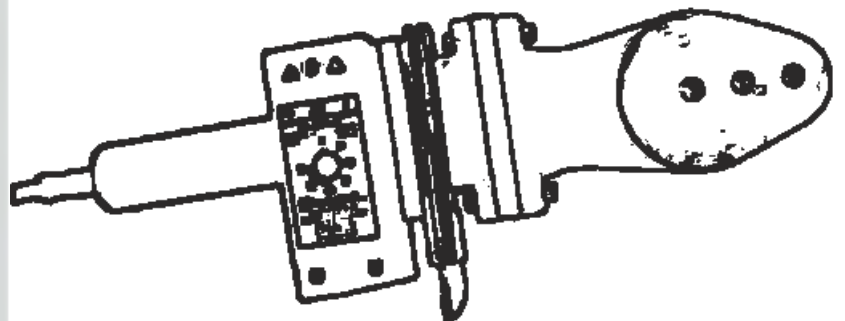


Board and pipe welding machines



The heating element butt welding machines of type series PT are robust and powerful and thus suited for the pipe trench as well as for workshop application.



The trench machines are suited for welding PE, PE100, PP, PVDF and other thermoplastic materials in pipe diameters ranging from 40 mm to a maximum of 1600 mm. On the right and left sides of the machine, there is a double clamping device with quick clamps which are guided by two hydraulic cylinders. An electrical hydraulic unit operates this double clamping device to ensure the precise joining of the pipes.

The heating element is equipped with a high-quality PTFE coating to prevent the parts from sticking to it. The temperature is electronically controlled and visualised by means of a digital display. Newly developed reduction clamping inserts allow to convert the machine for another pipe diameter in a matter of seconds without loosening any screws. The facing tool and the heating element are suspended from the guide shafts when used and then for storage they are placed in the provided transport box.



As an option, it is possible to supply a recording device. In addition to the control function, it guides the user step by step through the welding cycle. After completing the welding process, a welding record is printed for documentation purposes. Owing to the development of special modules and software, manually operated trench machines can be converted to trench machines with semi- and fully automatic control (CNC).

	PT 125	PT 160	PT 200	PT 250
Welding range	40mm - 125mm	40mm - 160mm	63mm - 200mm	63mm - 250mm
Pressure stages	SDR 41 - SDR 6	SDR 41 - SDR 6	SDR 41 - SDR 6	SDR 41 - SDR 6
Voltage	230V; 50Hz	230V; 50Hz	230V; 50Hz	230V; 50Hz
Power	1,5kW; 6,5 A	2,1kW; 9,1 A	2,7kW; 11 A	3,3kW; 14 A
Basic machine including clamping jaws	X	X	X	X
Welding mirror removable, PTFE coating with thermostat	X	X	X	X
Electrical facing tool	X	X	X	X
Transport box for facing tool and heating element	X	X	X	X
Hydraulic unit	X	X	X	X
Reduction clamping inserts	40,50,63,75,90,110mm	40,50,63,75,90,110,125,140mm	63,75,90,110,125,140,160,180mm	63,75,90,110,125,140,160,180,200,225mm
Four-jaw clamping plate	-	40 - 160mm	63 - 200mm	63 - 250mm
Transport box	X	X	X	X
	PT 315	PT 355	PT 500	PT 630
Welding range	90mm - 315mm	90mm - 355mm	200mm - 500mm	315mm - 630mm
Pressure stages	SDR 41 - SDR 6	SDR 41 - SDR 6	SDR 41 - SDR 6	SDR 41 - SDR 6
Voltage	230V; 50Hz	230V; 50Hz	230V; 50Hz	400V; 50Hz
Power	4,8kW; 22 A	4,8kW; 22 A	8,4kW; 37 A	11,5kW; 17 A
Basic machine including clamping jaws	-	-	-	-
Welding mirror removable, PTFE coating with thermostat	X	X	X	X
Electrical facing tool	X	X	X	X
Transport box for facing tool and heating element	X	X	X	X
Hydraulic unit	X	X	X	X
Reduction clamping inserts	90,110,125,140,160,180,200,225,180mm	90,110,125,140,160,180,200,225,250,280,315mm	200,225,250,280,315,355,400,450mm	315,355,400,450,500,560mm
Four-jaw clamping plate	90 - 315mm	90 - 355mm	200 - 500mm	315 - 630mm
Transport box	X	X	X	X
	PT 800	PT 1000	PT 1200	PT 1600
Welding range	450mm - 800mm	630mm - 1000mm	630mm - 1200mm	1000mm - 1600mm
Pressure stages	SDR 41 - SDR 6	SDR 41 - SDR 6	SDR 41 - SDR 6	SDR 41 - SDR 6
Voltage	400V; 50 Hz	400V; 50 Hz	400V; 50 Hz	400V; 50Hz
Power	13,9kW; 22 A	17,4kW; 28 A	21,7kW; 34 A	54kW; 80 A
Basic machine including clamping jaws	X	X	X	X
Welding mirror removable, PTFE coating with thermostat	X	X	X	X
Electrical facing tool	X	X	X	X
Transport box for facing tool and heating element	X	X	X	X
Hydraulic unit	X	X	X	X
Reduction clamping inserts	450,500,560,630,710mm	630,710,800,900mm	630,710,800,900,1000mm	1000,1200,1400mm
Four-jaw clamping plate	480 - 800mm	630 - 1000mm	630 - 1200mm	1000 - 1600mm
Transport box	X	X	X	X
	PT 250CSE	PT 315 CSE	PT 355 CSE	PT 500 CSE
Welding range	63mm - 250mm	90mm - 315mm	90mm - 355mm	200mm - 500mm
Pressure stages	SDR 41 - SDR 6	SDR 41 - SDR 6	SDR 41 - SDR 6	SDR 41 - SDR 6
Voltage	230V; 50Hz	230V; 50 Hz	230V; 50Hz	230 V; 50Hz.
Power	3,3kW; 14 A	4,8kW; 22 A	4,8kW; 22 A	8,3kW; 37,5 A
Basic machine including clamping jaws	-	-	-	-
Welding mirror removable, PTFE coating with thermostat	X	X	X	X
Electrical facing tool	X	X	X	X
Transport box for facing tool and heating element	X	X	X	X
Hydraulic unit	X	X	X	X
Reduction clamping inserts	40,50,90,110,125,140,160,180,200,225mm	90,110,125,140,160,180,200,225,250,280mm	90,110,125,140,160,180,200,225,250,280,315mm	200,225,250,280,315,355,400,500mm
Four-jaw clamping plate	63 - 50mm	90 - 315mm	90 - 355mm	200 - 500mm
Transport box	X	X	X	X

X Basic equipment
- not available



The pipe welding machines of type PL are sturdy and reliable welding machines. Due to the precise linear guides in the torsion-resistant basic frame, the machine allows the user to obtain a high degree of precision and stability under load.

The workshop machines operate hydraulically, they are computer controlled and suited and programmable for the welding of PE, PP and PVDF as well as other thermoplastic materials according to the latest DVS stipulations (DVS: German Welding Society). For documentation and control purposes, a welding record is automatically printed at the end of the welding process.

PL 500



The PTFE coated heating element as well as the electrical facing tool are connected with the basic frame of the machine. For clamping the individual pipe segments, several tools are available in various designs. For the production of T (45°, 60° and 90°), single-Y and double-V joints, special clamping tools were developed for the individual machine types.

	PL 125 C	PL 160 C	PL 315 C /CNC	PL 400 CNC	PL 500 CNC
Welding range	25mm – 125mm	40mm – 160mm	90mm – 315mm	90mm – 400mm	250mm – 500mm
Weldable bends	25mm – 125mm	40mm – 160mm	90mm – 315mm	90mm – 400mm	250mm – 500mm
90° T	-	-	90mm – 250mm	90mm – 315mm	250mm – 400mm
Double-V joint connection	-	-	90mm – 250mm	90mm – 315mm	250mm – 400mm
45° T and 60° joint connection	-	-	90mm – 250mm	90mm – 315mm	250mm – 400mm
Pressure range	SDR 41 – SDR 7,4	SDR 41 – SDR 7,4	SDR 41 – SDR 6	SDR 41 – SDR 6	SDR 41 – SDR 6
Voltage	230V; 50Hz	230V; 50Hz	230V; 50Hz	400V, 50 Hz	400V; 50Hz
Power	1,6 kW	2,2 kW	5,6kW; 24,5 A	6,2 kW, 9 A	9,95 kW; 14,4 A
Rotating clamping jaws	Ø 125mm	Ø 160mm	Ø 315mm	Ø 400mm	Ø 500mm
Heating element removable, PTFE coating and thermostat	X	X	X	X	X
Electrical facing tool	X	X	X	X	X
Four-jaw clamping plate	25 – 125mm	40 – 160mm	90 – 315mm	90 – 400mm	250 – 500mm
Reduction clamping inserts for rotating clamping jaws	25,32,40,50,63,75, 90,110mm	40,50,63,75,90,110, 125,140mm	90,110,125,140,160,180, 200,225,250,280mm	90,110,125,140,160,180,200, 225,250,280,315,355mm	250,280,315,355, 400,450mm
Clamping jaws for fittings	Ø 125mm	Ø 160mm	Ø 315mm	Ø 400mm	Ø 500mm
Reduction clamping inserts for fittings	25,32,40,50,63,75, 90,110mm	40,50,63,75,90,110 125,140mm	90,110,125,140,160, 180,200,225,250,280mm	90,110,125,140,160,180,200, 225,250,280,315,355mm	250,280,315,355, 400, 450mm
Clamping element for 90° and double-V joint connection	-	-	Ø 315mm	Ø 315mm	Ø 400mm
Reduction clamping inserts for double-V joint connections	-	-	90,110,125,140,160, 180,200,225mm	90,110,125,140,160, 180,200,225,250,280mm	250,280,315,355mm
Reduction clamping inserts for 90° T joint connections	-	-	90,110,125,140, 160,180,200,225mm	90,110,125,140,160, 180,200,225,250,280mm	250,280,315,355mm
Clamping element for 45° and 60° T joint connection	-	-	Ø 250mm	Ø 315mm	Ø 400mm
Reduction clamping inserts for 45° and 60° T joint connections	-	-	90,110,125,140,160, 180,200,225mm	90,110,125,140,160, 180,200,225,250,280,mm	250,280,315,355mm
Transport box	X	X			
	PL 630 CNC	PL 800 CNC	PL 1200 CNC	PL 1600 CNC	
Welding range	315mm – 630mm	315mm – 800mm	630mm – 1200mm	900mm – 1600mm	
Weldable bends	315mm – 630mm	315mm – 800mm	630mm – 1200mm	900mm – 1600mm	
90° T joint connection	315mm – 630mm	315mm – 630mm	630mm – 900mm	900mm – 1200mm	
45° T and 60° T joint connection	315mm – 630mm	315mm – 630mm	630mm – 900mm	900mm – 1200mm	
Pressure range	SDR 41 – SDR 6	SDR 41 – SDR 6	SDR 41 – SDR 6	SDR 41 – SDR 6	
Voltage	400V; 50Hz	400V; 50Hz	400V; 50Hz	400V; 50Hz	
Power	23kW; 34 A	23 kW; 34 A	39 kW; 56 A	55 kW; 85 A	
Basic machine including rotating clamping jaws	Ø 630mm	Ø 800mm	Ø 1200mm	Ø 1600mm	
Heating element removable, PTFE coating and thermostat	X	X	X	X	
Electrical facing tool	X	X	X	X	
Four-jaw clamping plate	315 – 630mm	315 – 800mm	630 – 1200mm	900 – 1600mm	
Reduction clamping inserts for rotating clamping jaws	315,355,400,450, 500,560mm	315,355,400,450, 500,560,630,710mm	630,710,800,900,1000mm	900,1000,1200,1400mm	
Clamping jaws for fittings	Ø 630mm	-	-	-	
Reduction clamping inserts for fittings	355,400,450,500, 560mm	-	-	-	
Reduction clamping inserts for 90° T joint connections	315,355,400,450,500,560mm	315,355,400,450,500, 560mm	630,710,800mm	900,1000mm	
Reduction clamping inserts for double-V joint connections	315,355,400,450,500,560mm	315,355,400,450,500, 560mm	630,710,800mm	900, 1000mm	
Clamping element for 45° and 60° T joint connection	Ø 630mm	Ø 630mm	Ø 900mm	Ø 1200mm	
Reduction clamping inserts for 45° and 60° T joint connections	315,355,400,450,500,560mm	315,355,400,450,500, 560mm	630,710,800mm	900,1000mm	
Transport box					

X included in the delivery
- not available



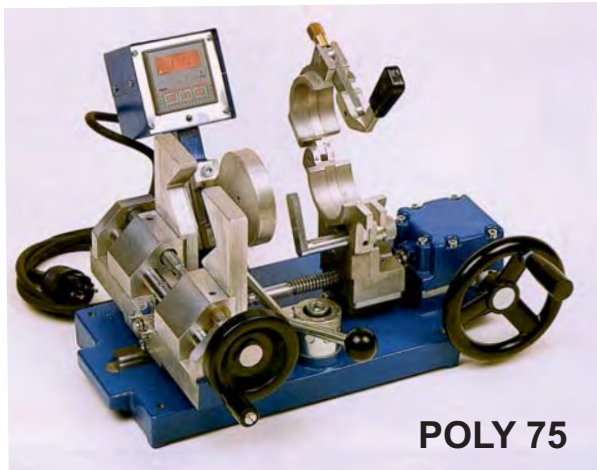
The manual pipe welding machines of the series EURO and WORLD are light-weight, highly versatile machines. They allow the user the possibility to process PE and PP pipes as well as fittings in dimensions up to SDR 11.

A sturdy frame guarantees a safe transport as well as the easy handling during processing. Via the installation of several storage facilities, it is possible to store the clamping tools quickly and easily.



	EURO 160	WORLD 160	EURO 200
Welding range	40mm – 160mm	40mm – 160mm	40mm – 200mm
Pressure stages	SDR 41 – SDR 17,6 alle Ø; SDR 11 Ø 40 – 125mm	SDR 41 – SDR 17,6 alle Ø; SDR 11 Ø 40 – 125mm	SDR 41 – SDR 26 alle Ø; SDR 17,6 Ø 40 – 160mm SDR 11 Ø 40 – 125mm
Voltage	230V; 50Hz	230V; 50Hz	230V; 50Hz
Power	1,3 kW	1,3 kW	1,9 kW
Reduction clamping inserts	40,50,63,75,90,125,140mm	40,50,63,75,90,125,140mm	40,50,63,75,90,125,140,160mm
Clamping jaws, rotating up to	—	7,5°	—
Heating element with PTFE coating and thermostat	X	X	X
Electrical facing tool	X	X	X
Protection for heating element	X	X	X
Welding pressure scale for PE pipes	X	X	X
	WORLD 250	EURO 315 C	
Welding range	63mm – 250mm	90mm – 315 mm	
Pressure stages	SDR 41 – SDR 33 alle Ø; SDR 26 Ø 40 – 225mm, SDR 17,6 Ø 40 – 160mm SDR 11 Ø 40 – 140mm	SDR 41 – SDR 26 alle Ø; SDR 22 Ø 225 – 250mm SDR 11 Ø 90 – 200mm	
Voltage	230V; 50Hz	230V; 50Hz	
Power	3 kW	4,5 kW	
Reduction clamping inserts	63,75,90,110,125,140, 160,180,200,225mm	90,110,125,140,160,180, 200,225,280mm	
Clamping jaws, rotating up to	7,5°	22,5°	
Heating element with PTFE coating and thermostat	X	X	
Electrical facing tool	X	X	
Protection for heating element	X	X	
Welding pressure scale for PE pipes	X	X	
- not available	X basic equipment		

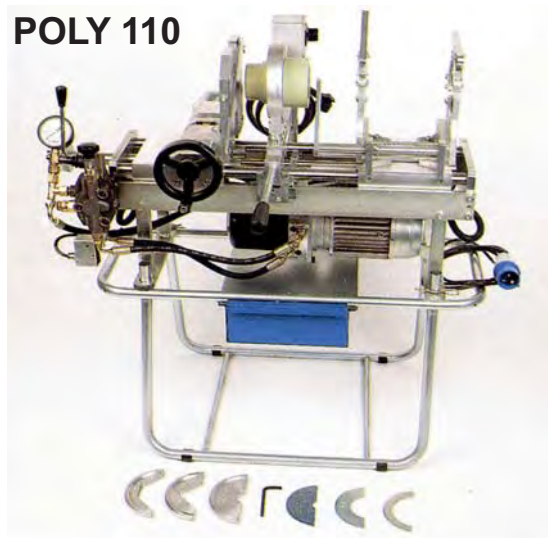
The heating element socket welding machine of type series POLY is suited for PE, PP and PVDF pipes and fittings of diameters from 16 to 110 mm.



POLY 75

The machines are highly versatile and light-weight, but nevertheless mounted on a sturdy frame. Due to the infinitely variable prism clamping jaws, all external diameters can be easily clamped.

The motion of the carriage can be effected depending on the construction design either manually via gear wheel and gear rack or hydraulically. Heating pins and sockets are provided with a high-quality coating each and comply with the stipulations of DVS 2208.



POLY 110

Technical data:

Welding range
Voltage
Power
Drive
Heating pins and sockets with PTFE coating for DA

POLY 75

16mm – 75mm
230V; 50Hz
0,8 kW
manual

POLY 110 M

16mm – 110mm
230V; 50Hz
1,6 kW
manual

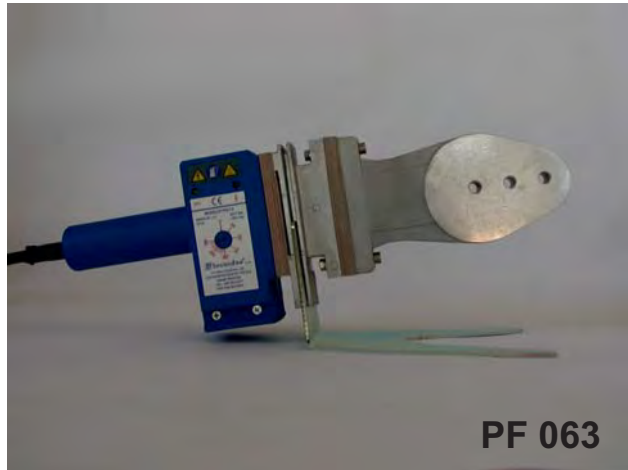
POLY 110 P

16mm – 110mm
230V, 50Hz
1,6 kW
hydraulic

16,20,25,32,40,50,
63,75 mm

16,20,25,32,40,50,
63,75,110mm

16,20,25,32,40,50,
63,75,110mm



The manual socket welding devices are suited for complex facility parts and parts which are difficult to access on the construction site and in the workshop.

Depending on the design, the user can either apply an electronic and/or thermostatic temperature control.

Heating pins and sockets which are provided with a high-quality coating enable the processing of diameters ranging from 20 mm to 110 mm.



Useful accessories, as e.g. a table clamp holder, can be stored together with the manual socket welding device in a sturdy transport box.

Technical data:	Welding range (mm)	Power (W)	Temperature control	Weight (kg)	PTFE-coated heating pins and sockets for DA (mm)
PF 032F KIT	20 – 32	800	Thermostat	6,0	20,25,32
PF 063R KIT	20 – 63	800	Thermostat	9,0	20,25,32,40,50,63
PF 110R KIT	20 – 110	1600	Thermostat	20,0	20,25,32,40,50,63,75, 90, 110



Portable heating elements with high-quality PTFE coating for socket welding of PE and PP pipes and fittings. The temperature of the heating element is infinitely variable and equipped with a thermostatic temperature control. At request, the heating element can also be supplied in a handy transport box.

Technical data:

	Diameter (mm)	Power (W)	Weight (kg)
TE 140 / 30°	140	600	2,4
TE 140	140	600	2,4
TE 180	180	800	2,6
TE 230	230	1300	3,9
TE 300	300	1500	4,8

Band saws of type series ST



The band saws of type series ST are hydraulically operated and CNC controlled band saws. They were designed for the accurate sawing of PE, PP and other thermoplastic pipes, profiles and fittings. Due to the swivelling saw arm, it is possible to saw various pipe diameters and mitre cuts (up to 67.5°). The saw arm is lowered and the pipes are clamped via an accurate hydraulic system.

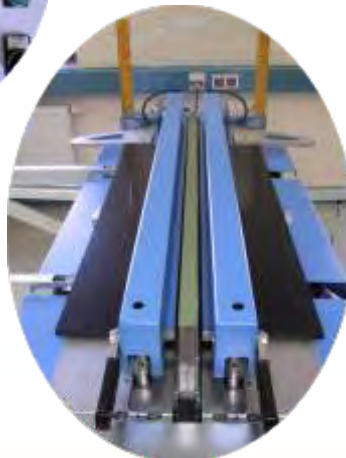
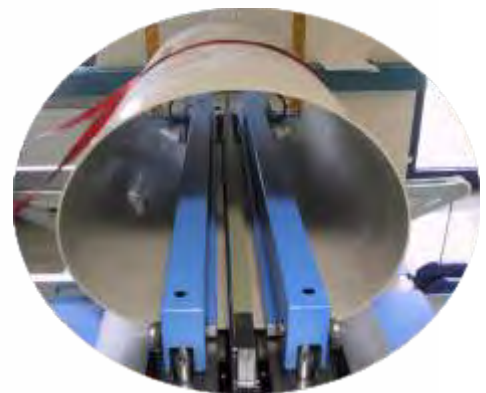
Technical data:

		ST 630	ST 800	ST 1200
Sawing range	mm	200 – 630	200 – 800	500 – 1200
Max. sawing speed	m/min	400	400	400
Sawing angle		27,5° – 67,5°	27,5° – 67,5°	45° – 67,5°
Voltage	V	400V; 50Hz	400V, 50Hz	400V; 50 Hz
Power	kW	2,6	2,6	6,7
Dimensions	cm	380x330x300	380x330x300	510x520x350
Weight	kg	1015	1015	2200

Type series SL 1000M



- The smallest of the construction series of the board welding machines
- SL 1000M is a purely manual machine with hydraulic control
- It is suited for PE-HD, PP, PVC, PVDF



Technical data:

SL1000M

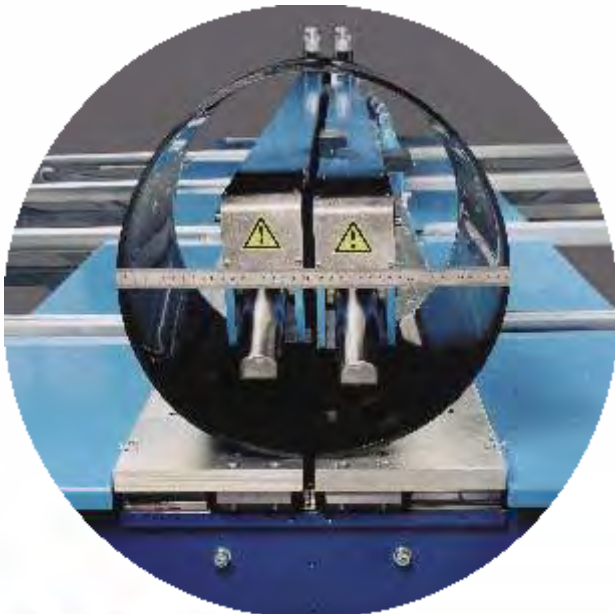
Working width	1000mm
Max. material thickness	20mm – PVC 5mm
Dimensions	1860 x 900 x 1250mm
Weight	611Kg

The design of the butt welding machines of the types SL....CNC, SL....M and SLV....CNC is characterised by the optimum relationship between acquisition costs and the rationalisation effect to be achieved for each company owner.



		SL 3000 CNC	SL 3000 Plus	SLV 3000 Plus	SL 4000 M	SL 4000 CNC
Max. working width (mm)		3000	3000	3000	4000	4000
Max. board thickness (mm)	PE PP	30	50	50 h/ 30 v	25	25
	PVC	8	25	25 h/ 25 v	8	8
Supply voltage (V)		400	400	400	400	400
Power input (kW)		10,4	10,41	10,4	15,5	15,5
Dimensions l x w x h (cm)		450x120x180	450x120x180	450x120x180	570x120x180	570x120x180
Machine weight (kg)		1900	1900	1900	2800	2800
Control		CNC	CNC	CNC	manuell	CNC

H horizontal welding
V vertical welding



Owing to the solid and extremely sturdy frame construction and the hydraulic drive of the machine (**no compressed air required**), it is possible to weld thermoplastic materials such as PE-HD, PP-H, PP-B, PP-R, PVDF and also PP-S in a board thickness ranging from 3-50 mm depending on the welding factor, as well as HDPE-500 (up to a board thickness of 20 mm) and PVC-U, PVC-Rl (up to a plate thickness of 30 mm). It is also possible to weld cylinders from an internal diameter of 350 mm onward.

By means of the automatic opening of the holding bolts, these parts can be removed laterally from the machine after the welding process has been completed. All machines are fitted with a cold aligning device and a parallel guide of the clamping tables.



Operating unit Typ SLV, SL 3000 PLUS

All operating elements are clearly arranged in an operating panel. In connection with mobile foot switches, the operator is always capable of positioning the boards to be clamped with both hands and of tensioning the clamping bar simultaneously.



Operating unit type Standard

The butt welding machines can optionally be equipped with a manual or a CNC control. With the CNC control, the material type, board thickness and length must only be entered. After the plate has been adligned, the welding process will proceed fully automatically pursuant to the latest DVS guidelines. The operator can certainly also enter other welding parameters. The integrated printer prints a welding record with all data of the welding parameters if desired.

Basic equipment:

Hydraulic drive for exact clamping and welding pressures.

PTFE-coated heating element of a special cast alloy for high temperature precision.

The twisting of the individual clamping plates is prevented due to the overall motion of the clamping bar.

Folding lateral support arms help to save space when the machine is not in use.





The butt welding machines of type series SLV are an extension of type series SL...PLUS.

With this machine, thermoplastic materials can not only be welded horizontally but also at right angles. Thus it is often possible to avoid costly hot gas or extrusion welds and folds. The horizontal board is welded to the vertical board (board thickness, vertical welding max. 30 mm and horizontal welding max. 50 mm).

Thus it is possible to produce right-angled profiles and closed channels with an internal leg pipe dimension from 300 mm onward.



Owing to the vacuum holder which can be mounted or dismantled in no time, the solid fixation of the vertically positioned boards is ensured. With this version it is also possible to produce pipes from a minimum diameter of 400mm without the vacuum holder.

The lateral support arms can be folded up so that no unnecessary space is occupied when the machine is not used.

Heating bending machines



Heating bending machines of a working width of up to 3 m and a material thickness up to 20 mm.

For further interesting information ask for our brochure for heating bending machines.

Manual welding devices & accessories



Manual welding devices for welding, heating, drying, shaping and shrinking of thermoplastic materials.

For further interesting information ask for our brochure for roof welding systems.

Extrusion welding & accessories



The manual extrusion welding device with internal and external air supply are used in workshop and construction site application.

For further interesting information ask for our brochure for extrusion welding systems.

LDU Data Logging Unit

Suitable for our own PT models, and most other, electro-hydraulic field welding machines.

Measures and reports on every butt weld performed



- The printing data-logger is designed and constructed for the measurement of butt welding parameters of PE, PP and PVDF pipes and fittings.
- In addition to the control function, the printing data machine helps the operator during all working phases showing on the display and advising with an acoustic signal the pressure and the time to be achieved during all welding cycle phases.
- The heating mirror temperature (once the operator has set up the material, diameter and wall thickness of the pipe) is controlled by computer according to the material and wall thickness involved.
- The possibility to print in advance all welding parameters helps the operator avoiding the use of welding tables.
- At the end of welding, a final print allows the operator or supervisor to check if the welding cycle has been correctly performed.

Maximum Working Pressure	0 - 160 Bar
PN Weldable	PN 2.5 - PN 40
Voltage	230V 50Hz (standard, other on specific request)
Power	100 watt - IP 20



You can find us here...

Herz GmbH

Kunststoff- & Wärmetechnologie
Biberweg 1
DE - 56566 Neuwied
Tel.: +49 (0)2622-81086 Fax: +49 (0)2622-81080
www.herz-gmbh.com, info@herz-gmbh.com

Herz Austria GmbH

Kunststoff- & Wärmetechnologie
Gleinser Weg 27
AT - 6141 Schönberg / Tirol
Tel.: +43 (0)5225-63113 Fax: +43 (0)5225-6311385
www.herz-austria.at, herz.schoenberg@herz-gmbh.com

Herz Hungária Kft.

Műanyag- és hőlégtéchnika
Pesti út 284. (HRSZ.3335.)
HU – 2225 Üllő
Tel.: +36 (06)29-522 400 Fax: +36 (06)29-522 410
www.herz-hungaria.hu, herz@herz-hungaria.hu

Herz Bulgaria OOD

Boul. Assen Yordanov 10
BG – 1592 Sofia
Tel.: +359 (0)2 - 9790351 Fax: +359 (0) 2 - 9790793
www.herz-bulgaria.bg, office@herz-bulgaria.bg

Herz GmbH

Kunststoff- & Wärmetechnologie
Am Arenberg 26a
DE - 86456 Gablingen
Tel.: +49 (0)8230-85085 Fax: +49 (0)8230-85087
www.herz-gmbh.com, robert.einberger@herz-gmbh.com

Herz Austria GmbH

Kunststoff- & Wärmetechnologie
Johann-Galler-Str. 20 IZ – NÖ - Nord
AT - 2120 Wolkersdorf i. Weinviertel
Tel.: +43 (0)2245-82494-0 Fax: +43 (0)2245-82494-9
www.herz-austria.at, herz.wolkersdorf@herz-gmbh.com

Herz Polska Sp.z o. o.

Technologie obróbki tworzyw sztucznych
ul. Wiernicza 110
PL – 02-952 Warszawa
Tel.: +48 (0)22-8428583 Fax: +48 (0)22-8429700
www.herz-polska.pl, herz.polska@herz-gmbh.com

Half day welding courses in our training facilities - 24 hour repair service.