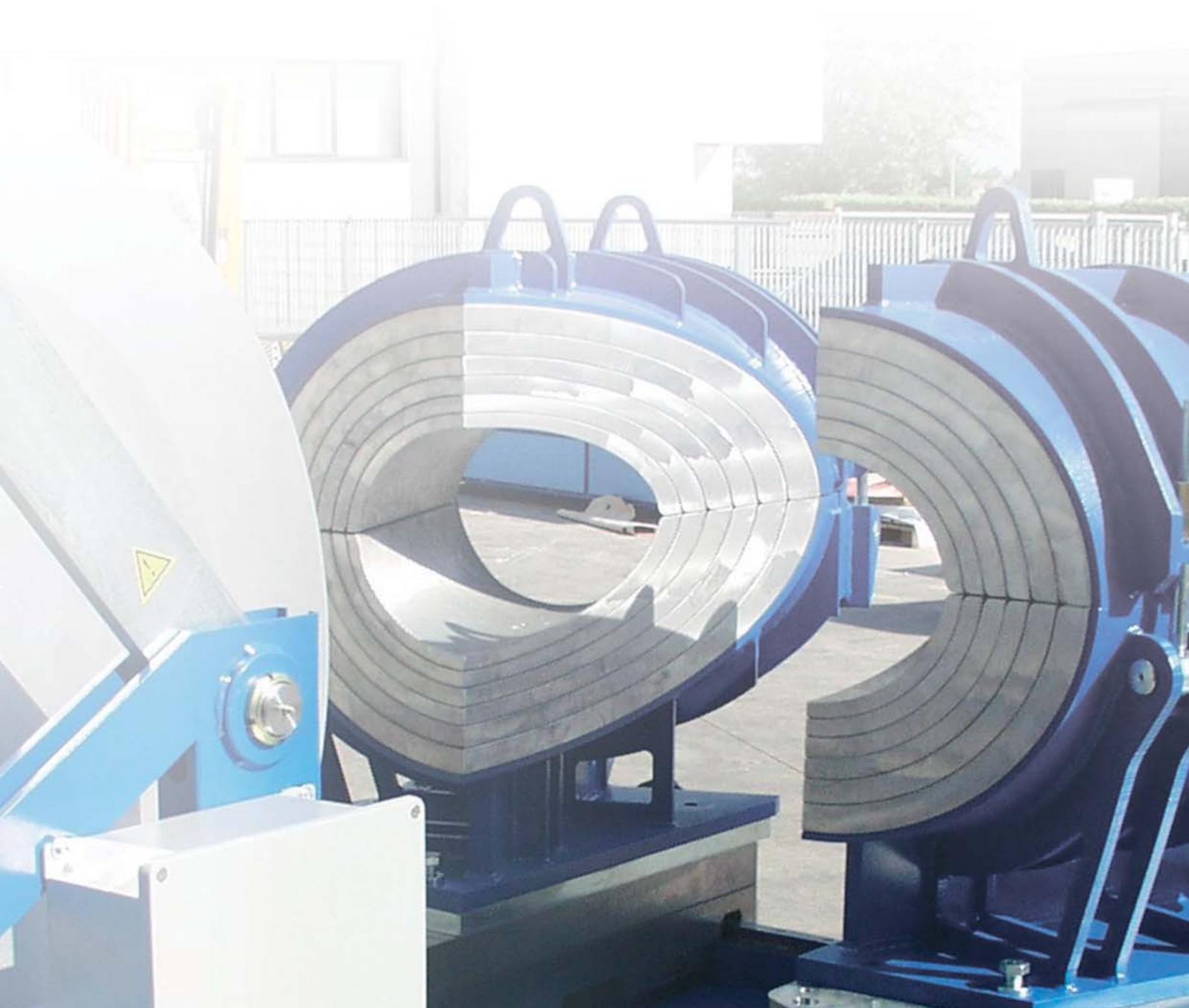


Uponor

Butt welding workshop machines

For production any kind of segmented fittings



EURO and WORLD Series

Manually operated butt welding machines for PE and PP pipes and fittings. Machines versatile and very light, for easy operations and transport complete with a drawer which will hold accessories when not in use. The "World" models could be supplied with a combined wooden box, highly suitable for an easy operation and transport.

All machines are supplied with two alloy carriages. One is fixed and the other one is sliding.



Machines being cap sizeable into the frame reduce the overall dimensions for the transport and stocking when not in use.

The sliding carriage is operated by a lever that is also connected to the pressure indication (kp).



Practical accessories and standard equipment.

PL Series

The workshop welding machines of PL series are designed for the butt welding of pipes and fittings of PE, PP, PVDF and other thermoplastic materials. All machines of PL series are highly suitable for production of prefabricated fittings. PL machines from 315 CNC are hydraulically operated and equipped with a CNC unit which enables automatic welding with the possibility to print out and transfer to PC-Database "Memoplan" all process parameters. The pivoting clamps allow to produce segmented bends in different radius. Reduction inserts, produced like two half shells each set, are lying one in each other.



PL 125 C and PL 160 C are manually working workshop machines to produce high quality segmented bends in all pressure classes.

PL 315 C and PL 400 C are hydraulically operated workshop machines which can be supplied with LDU data logger

PL 315 CNC - PL 1600 CNC are high performance automatic workshop machines for the batch production of all kinds butt welded fittings. The CNC unit is located into an external control board

NEW! ALL CNC MODELS WITH NEW CONTROL BOARD!

Features:

- all parts of machine are controlled via front control panel
- data transfer to PC/LAPTOP to database "Memoplan"
- 2000 joints can be stored in memory

for detailed information of the new CNC-system, please contact our team: info@kwhtech.de



Optional equipment

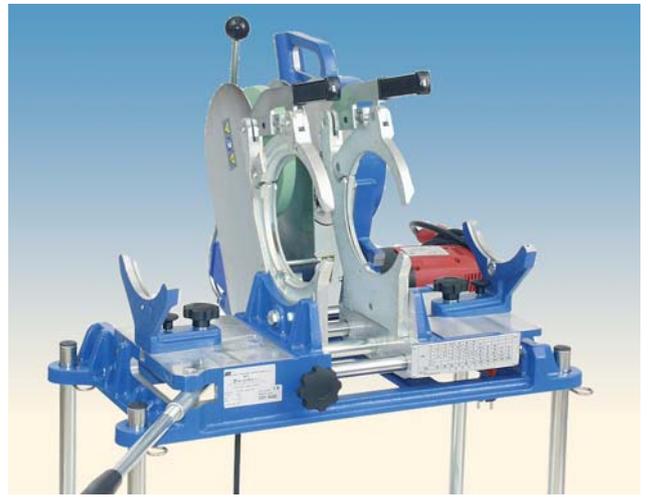
1. The optional devices are manufactured to produce fittings for special applications, such as equal T-pieces 90°, Y-shapes 45°, 60° and Cross pieces.

2. The fitting clamp is a tool to clamp fittings, such as moulded bends, which has only few space for fixing into clamps, cutting-, bead formation and welding procedure. Production of fitting to fitting or fitting to pipe connections.

3. The stub end holder is a device for centering and clamping flanges or other fittings with stub end. Production of pipe to flange connections.

EURO 160 230 V 50 Hz (standard) - 1,51 kW
 Pressure rates: SDR 41 - 17,6 all sizes. SDR 11 sizes 40 - 125 mm

Machine consisting of	Sizes (mm)	Weight (kg)
Basic machine	OD 160	
Electric cutting mill		
PTFE-coated heating mirror		
Two main clamps	OD 160	
Reduction inserts main clamps (2 set)	OD 40 - 140	
Back supports right and left (2 pcs)	OD 160	
Reduction inserts for back supports (2 set)	OD 40 - 140	
Metal combined frame with drawer		
Packing		
Total weight		51



WORLD 160 230 V 50 Hz (standard) - 1,51 kW
 Pressure rates: SDR 41 - 17,6 all sizes. SDR 11 sizes 40 - 125 mm
 Main clamps can be rotated each 7,5°

Machine consisting of	Sizes (mm)	Weight (kg)
Basic machine	OD 160	
Electric cutting mill		
PTFE-coated heating mirror		
Two main clamps	OD 160	
Reduction inserts main clamps (2 set)	OD 40 - 140	
Back supports right and left (2 pcs)	OD 160	
Reduction inserts for back supports (2 set)	OD 40 - 140	
Metal combined frame with drawer		
Packing		
Total weight		51



EURO 200 230 V 50 Hz (standard) - 2,11 kW
 Pressure rates: SDR 41 - SDR 26 all OD, SDR 17,6 OD 40-160 mm,
 SDR 11 OD 40-125 mm

Machine consisting of	Sizes (mm)	Weight (kg)
Basic machine	OD 200	
Electric cutting mill		
PTFE-coated heating mirror, OD 180 on request		
Two main clamps	OD 180	
Reduction inserts main clamps (2 set)	OD 40 - 160	
Back supports right and left (2 pcs)	OD 200	
Reduction inserts for back supports (2 set)	OD 40 - 200	
Metal combined frame with drawer		
Packing		
Total weight		73



WORLD 250 M 230 V 50 Hz (standard) - 2,9 kW
 Pressure rates: SDR 41 - 33 all sizes. SDR 26 sizes 40 - 225 mm
 SDR 17,6 sizes 40 - 160 mm. SDR 11 sizes 40 - 140 mm

Machine consisting of	Sizes (mm)	Weight (kg)
Basic machine	OD 250	90
Two main clamps, each movable up to 7,5°	OD 250	
Reduction inserts for main clamps (2 set)	OD 63 - 225	
Back supports (2 pcs)	OD 250	
Reduction inserts for back supports (2 set)	OD 63 - 225	
Electric cutting mill		
PTFE-coated heating mirror		
Metal combined frame with drawer		
Accessories:		
Combined wooden transport box		
Total weight		



WORLD 250 H 230 V 50 Hz (standard) - 3,1 kW
 Pressure rates: SDR 41 - 17 all sizes. SDR 11 sizes 40 - 200 mm

Machine consisting of	Sizes (mm)	Weight (kg)
Basic machine with integrated manual hydraulic pump	OD 250	90
Two main clamps, each movable up to 7,5°	OD 250	
Reduction inserts for main clamps (2 set)	OD 63 - 225	
Back supports (2 pcs)	OD 250	
Reduction inserts for back supports (2 set)	OD 63 - 225	
Electric cutting mill		
PTFE-coated heating mirror		
Metal combined frame with drawer		
Accessories:		
Combined wooden transport box		
Total weight		



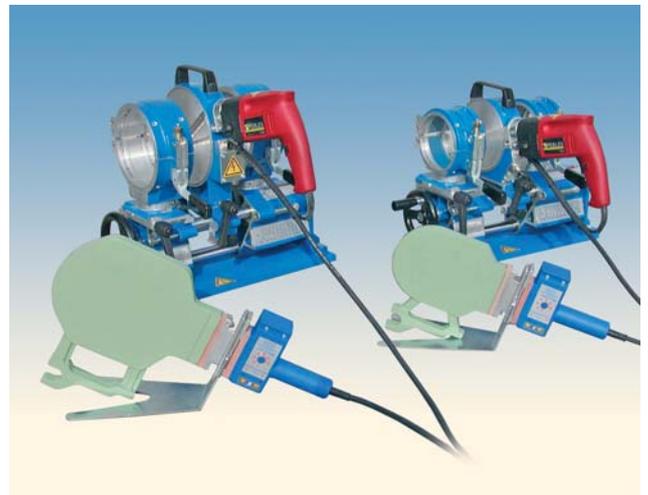
EURO 315 230 V 50 Hz (standard) - 4,5 kW
 Pressure rates: SDR 41 - 26 all sizes. SDR 17,6 sizes 90 - 250 mm
 SDR 11 sizes 90 - 200 mm

Machine consisting of	Sizes (mm)	Weight (kg)
Basic machine	OD 315	180
Two pivoting clamps, each movable up to 22,5°	OD 315	
Reduction inserts (2 set)	OD 90 - 280	
Back supports (2 pcs)	OD 315	
Reduction inserts for back supports (2 set)	OD 90 - 280	
Electric cutting mill		
PTFE-coated heating mirror		
Metal combined frame with drawer		
Accessories:		
Combined wooden transport box		
Total weight		



PL 125 230 V 50 Hz (standard) - 1,6 kW SDR-Pressure rates 41 - 7,4

Machine consisting of	Sizes (mm)	Weight (kg)
Welding range	OD 25 - 125	
Basic machine with 2 pivoting main clamps	OD 125	16
PTFE-coated heating mirror with electric thermostat		3
Electric facing tool with safety switch		6
Support for heating mirror		1
Reduction rings for pivoting clamp	OD 25, 40, 50, 63, 75, 90, 110	11
Fitting clamp for short spigot fittings	OD 125	2
Reduction inserts for fitting clamp	OD 25, 40, 50, 63, 75, 90, 110	2
Stub end holder	OD 25 - 125	1,5
Wooden transport box	560x480x550	16
Total Weight		58,5



PL 160 230 V 50 Hz (standard) - 2,2 kW SDR-Pressure rates 41 - 7,4

Machine consisting of	Sizes (mm)	Weight (kg)
Welding range	OD 40 - 160	
Basic machine with 2 pivoting main clamps	OD 160	18
PTFE-coated heating mirror with electric thermostat		4
Electric facing tool with safety switch		8
Support for heating mirror		1
Reduction rings for pivoting clamp	OD 40, 50, 63, 75, 90, 110, 125, 140	17
Fitting clamp for short spigot fittings	OD 160	3
Reduction inserts for fitting clamp	OD 40, 50, 63, 75, 90, 110, 125, 140	4
Stub end holder	OD 40 - 160	3
Wooden transport box	700x590x570	16
Total Weight		74



PL 315 C 230 V 50 Hz (standard) - 5,6 kW - 24,5 A
SDR-Pressure rates 41 - 6. Cylinder's total section 6,47 cm²

Fittings

Segmented bends
T-Pieces 90° and Crosses
Y-Shapes 45° and 60°

Welding ranges

OD 90 - 315 mm
OD 90 - 250 mm
OD 90 - 250 mm

Basic machine consisting of

Basic machine with hydraulic control
Two pivoting main clamps
Reduction inserts
Electric mill cutter with reducing gear and safety micro switch
PTFE-coated heating mirror

Sizes (mm)

OD 315
DA 90 - 280

Weight (kg)

380



PL 315 CNC 230 V 50 Hz (standard) - 5,6 kW - 24,5 A
SDR-Pressure rates 41 - 6. Cylinder's total section 6,47 cm²

Fittings

Segmented bends
T-Pieces 90° and Crosses
Y-Shapes 45° and 60°

Welding ranges

OD 90 - 315 mm
OD 90 - 250 mm
OD 90 - 250 mm

Basic machine consisting of

Basic machine with CNC control board and printer
Two pivoting main clamps
Reduction inserts
Electric mill cutter with reducing gear and safety micro switch
PTFE-coated heating mirror
CNC-controlled

Sizes (mm)

OD 315
OD 90 - 280

Weight (kg)

390



PL 315 C / CNC Accessories

Description

Right or left fitting clamp
Reduction inserts for fitting clamps (right or left)
Stub end holder
Main clamps for Tees and Crosses 90°
Reduction inserts for producing Tees 90° (6 half shells each size)
1 additional set of reduction inserts for producing
Crosses 90° (2 half shells each size)
Main clamp for Y-Shapes 45° and 60°
Reduction inserts for producing Y-Shapes 45° - 60° (4 half shells each set)
Packing

Sizes (mm)

OD 315
OD 90 - 280

OD 90 - 315
OD 250
OD 90 - 225

OD 90 - 225
OD 250

OD 90 - 225

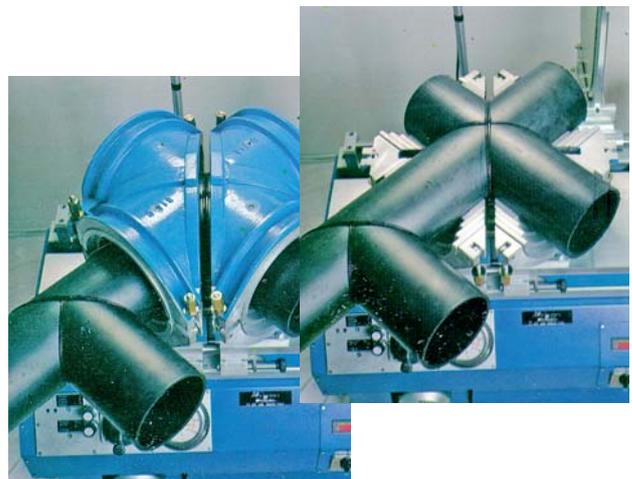
Weight (kg)

14
24

30
38
25

10
40

70
72
323



PL 400 C 400 V 3Ph. 50 Hz (standard) - 6,2 kW - 9 A
SDR pressur rates 41 - 6. Cylinder's total section 6,47 cm²

Fittings

Segmented bends
T-Pieces 90° and Crosses
Y-Shapes 45° and 60°

Welding ranges

OD 90 - 400 mm
OD 90 - 315 mm
OD 90 - 315 mm

Basic machine consisting of

Basic machine, hydraulically working
Two pivoting main clamps
Reduction inserts
Electric mill cutter with reducing gear and safety micro switch
PTFE-coated heating mirror

Sizes (mm)

OD 400
OD 90 - 355

Weight (kg)

465



PL 400 CNC 400 V 3Ph. 50 Hz (standard) - 6,1 kW - 8 A
SDR pressur rates 41 - 6. Cylinder's total section 6,47 cm²

Fittings

Segmented bends
T-Pieces 90° and Crosses
Y-Shapes 45° and 60°

Welding ranges

OD 90 - 400 mm
OD 90 - 315 mm
OD 90 - 315 mm

Basic machine consisting of

Basic machine with CNC control board and printer
Two pivoting main clamps
Reduction inserts
Electric mill cutter with reducing gear and safety micro switch
PTFE-coated heating mirror
CNC-controlled

Sizes (mm)

OD 400
OD 90 - 355

Weight (kg)

488



PL 400 C/CNC Accessories

Description

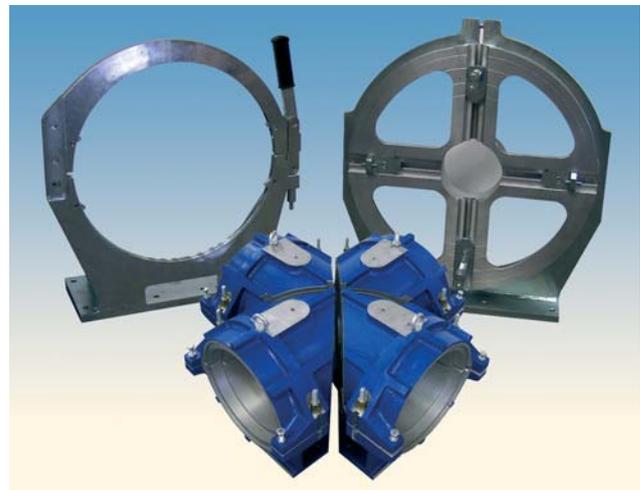
Right or left fitting clamp
Reduction inserts for fitting clamps (right or left)
Stub end holder
Main clamp for Tees 90° (consisting of 3 pieces)
Reducing inserts for Tees device 90° (6 half rings each size)
1 additional main clamp for Crosses 90°
Reduction inserts for Crosses device 90° (2 half rings each size)
Main clamp for Y-Shapes 45° and 60°
Reduction inserts for Y-Shapes device 45° - 60° (4 half rings each size)
Packing

Sizes (mm)

OD 400
OD 90 - 355
OD 90 - 400
OD 315
OD 90 - 280
OD 315
OD 90 - 280
OD 315
OD 90 - 280

Weight (kg)

23
25
30
57
75
19
25
62
96
35
447



PL 500 C 400 V 3Ph. 50 Hz (standard) - 11 kW - 15 A
SDR pressure rates 41 - 6. Cylinder's total section 14,72 cm²

Fittings

Segmented bends
T-Pieces 90° and Crosses
Y-Shapes 45° and 60°

Welding ranges

OD 250 - 500 mm
OD 250 - 400 mm
OD 250 - 400 mm

Basic machine consisting of

Basic machine, hydraulically working board and printer
Two pivoting main clamps
Reduction inserts
Electric mill cutter with reducing gear and safety micro switch
PTFE-coated heating mirror

Sizes (mm)

OD 500
OD 250 - 450

Weight (kg)

Total weight

950



PL 500 CNC 400 V 3Ph. 50 Hz (standard) - 11 kW - 15 A
SDR pressure rates 41 - 6. Cylinder's total section 14,72 cm²

Fittings

Segmented bends
T-Pieces 90° and Crosses
Y-Shapes 45° and 60°

Welding ranges

OD 250 - 500 mm
OD 250 - 400 mm
OD 250 - 400 mm

Basic machine consisting of

Basic machine with CNC control board and printer
Two pivoting main clamps
Reduction inserts
Electric mill cutter with reducing gear and safety micro switch
PTFE-coated heating mirror
CNC-controlled

Sizes (mm)

OD 500
OD 250 - 450

Weight (kg)

Total weight

970



On request available with hydraulic clamping system.

PL 500 CNC Accessories

Description

Right or left fitting clamp
Reduction inserts for fitting clamps (right or left)
Stub end holder
Main clamp for Tees 90° (consisting of 3 pieces)
Reducing inserts for Tees device 90° (6 half rings each size)
1 additional main clamp for Crosses 90°
Reduction inserts for Crosses device 90° (2 half rings each size)
Main clamp for Y-Shapes 45° and 60°
Reduction inserts for Y-Shapes device 45° - 60° (4 half rings each size)
Packing

Sizes (mm)

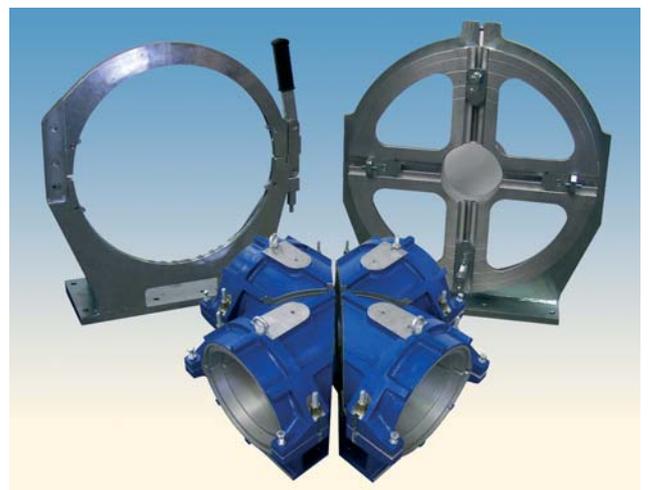
OD 500
OD 250 - 450
OD 250 - 500
OD 400
OD 250 - 355
OD 400
OD 250 - 355
OD 400
OD 250 - 355

Weight (kg)

85
30
54
210
240
70
80
162
206
185

Total weight

1322



PL 630 CNC 400 V 3Ph. 50 Hz (standard) - 23 kW - 35 A
SDR pressure rates 41 - 6. Cylinder's total section 19,36 cm²

Fittings

Segmented bends
T-Pieces 90° and Crosses
Y-Shapes 45° and 60°

Welding ranges

OD 315 - 630 mm
OD 315 - 630 mm
OD 315 - 630 mm

Basic machine consisting of

Basic machine with CNC control board and printer
Two pivoting main clamps
Reduction inserts
Electric mill cutter with reducing gear and safety micro switch
PTFE-coated heating mirror
CNC-controlled

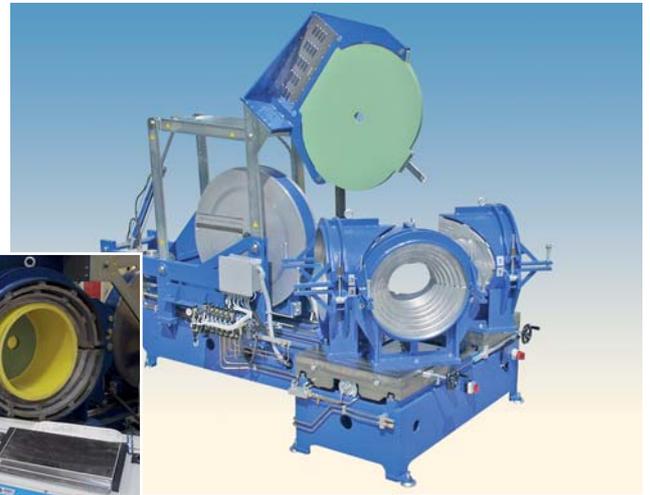
Total weight

Sizes (mm)

OD 630
OD 315 - 560

Weight (kg)

3500



PL 630 CNC Accessories

Description

Right or left fitting clamp
Reduction inserts for fitting clamps (right or left)
Stub end holder
Main clamp for Tees 90° (consisting of 3 pieces)
Reducing inserts for Tees device 90° (6 half rings each size)
1 additional main clamp for Crosses 90°
Reduction inserts for Crosses device 90° (2 half rings each size)
Main clamp for Y-Shapes 45° and 60°
Reduction inserts for Y-Shapes device 45° - 60° (4 half rings each size)

Packing

Total weight

Sizes (mm)

OD 630
OD 315 - 560

OD 315 - 630
OD 630

OD 315 - 560
OD 630

OD 315 - 560
OD 630
OD 315 - 560

Weight (kg)

110
90

82
270

285
90

95
240
260

1522



PL 800 CNC 400 V 3Ph. 50 Hz (standard) - 23 kW - 35 A
SDR pressure rates 41 - 6. Cylinder's total section 19,36 cm²

Fittings

Segmented bends
T-Pieces 90° and Crosses
Y-Shapes 45° and 60°

Welding ranges

OD 315 - 800 mm
OD 315 - 630 mm
OD 315 - 630 mm

Basic machine consisting of

Basic machine with CNC control board and printer
Two pivoting main clamps
Reduction inserts
Two pivoting main clamps
Reduction inserts
Electric mill cutter with reducing gear and safety micro switch
PTFE-coated heating mirror
CNC-controlled

Total weight

Sizes (mm)

OD 800
OD 710
OD 630
OD 315 - 560

Weight (kg)

3700



PL 800 CNC Accessories

Description	Sizes (mm)	Weight (kg)
Right or left fitting clamp	OD 630	110
Reduction inserts for fitting clamps (right or left)	OD 315 - 560	90
Stub end holder	OD 315 - 800	90
Main clamp for Tees 90° (consisting of 3 pieces)	OD 630	270
Reducing inserts for Tees device 90° (6 half rings each size)	OD 315 - 560	285
1 additional main clamp for Crosses 90°	OD 630	90
Reduction inserts for Crosses device 90° (2 half rings each size)	OD 315 - 560	95
Main clamp for Y-Shapes 45° and 60°	OD 630	240
Reduction inserts for Y-Shapes device 45° - 60° (4 half rings each size)	OD 315 - 560	260
Packing		
Total weight		1530



PL 1201 CNC 400 V 3Ph. 50 Hz (standard) - 41,5 kW - 60 A SDR pressure rates 41 - 6. Cylinder's total section 28,85 cm²

Fittings	Welding ranges		
Segmented bends	OD 630 - 1200 mm		
T-Pieces 90° and Crosses	OD 630 - 1000 mm		
Y-Shapes 45° and 60°	OD 630 - 900 mm		
Basic machine consisting of	Sizes (mm)	Weight (kg)	
Basic machine with CNC control board and printer			
Two pivoting main clamps	OD 1200		
Reduction inserts	OD 630 - 1000 mm		
Electric mill cutter with reducing gear and safety micro switch			
PTFE-coated heating mirror			
CNC-controlled			
Total weight		6500	



PL 1201 CNC Accessories

Description	Sizes (mm)	Weight (kg)
Stub end holder	OD 630 - 1200	340
Main clamp for Tees 90° (consisting of 3 pieces)	OD 1000	1260
Reducing inserts for Tees device 90° (6 half rings each size)	OD 630, 710, 800, 900	1380
1 additional main clamp for Crosses 90°	OD 1000	420
Reduction inserts for Crosses device 90° (2 half rings each size)	OD 630, 710, 800, 900	460
Main clamp for Y-Shapes 45° and 60°	OD 900	1030
Reduction inserts for Y-Shapes device 45° - 60° (4 half rings each size)	OD 630, 710, 800	680
Packing		
Total weight		5570



PL 1601 CNC 400 V 3Ph. 50 Hz (standard) - 58,3 kW - 85 A
SDR pressure rates 41 - 6. Cylinder's total section 41,7 cm²

Fittings

Segmented bends
T-Pieces 90° and Crosses
Y-Shapes 45° and 60°

Welding ranges

OD 900 - 1600 mm
OD 900 - 1200 mm
OD 900 - 1200 mm

Basic machine consisting of

Basic machine with CNC control board and printer
Two pivoting main clamps
Reduction inserts
Electric mill cutter with reducing gear and safety micro switch
PTFE-coated heating mirror
CNC-controlled

Sizes (mm)

OD 1600
OD 900 - 1400 mm

Weight (kg)

8000



PL 1601 CNC Accessories

Description

Stub end holder
Main clamp for Tees 90° (consisting of 3 pieces)
Reducing inserts for Tees device 90° (6 half rings each size)
1 additional main clamp for Crosses 90°
Reduction inserts for Crosses device 90° (2 half rings each size)
Main clamp for Y-Shapes 45° and 60°
Reduction inserts for Y-Shapes device 45° - 60° (4 half rings each size)
Packing

Sizes (mm)

OD 900 - 1600
OD 1200
OD 900, 1000
OD 1200
OD 900, 1000
OD 1200
OD 900, 1000

Weight (kg)

530
1905
795
635
265
1570
772

Total weight

6472



PL 2001 CNC 400 V 3Ph. 50 Hz (standard)

Fittings

Segmented bends
T-Pieces 90° and Crosses

Welding ranges

OD 1200 - 2000 mm
OD 1200 - 1600 mm

Basic machine consisting of

Basic machine with CNC control board and printer
Two pivoting main clamps
Reduction inserts
Electric mill cutter with reducing gear and safety micro switch
PTFE-coated heating mirror
CNC-controlled

Sizes (mm)

OD 2000
OD 1200 - 1800 mm

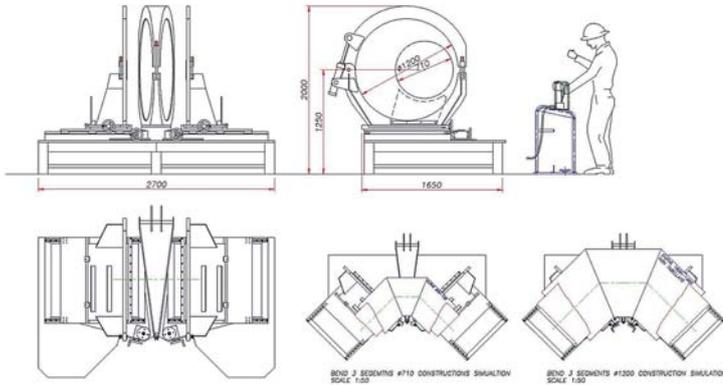
Weight (kg)

on request

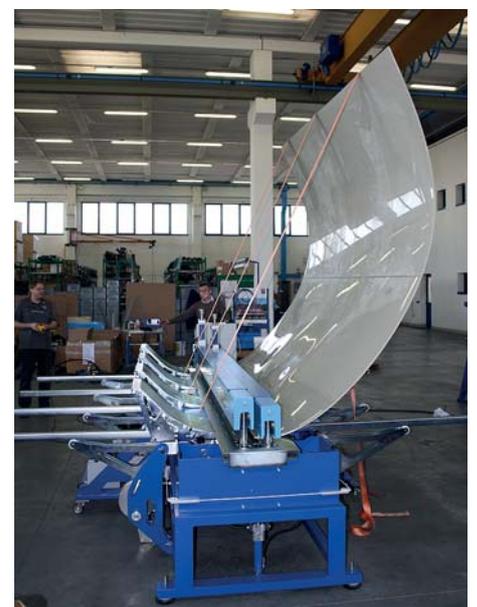


SSM Saddle Welders
for fabrication of reduced T-pieces by the well established heating
element system with convex and concave elements.

PL DH Series
taylor made machines with 3 clamps, especially made for jacket pipes



BSM Band[saws



SL and SLV[sheet welders

Butt welding workshop machines



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