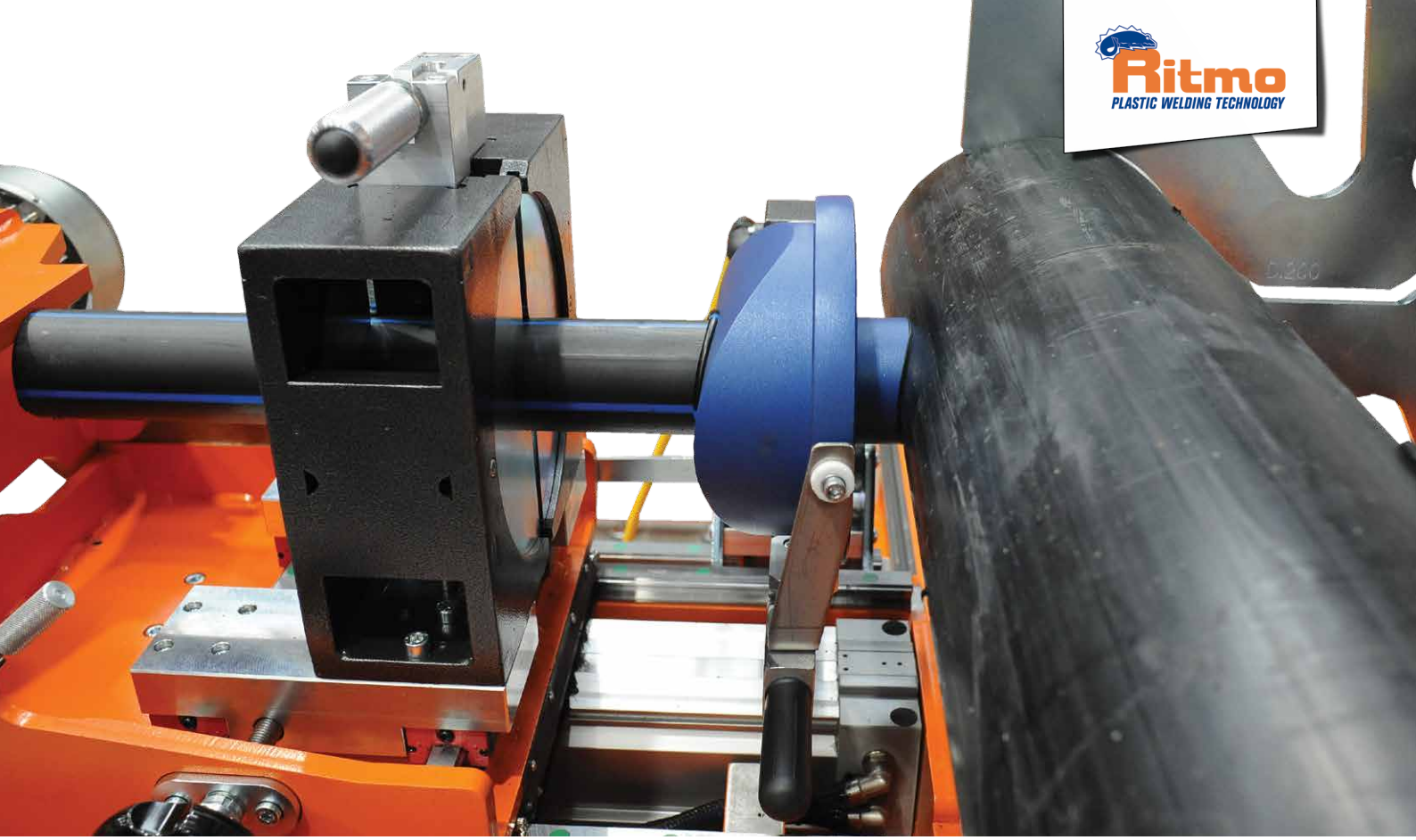
Ritmo
PLASTIC WELDING TECHNOLOGY

FM 630 - 180

BRANCH MANIFOLD

HDPE, PP, PP-R

www.ritmo.it



OUR EXPERIENCE

With the FM 630-180 we have created a special welding machine that creates value in the construction of quality custom manifolds up to Ø 630 mm. It doesn't matter whether you are a large industry or a small craftsman, what matters is that with FM 630-180 we have put ease of use in the work process at the center. With this extraordinary welder the operator is able to standardize the workflow with maximum flexibility and be able to weld with the choice of two work processes: butt or polyfusion in the socket.

The sturdy frame, the use of quality materials, the pneumatic welding cycle, the comfortable workstation, the millimetric positioning by the operator, the large control panel, are just some of the construction details that we have included in this powerful tool for your work.

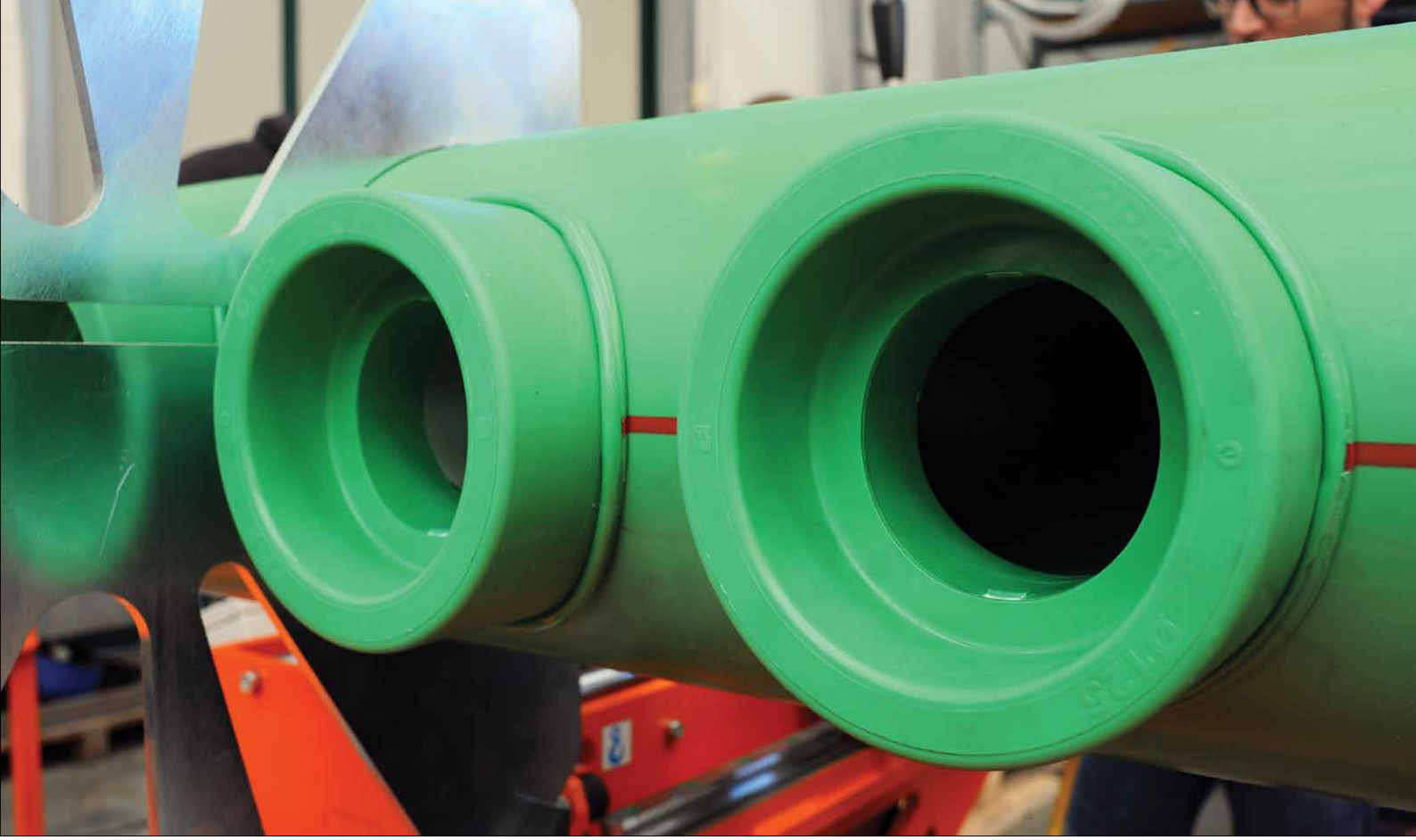
FM 630-180 we have made something "extraordinary" "normal"!

ALWAYS PROVIDE MAXIMUM QUALITY

PRECISE BRANCH MANIFOLDS

MILLIMETRIC PRECISION

EASE OF USE



INFINITE POSSIBILITIES

VERSATILE

- Materials: PE, PP, PP-R
- Two types of welding
  Butt fusion and socket fusion

- Field of work
  BUTT FUSION:
  Main pipe
  Ø 50 ÷ 630 mm; 1½" ÷ 24" IPS
  Branch pipe:
  Ø 32 ÷ 180 mm; 1" ÷ 6" IPS

  SOCKET FUSION
  Main pipe:
  Ø 50 ÷ 630 mm; OD 1½" ÷ 24"
  Branch pipe

PRECISE

- Millimetric precision
- Work area visibility
- Mobile workstation
- Pneumatic welding system
- Perfect drilling - welding alignment

COMPLETE

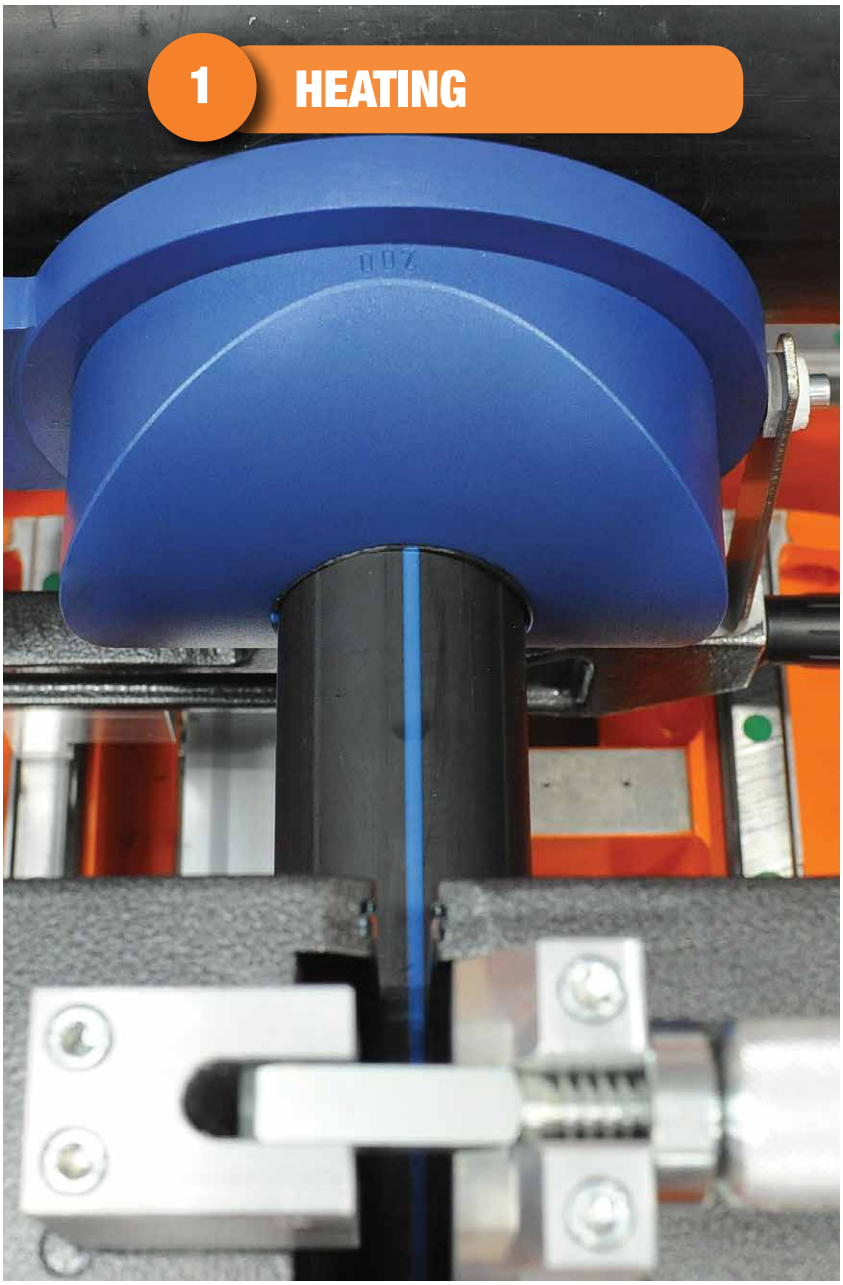
- Self-centering clamps
- Frame with lateral supports
- Clamps with narrow profile
- Thin inserts
- Rapidly interchangeable heating plate, avoid waiting for cooling when the working diameter or welding method is changed (purchase of a second heating plate necessary)
- Connections for data loggers (accessory on request)

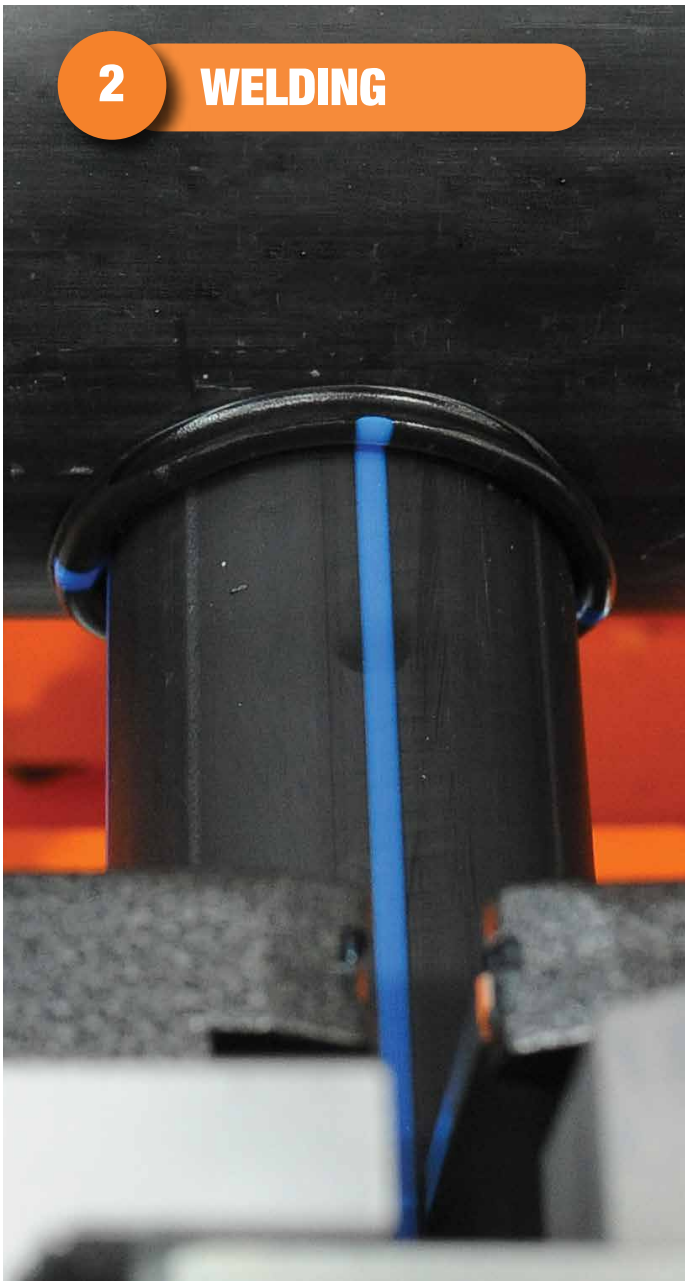
BUTT FUSION

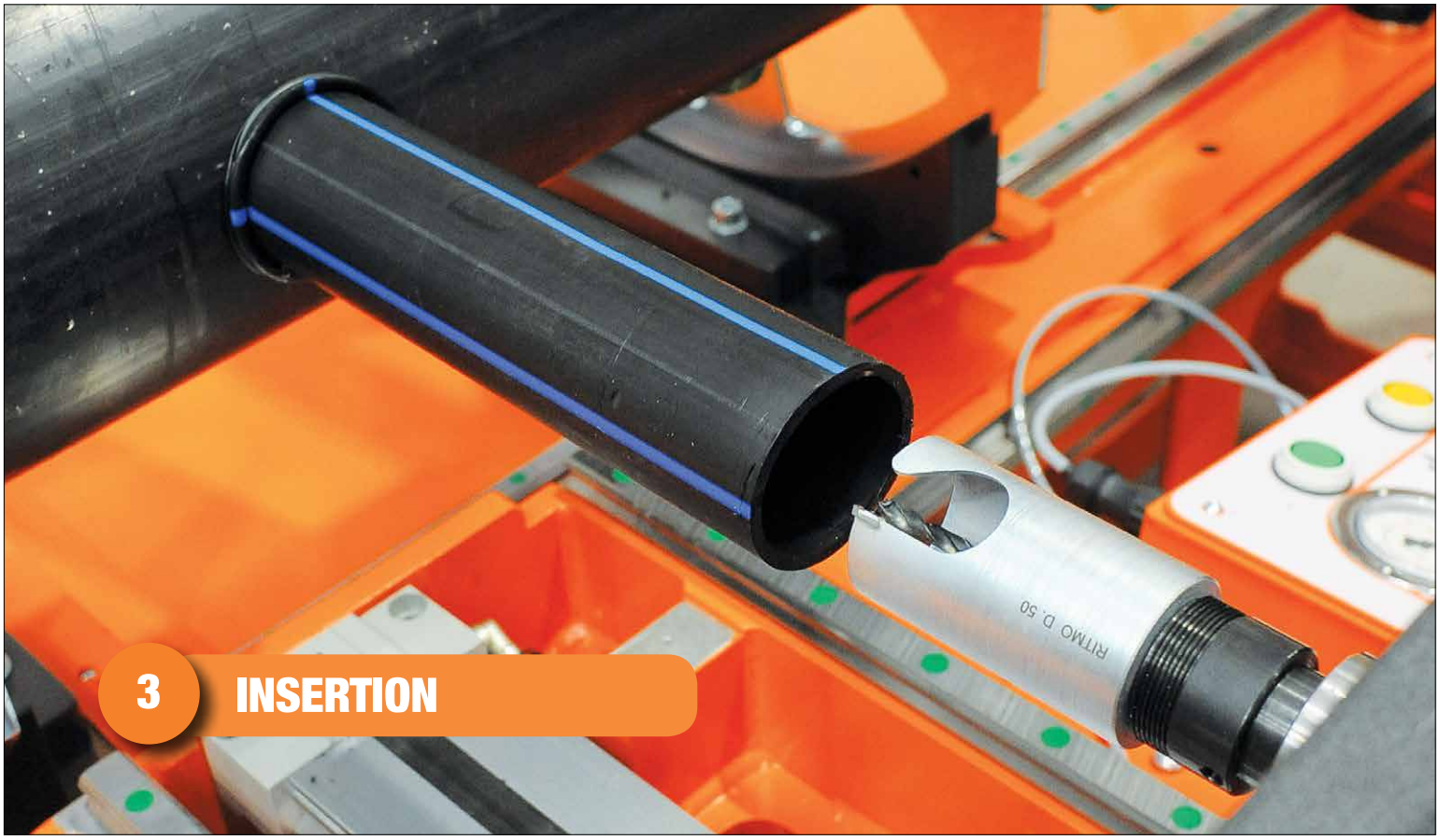
Butt welding allows the main pipe to be joined with pre-molded fittings or customized pipe lengths prepared by a radial cut.
Saddle sockets are used for welding, and once the union between the main pipe and the branch (fitting or pipe) has been achieved, drilling is carried out using special hole cutters.

The operation is carried out from inside the pipe/fitting diameter.

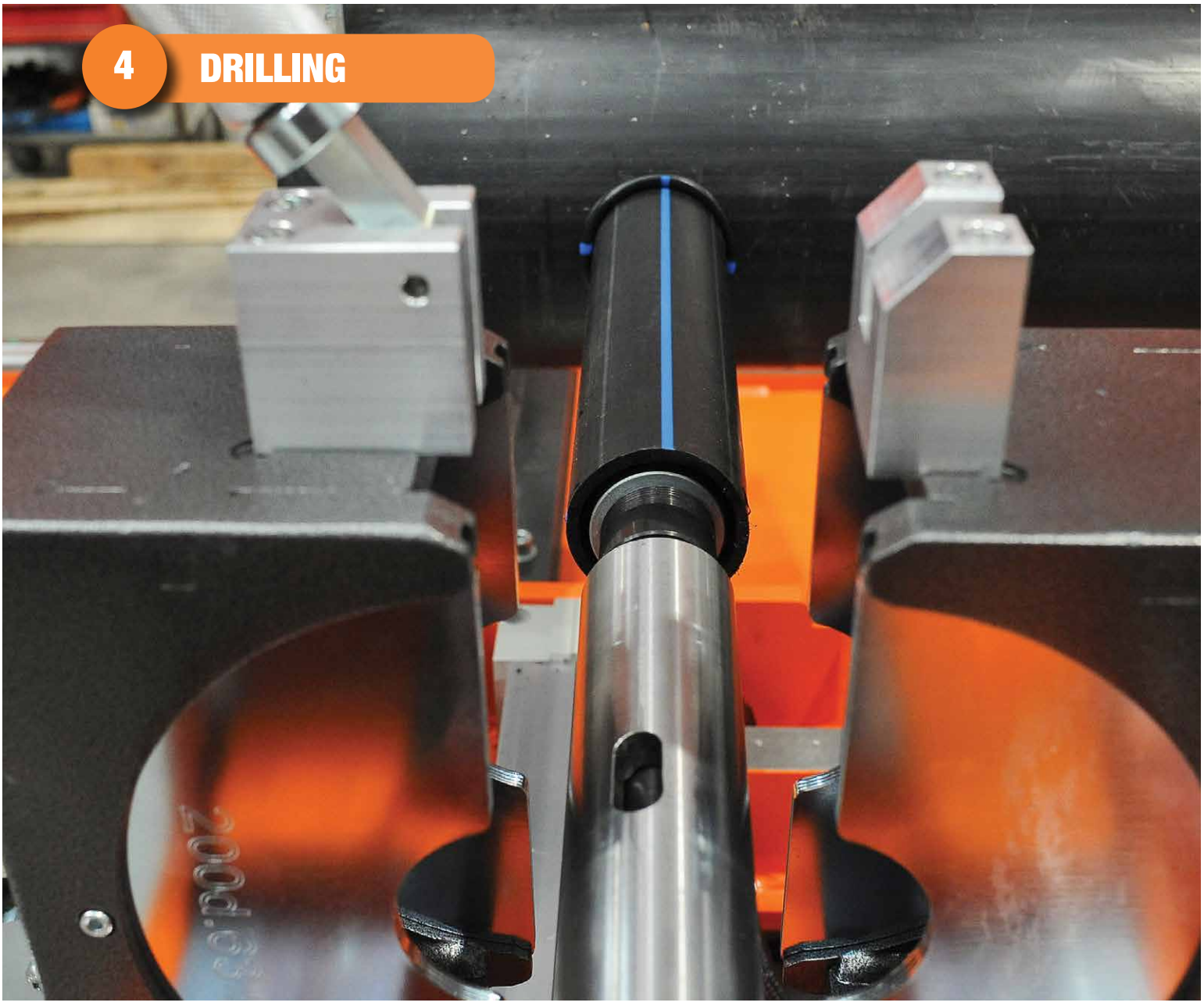
With butt welding, manifolds from Ø 50 ÷ 630 mm or 1" ÷ 24" IPS and with branch from Ø 32 ÷ 180 mm or Ø 1½" ÷ 6" IPS.







3 INSERTION

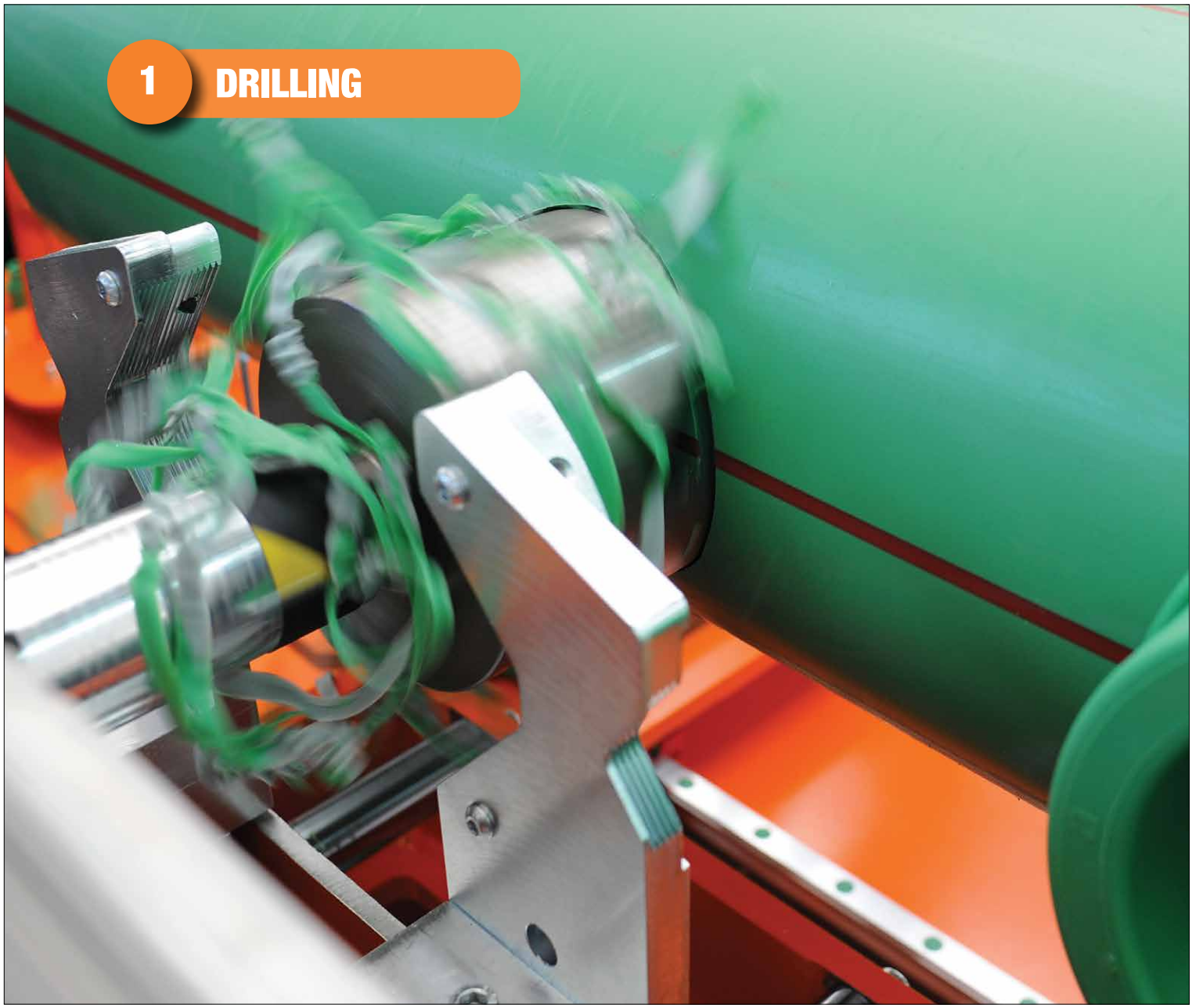


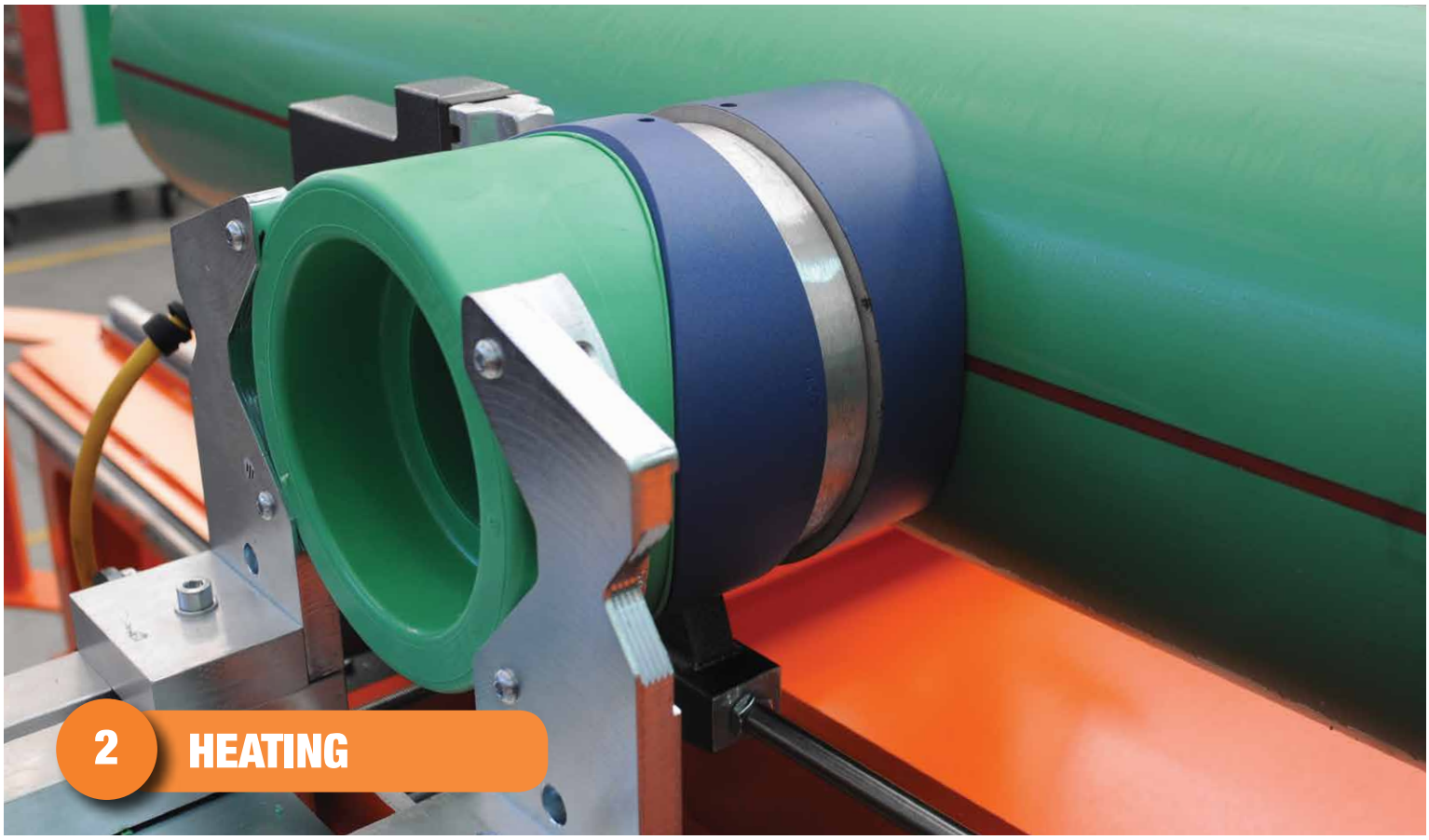
4 DRILLING

SOCKET WELDING

The welding of a fitting by socket fusion (welding in the socket) requires the first action to be the drilling of the main pipe which is carried out with specific hole cutters.
Subsequently, with the use of saddle sockets, we move on to the welding phase.
The self-centering clamp system combined with the perfect alignment between the fitting and the main pipe hole guarantees quality welds.

With socket welding, manifolds with Ø 50 ÷ 630 mm and OD 1½" ÷ 24" and with branch from Ø 20 ÷ 125 mm; OD ½" ÷ 5".

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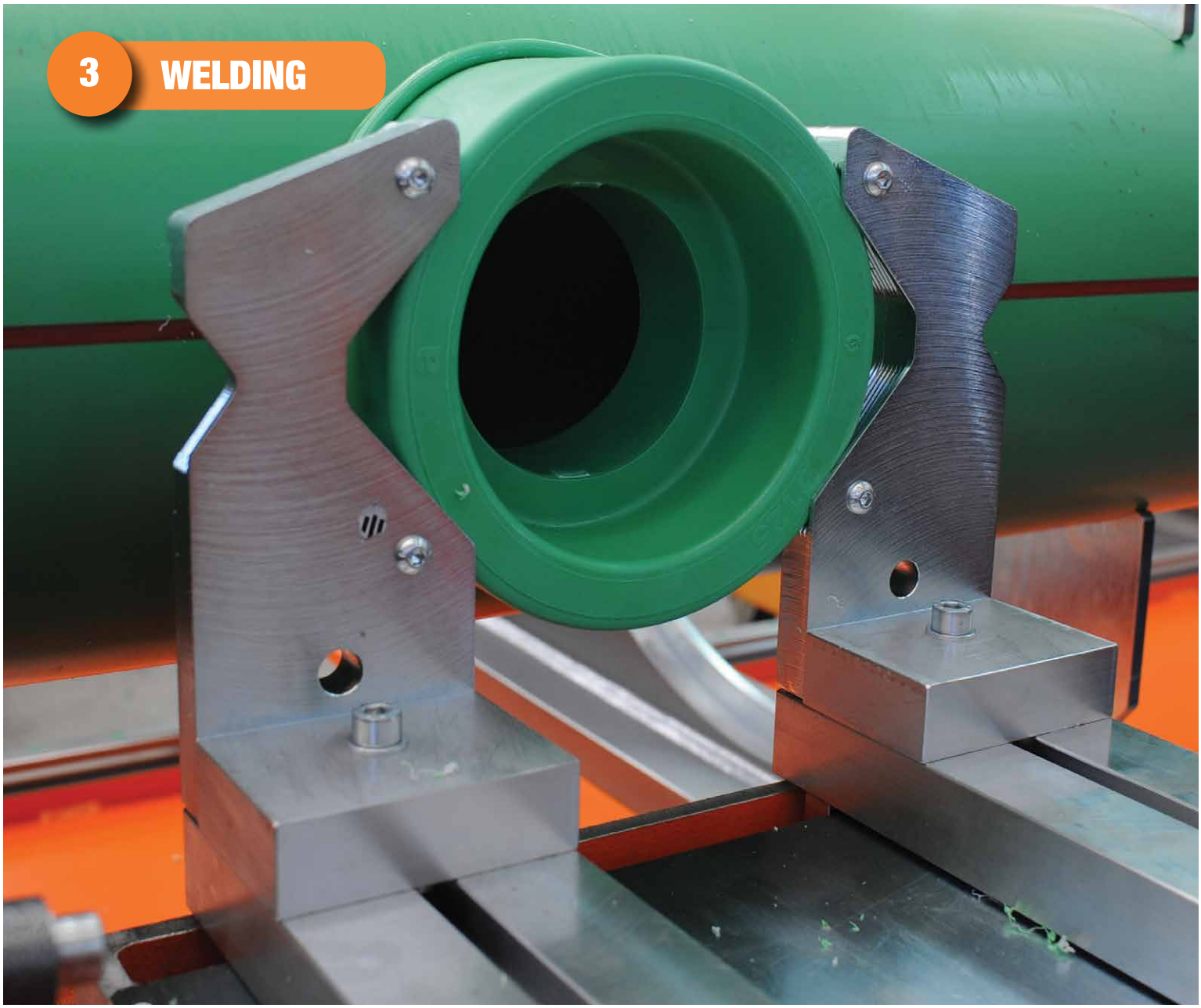
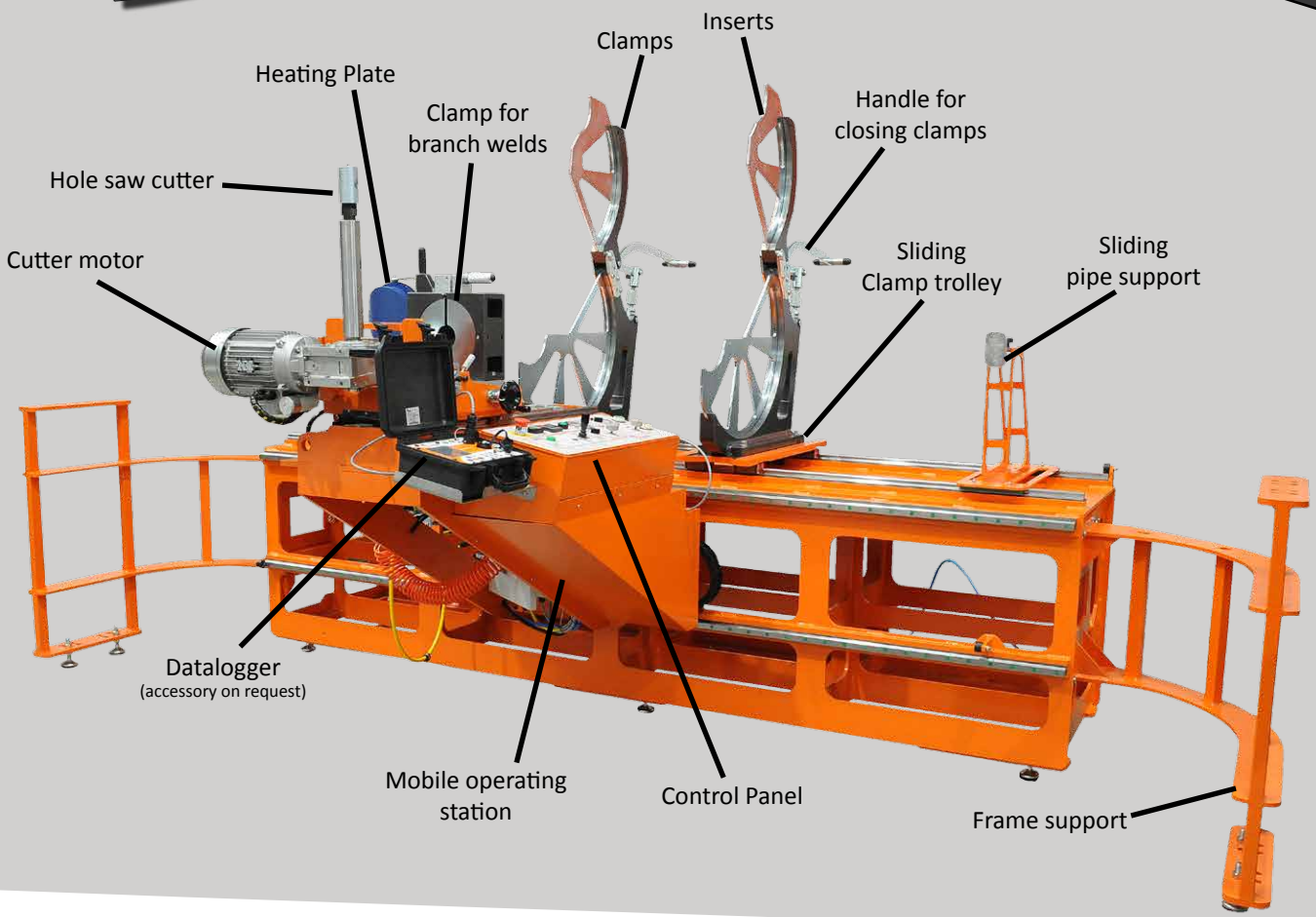
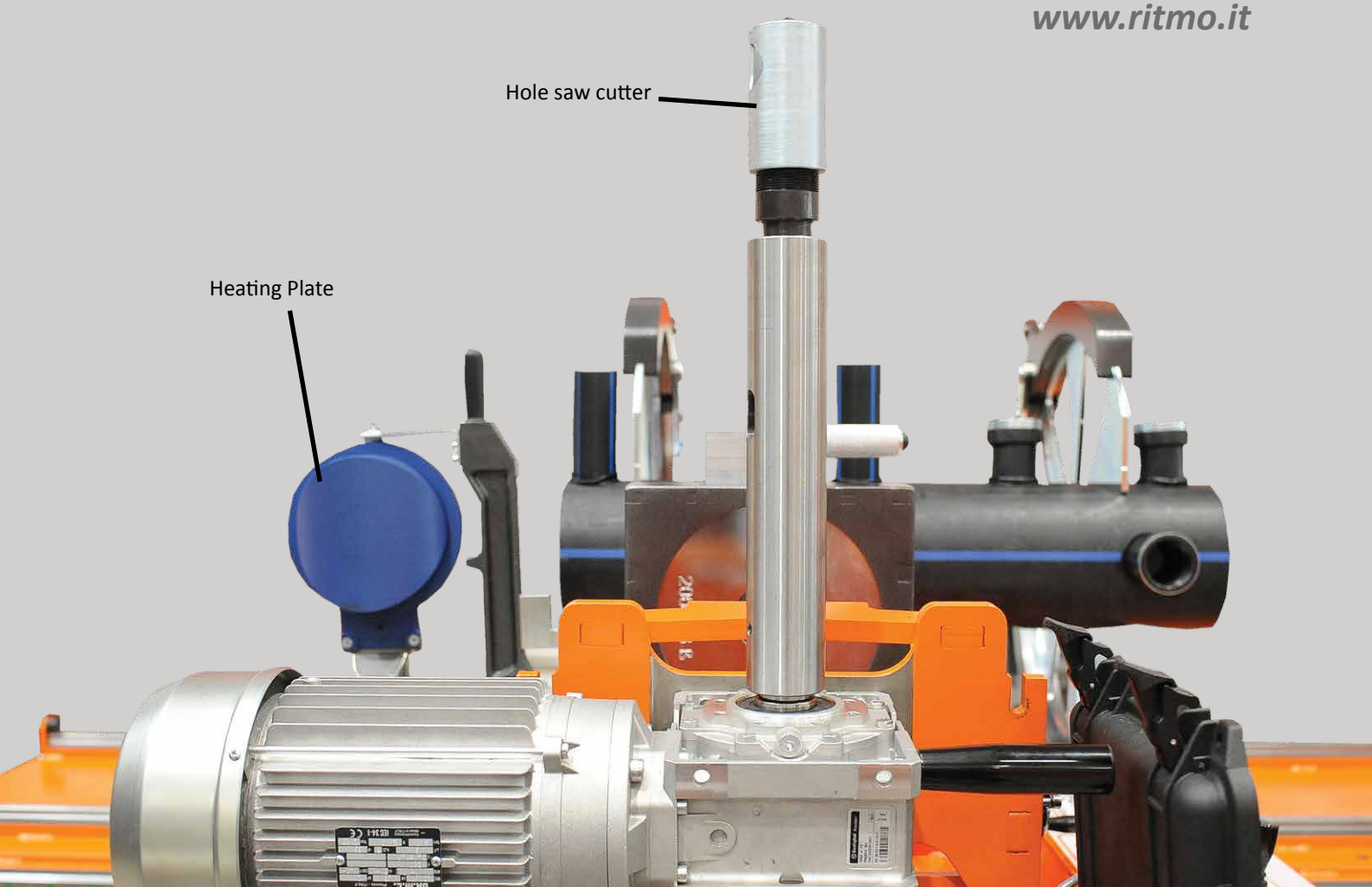
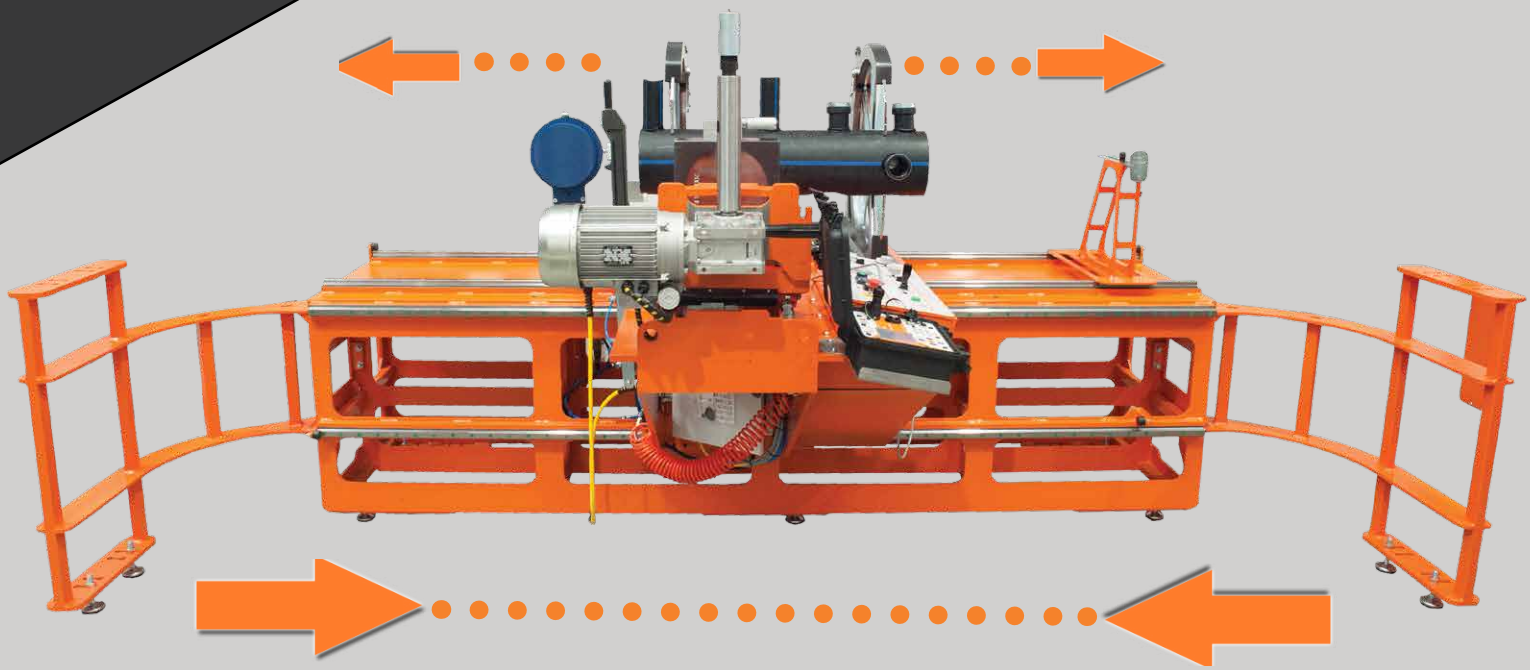
HEATING


3
WELDING


Inserts
Clamps
Heating Plate
Handle for
closing clamps
Clamp for
branch welds
Hole saw cutter
Sliding
Clamp trolley
Sliding
pipe support
Cutter motor
Datalogger
(accessory on request)
Mobile operating
station
Control Panel
Frame support


Hole saw cutter
Heating Plate



ALWAYS CENTERED AND PERFECT ALIGNMENT

The operating station and the clamps are free to move along the entire width of the frame by manual movement by the operator. The clamps can in turn be spaced as desired and this allows you to work with both lengths of pipe and rods. Alignment and centering are always guaranteed.

On the station there are: the fitting clamps, welding system equipped with plate detachment, the cutter, the control panel and a practical housing for the datalogger.

CONTROL PANEL

The control panel allows, in addition to setup, the movement of the thermoelement and the cutter. It is 90° perpendicular to the frame, allowing the operator maximum visibility and better control during the work phases.

DYNAMIC, FLEXIBLE

THIN CLAMPS AND INSERTS, REDUCED OBSTRUCTION

Details and solutions designed to give freedom and effectiveness to your work needs.

BUTT FUSION WELDS, POSSIBLE COMBINATIONS

BRANCH MANIFOLD

MAIN PIPE

Ø mm	32	40	50	63	75	90	110	125	140	160	180
50	◆										
63	◆	◆									
75	◆	◆	◆								
90	◆	◆	◆	◆							
110	◆	◆	◆	◆	◆	◆					
125	◆	◆	◆	◆	◆	◆					
140	◆	◆	◆	◆	◆	◆	◆				
160	◆	◆	◆	◆	◆	◆	◆	◆			
180	◆	◆	◆	◆	◆	◆	◆	◆	◆		
200	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
225	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
250	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
280	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
315	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
355	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
400	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
450	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
500	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
560	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
630	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆

BRANCH MANIFOLD

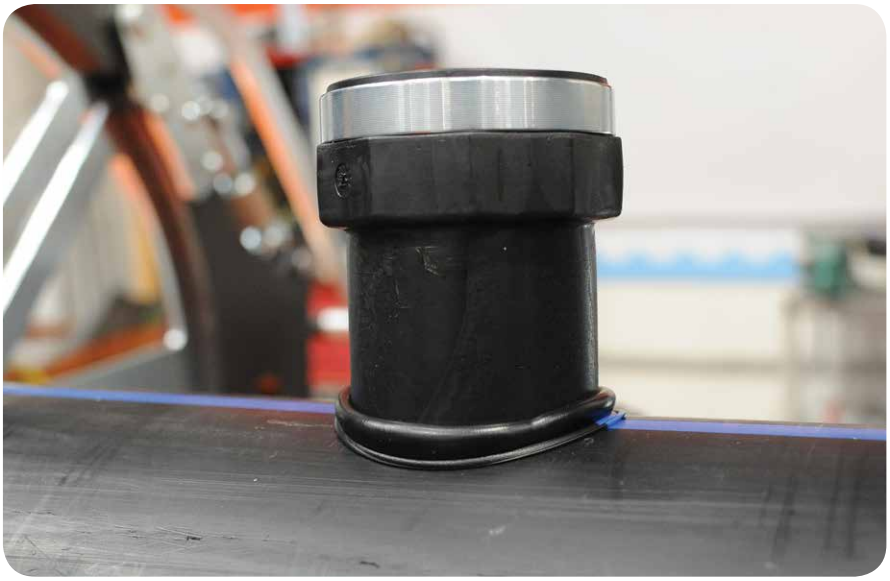
MAIN PIPE

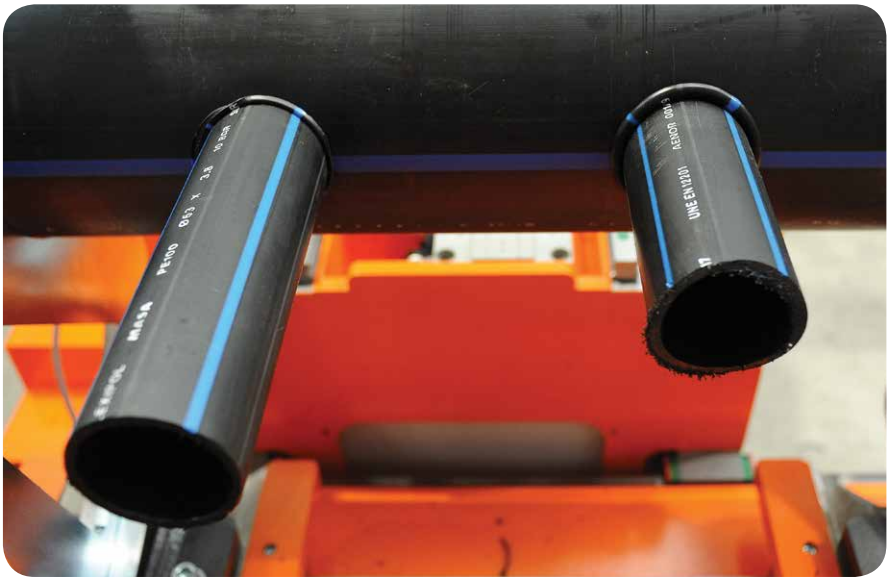
Ø inc IPS	1”	1¼”	1½”	2”	2½”	3”	4”	5”	6”
1½”	◆								
2”	◆	◆							
2½”	◆	◆	◆						
3”	◆	◆	◆	◆					
4”	◆	◆	◆	◆	◆				
5”	◆	◆	◆	◆	◆	◆	◆		
6”	◆	◆	◆	◆	◆	◆	◆		
8”	◆	◆	◆	◆	◆	◆	◆	◆	◆
10”	◆	◆	◆	◆	◆	◆	◆	◆	◆
12”	◆	◆	◆	◆	◆	◆	◆	◆	◆
14”	◆	◆	◆	◆	◆	◆	◆	◆	◆
16”	◆	◆	◆	◆	◆	◆	◆	◆	◆
18”	◆	◆	◆	◆	◆	◆	◆	◆	◆
20”	◆	◆	◆	◆	◆	◆	◆	◆	◆
22”	◆	◆	◆	◆	◆	◆	◆	◆	◆
24”	◆	◆	◆	◆	◆	◆	◆	◆	◆

SOCKET FUSION WELDS, POSSIBLE COMBINATIONS

BRANCH MANIFOLD
Ø 20 ÷ 125 mm
½” ÷ 4”

MINE PIPE
Ø 50 ÷ 630 mm
1½” ÷ 24”





COMPLETE PRODUCT
RADIUS 40-315

Sawing machine for making precise radial cuts on PE, PP, PVC plastic pipes.
Thanks to a sliding carriage and a graduated scale, the cutting radius can be configured quickly. The pipe fixing bench is also sliding and allows you to cut even small pieces of just 15 cm. The rotation of the saw during cutting is performed manually and in total safety by the operator using the two handles on the control panel.

TECHNICAL FEATURES

FM 630 - 180

Materials	HDPE, PP, PP-R
Field of work BUTT WELDING	Main Pipe: Ø 50 ÷ 630 mm; 1½" IPS ÷ 24" IPS Branch pipe/fitting: Ø 32 ÷ 180 mm; 1" IPS ÷ 6" IPS
Field of work SOCKET FUSION WELDING	Main Pipe: Ø 50 ÷ 630 mm; 1½" ÷ 24" Branch pipe/fitting: Ø 20 ÷ 125 mm; ½" ÷ 4"
Power	230 V - 50 Hz
Maximum absorbed power	3400 W
Working temperatures	-5° ÷ 40° C (23 ÷ 104 F)
Pneumatic system requirements	Minimum 8 bar
Interfacial Pressure	PE 0.15 N/mm2 PP 0.10 N/mm2
Weight	1260 Kg (2777 lb)

RITMO S.P.A
Via A Volta, 35/37 - Bresseo di Teolo (Padova) Italy
Ph. + 39 049 9901888 Fax +39 049 9901993 - info@ritmo.it - www.ritmo.it