must be removed with the above-mentioned aquatherm green pipe special peeling drills.

For this the special peeling drill is inserted into the bore hole and swailed 2-3 times with light pressure and low rotating speed between the pipe walls until the oxygen barrier layer is completely peeled off.

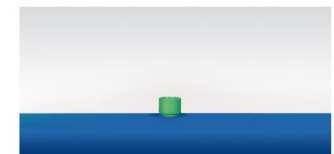


Joining

Remove burrs, debris and other dirt with a chamfering tool or the aquatherm cleaning wipes. Do not touch the peeled surface any more and protect it from new pollution.



aquatherm special peeling drill



Ready!