

PRODUCTS CATALOGUE

"AT EASE IN YOUR CONSTRUCTION SITE"





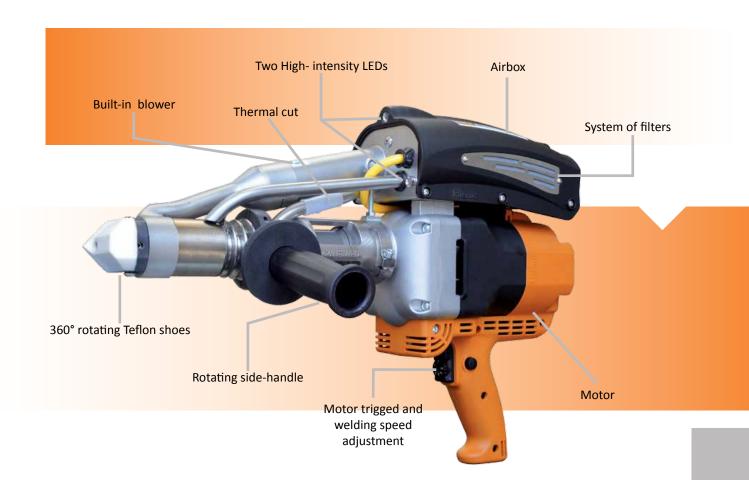
PLASTIC FABRICATION



OUTPUT: Kg / h lb / h	2 Kg / h 4.4 lb / h	3 Kg / h 6.6 lb / h	4 Kg / h 8.8 lb / h	5 Kg / h 11.2 lb / h
K-SB 20	•			
K-SB 30	•	•		
K-SB 40	•	•	•	
R-SB 50	•	•	•	•

CUSTOMIZED PLASTIC FABRICATION USING THE STARGUN

STARGUN is the line of handy and easy to use extruder welders. All models distinguish for being light, compact and very smooth during the welding phase. The entire line is supported by a series of interchangeable Teflon® shoes which allow the STARGUN to adapt to every kind of welding situation: from plane sheets to oblique angles. Thanks to their versatility they are able to weld different types of fabrications like: containing tanks, fume treatment towers, scrubbers, chemical hoods, aspiration systems, and for joining linings and geo-textiles. In the chart below find the main characteristics that make of the STARGUN a unique instrument.





Universal feeding system



K-SB 20

K-SB 30





K-SB 20 is a compact and ergonomic extruder equipped with a power control device and the safety system "motor block" that doesn't allow the machine to start before it reaches the right temperature. The extruder has an innovative universal feeding system that makes possible to use the machine with different diameters of wire.

- Rod Ø 3 4 mm; 1/8" 5/32"
- Backlight display
- Two high-brightness LEDs for welding area
- Power regulator; security system "motor block"
- Independent blower
- Thermoregulator double electronic T ° control: for blower and extrusion
- Orientable handle
- 360° orientable and replaceable welding shoes

Standard equipment:

Flat welding shoe, 90° "K14" with supports; rod feeding system up to Ø 4 mm, suitcase and extruder support.

Materials	HDPE, PP, PVDF
Rod	Ø 3 - 4 mm; 1/8" - 5/32"
Sheets	1,5 ÷ 20 mm; 1/16" ÷ 0.8"
*Output up to	2 Kg/h HDPE rod Ø 4 mm; 5/32"
Dimension	450 x 310 x 100 mm; 17.7" x 12.2" x 3.9"
Power supply	230 Vac 50/60 Hz
Total absorbed power	3100 W
Weight	6.9 Kg (15.2 lb)

K-SB 30 is a compact and ergonomic extruder equipped with a power control device and the safety system "motor block" that doesn't allow the machine to start before it reaches the right temperature. The extruder has an innovative universal feeding system that makes possible to use the machine with different diameters of wire.

- Rod Ø 3 4 5 mm; 1/8" 5/32" 3/16"
- Backlight display
- Two high-brightness LEDs for welding area
- Power regulator; security system "motor block"
- Independent blower
- Thermoregulator double electronic T° control: for blower and extrusion
- Orientable handle
- 360° orientable and replaceable welding shoes

Standard equipment:

Flat welding shoe; 90° "K14" with supports; rod feeding system up to \emptyset 5 mm, suitcase and extruder support.

Materials	HDPE, PP, PVDF
Rod	Ø 3 - 4 - 5 mm; 1/8" - 5/32" - 3/16"
Sheets	1,5 ÷ 30 mm; 1/16" ÷ 1.1"
*Output up to	3 Kg/h HDPE rod Ø 5; 3/16"
Dimension	500 x 310 x 100 mm 19.6" x 12.2" x 3.9"
Power supply	230 Vac 50/60 Hz
Total absorbed power	3350 W
Weight	7,1 Kg (15,6 lb)











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K-SB 40





K-SB 40 is a compact and ergonomic extruder equipped with a power control device and the safety system "motor block" that doesn't allow the machine to start before it reaches the right temperature. The extruder has an innovative universal feeding system that makes possible to use the machine with different diameters of wire.

- Rod Ø 4 5 mm; 5/32" 3/16"
- Backlight display
- Two high-brightness LEDs for welding area
- Power regulator; security system "motor block"
- Independent blower
- Thermoregulator double electronic T° control: for blower and extrusion
- Orientable handle
- 360° orientable and replaceable welding shoes

Standard equipment: Flat welding shoe 90° "K14" with supports; rod feeding system up to Ø 5 mm, suitcase and extruder support.

Materials	HDPE, PP
Rod	Ø 4 - 5 mm; 5/32" - 3/16"
Sheets	1,5 ÷ 30 mm; 1/16" ÷ 1.1"
Output: up to	4 Kg/h HDPE rod Ø 5; 3/16"
Dimension	640 x 200 x 100 mm 25.2" x 7.9" x 3.9"
Power supply	230 Vac 50/60 Hz
Total absorbed power	3500 W
Weight	7,6 Kg (16.7 lb)













R-SB 50



R - SB 50 is a powerful extruder indispensable for jobs that require a high output of extruded material. R-SB 50 is suitable for joining linings and geo-textiles, sheets, thick pipes and for all those welds that are required to resist to continuous stress. During the welding phase the extruder is very smooth and handy.

Like the other models, R - SB 50 is equipped with the safety system that allows the operator to work only after the right temperature has been reached; display for temperature setting and spot light LEDs to illuminate the welding area. It is capable of up to 5 Kg/h of extruded material.

- Backlight display
- Welding area spot light LEDs
- Temperature control safety system cold start control
- Built in blower
- Double T° controller for blower and extrusion chamber
- Rotating side handle
- Replaceable 360° rotating teflon shoe
- Turnable side-handle
- Replaceable 360° rotating teflon shoe

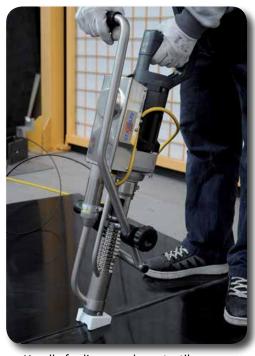
Standard equipment:

Aluminium case, extruder support, rod guide Ø 4 - 5 mm, handle for line/geo-textiles.

Teflon shoe support with: 90° "K 14", flat, geo-textiles.



Pistol grip



Handle for liners and geo-textiles

Materials	HDPE, PP
Rod	Ø 4 - 5 mm; 5/32" - 3/16"
Sheets	1,5 ÷ 40 mm; 1/16" ÷ 1.5"
Output: up to	5 Kg/h HDPE rod Ø 5; 3/16"
Dimension with pistol grip	600 x 330 x 100 mm 23.6" x 13" x 3.9"
Power supply	230 Vac 50/60 Hz
Total absorbed power	4000 W
Weight	9 Kg (19.8 lb)















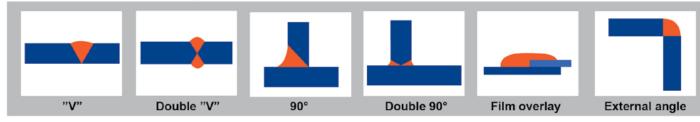
PRODUCTS OVERVIEW

	K - SB 20	K - SB 30	K - SB 40	R - SB 50
MATERIALS	HDPE, PP, PVDF	HDPE, PP, PVDF	HDPE, PP	HDPE, PP
ОИТРИТ	2 Kg/h HDPE rod Ø 4 mm; 5/32"	3 Kg/h HDPE rod Ø 5; 3/16"	4 Kg/h HDPE rod Ø 5; 3/16"	5 Kg/h HDPE rod Ø 5; 3/16"
ROD	3 - 4 mm 1/8" - 5/32"	3 - 4 - 5 mm; 1/8" - 5/32" - 3/16"	4 - 5 mm; 5/32" - 3/16"	4 - 5 mm; 5/32" - 3/16"
WEIGHT	6.9 Kg (15.2 lb)	7,1 Kg (15.6 lb)	7,6 Kg (16.7 lb)	9 Kg (19.8 lb)
DIMENSIONS	450 x 310 x 100 mm; 17.7" x 12.2" x 3.9"	500 x 310 x 100 mm 19.6" x 12.2" x 3.9"	640 x 200 x 100 mm 25.2" x 7.9" x 3.9"	Back handle 700 x 170 x 100 mm 27.5" x 6.7" x 3.9" Pistol grip 600 x 330 x 100 mm 23.6" x 13" x 3.9"
Max absorbed power	3100 W 230 V 50/60 Hz	3350 W 230 V 50/60 Hz	3500 W 230 V 50/60 Hz	4000 W 230 V 50/60 Hz
GEO-TEXTILE		•	•	•
CONTAINER CONSTRUCTION				
BUILDING OF TANKS AND FILTERS	•	•	•	•
BUILDING OF FUMES TREATMENT TOWERS	•	•	•	•





Possibilities of welding seams







RELATED SERVICES

RITMO offers turnkey solutions to its customers: welding rods and rod dispensers are available

Welding rods: HDPE Ø 4 - 5 mm; 5/32" - 3/16" PP Ø 3 - 4 mm; 1/8" - 5/32"





Welding rod dispenser (on request)

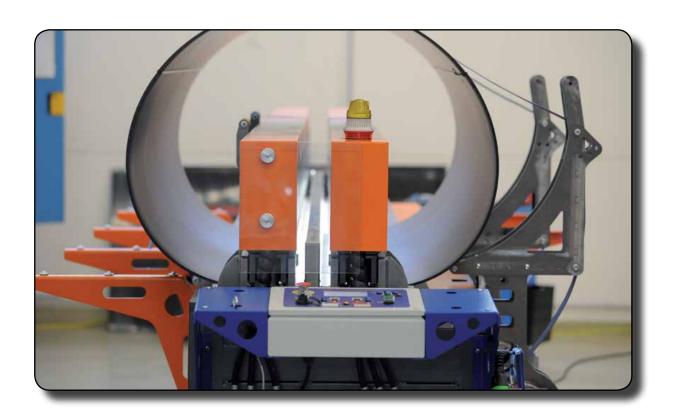








PLASTIC FABRICATION SHEET WELDING



MAIN APPLICATIONS

- Mining technology
- Building industry
- Mechanical engineering
- Livestock breeding
- Aquaculture and swimming pools
- Chemical engineering and tank building
- Surface treatment metals
- Buffer tanks
- Beverage and food industry
- Pump manufacturing
- Ventilation system and ventilator manufacture
- Environment and waste water tanks
- Nautical sector



POLYFUSION 1-25

POLYFUSION 1-25 is compact and easy to use manual welders for HDPE and PP sheets from one meters wide and 2 mm to 25 mm thickness ($1/8" \div 1"$). The welding cycle is handled by a control panel which commands the hydraulic gearcase. The control panel can be adjusted horizontally to assist the operator. The machine can operate in compliance with the D.V.S. 2207.

The sheets are fixed to the machine body by manual handwheels; the locking arm has an articulated joint that allows its opening and the easy extraction of the welded sheets. The working surface of the machine body has a graduated scale on both sides, which speeds the positioning and centering of the pieces to be welded.

The manual heating plate, located under the machine body, has a height adjustment handwheel. The temperature is controlled by a built-in high-precision electronic thermoregulator, "Digital Dragon".

The welding machine has a small modulated sustaining frame to perform 90 ° weldings.

The machine can also weld twin-wall HDPE sheets.

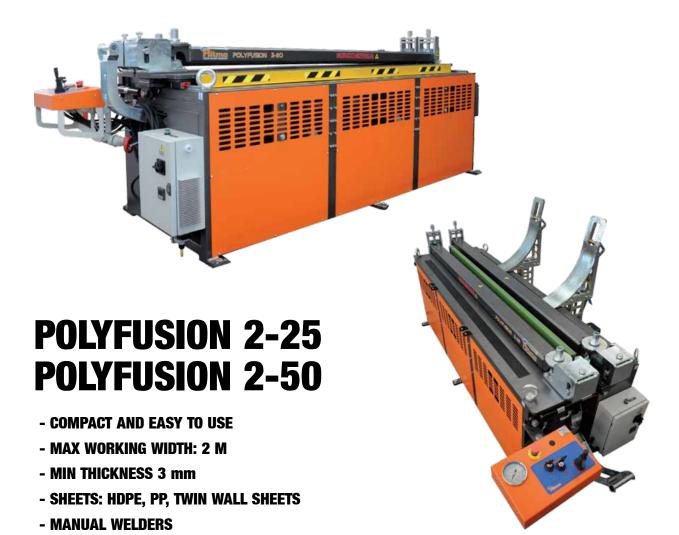
There's a practical shelf at the base of the steel frame, which can be used to place some tools. POLYFUSION 1-25 is available in 230 V (110 V on request).



TECHNICAL FEATURES

Model	Polyfusion 1-25
Working range	2 ÷ 25 mm 1/8" ÷ 1"
Materials	HDPE, PP
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Total absorbed power	1580 W (230 V)
Types of welding	line, 90°, circular
Max. working width	1000 mm; 3.28 ft
Min. weldable thickness	2 mm - 1/8"
Max. weldable thickness	25,4 mm - 1"
Pressure range	0 ÷ 150 bar
Weight standard composition	118 Kg (260 lb)
Dimensions machine body	1420 x 900 x 1190 mm 56" x 35.4" x 46.8"





- TYPE OF WELDING: STRAIGHT BUTT FUSION, 90°, CIRCULAR

POLYFUSION 2-25 and POLYFUSION 2-50 are compact and easy to use manual welders for HDPE and PP sheets from two meters wide and $3\div25$ mm or $1/8"\div1"$ thickness (mod. POLYFUSION 2-25); and $3\div50$ mm or $1/8"\div2"$ thickness (mod. POLYFUSION 2-50). The machines can also weld twin-wall sheets. The machine can operate in compliance with the D.V.S. 2207.

The welding cycle is handled by a control panel which commands the hydraulic gearcase.

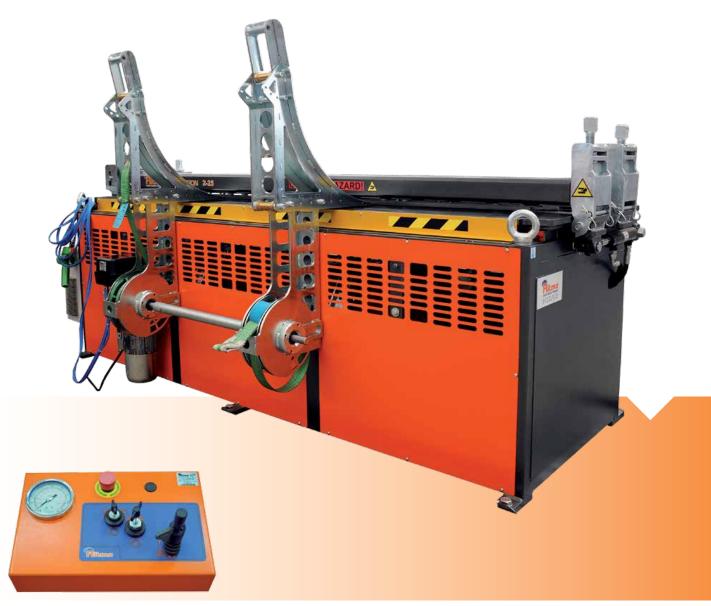
The control panel can be adjusted horizontally to assist the operator during the set-up and welding phases, to work always in the clearance.

The sheets are fixed to the machine body by manual handwheel bars; the locking arm has an articulated pivot joint that allows its opening and the easy extraction of the welded sheets.

The working surface of the machine body has a graduated scale on both sides, which speeds the positioning and centering of the pieces to be welded.

The manual lever lifting heating plate, located under the machine body, has a height adjustment handwheel to allow the 90° welding.

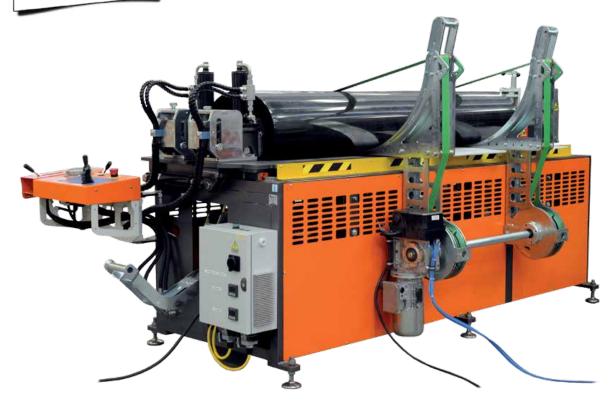
The heater temperature is controlled by a built-in high-precision electronic thermoregulator.



Manual Control Panel

Model	POLYFUSION 2-25	POLYFUSION 2-50
Working range	3 ÷ 25 mm; 1/8" ÷ 1"	3 ÷ 50 mm; 1/8" ÷ 2"
Materials	HDPE, PP, Twin Wall sheets	HDPE, PP, Twin Wall sheets
Power supply	400 V T. Phase 50/60 Hz	400 V T. Phase 50/60 Hz
Total absorbed power	5900 W	8300 W
Types of welding	Line, 90° and Circular (on request) Ø min 500 mm with 12 mm thickness Ø min 20" with 1/2" thickness	Line, 90° and Circular (on request) Ø min 500 mm with 12 mm thickness Ø min 20" with 1/2" thickness
Max. working width	2000 mm - 6.56 ft	2000 mm - 6.56 ft
Min. weldable thickness	3 mm - 1/8"	3 mm - 1/8"
Max. weldable thickness	25 mm - 1"	50 mm - 2"
Pressure range	0 ÷ 170 bar	0 ÷ 170 bar
Weight standard composition	1100 Kg (2425 lb)	1150 Kg (2535 lb)
Dimensions (W x D x H)	3200 x 2000 x 1200 mm 126" x 78.7" x 47.2"	3200 x 2000 x 1200 mm 126" x 78.7" x 47.2"





POLYFUSION 2-100

- HYDRAULIC ARM
- MAX WORKING WIDTH: 2 M
- THICKNESS 3 ÷ 100 mm (1/8" ÷ 4")
- SHEETS: HDPE, PP, TWIN WALL SHEETS
- MANUAL WELDERS
- TYPE OF WELDING: STRAIGHT BUTT FUSION, 90°, CIRCULAR



Manual control panel

POLYFUSION 2-100 is compact and easy to use manual welders for HDPE and PP sheets from two meters wide and 3 mm to 100 mm thickness. The welding cycle is handled by a control panel which commands the hydraulic gearcase. The control panel can be adjusted horizontally to assist the operator. The machine can operate in compliance with the D.V.S. 2207

The sheets are fixed to the machine body by hydraulic arm. The locking arm has an articulated joint that allows its opening and the easy extraction of the welded sheets. The working surface of the machine body has a graduated scale on both sides, which speeds the positioning and centering of the pieces to be welded.

The manual heating plate, located under the machine body, has a height adjustment handwheel. The temperature is controlled by a built-in high-precision electronic thermoregulator.

The machine can also weld twin-wall sheets.



Materials	HDPE, PP, Twin Wall sheets
Working range	3 ÷ 100 mm; 1/8" ÷ 4"
Power supply	400 V Three Phase 50/60 Hz
Total absorbed power	10300 W
Types of welding	Line, 90° and Circular (on request) Ø min 500 mm with 12 mm thickness Ø min 20" with 1/2" thickness
Max. working width	2000 mm - 6.56 ft
Min. weldable thickness	3 mm - 1/8"
Max. weldable thickness	100 mm - 4"
Pressure range	0 ÷ 170 bar
Weight standard composition	1200 Kg (2645 lb)
Dimensions machine body	3440 x 2000 x 1450 mm 135.4" x 78.7" x 57"

Ø 500 mm

2000 mm







POLYFUSION 3-30

POLYFUSION 3-30 is CNC automatic butt fusion machines, suitable for welding thermoplastic sheets made of HDPE, PP, PVC*. The butt fusion machine is also able to weld twin-wall HDPE and PP sheets. The machine can operate in compliance with the D.V.S. 2207.

POLYFUSION 3-30 is an hydraulic welding machine equipped with a control panel, which allows easily and safely setting and performance of the whole welding process. According to the user's needs, it is also possible to input the type of material and the dimension of the thermoplastic sheet, and therefore proceed to weld. The welding area and the clamping bars are compacts; this allow to build a small circular joint (Ø min 400 mm with 5 mm thickness; Ø min 16" with 1/5" thickness).

The CNC can store up to 4000 cycles. It is possible to download the PDF file via USB slot; possibility to pre-set 15 customized welding cycles. The machine has foldable side supports.

POLYFUSION 3-30 performs different types of weld horizontal, circular and 90° joints.

Types of welding







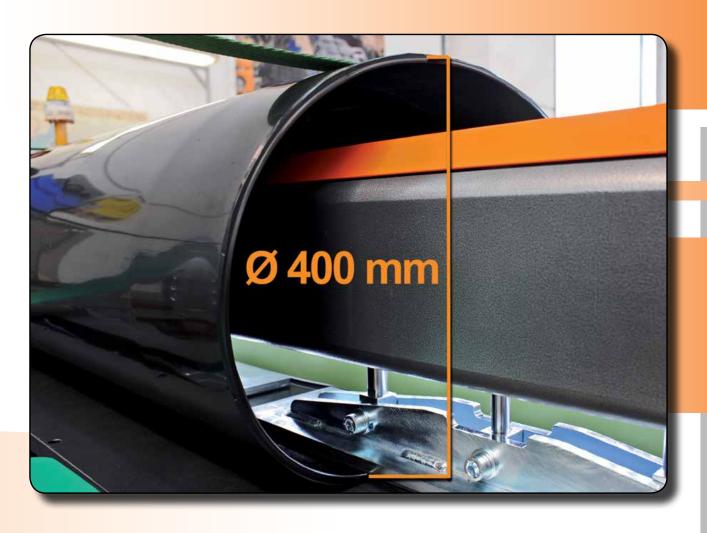




B.A.A. artala	PP, PVC*, HDPE,	
Materials	Twin Wall sheets	
Power supply	400 V Three Phase 50/60 Hz	
Total absorbed power	12500 W	
Types of welding	Line, 90° and Circular (on request) Ø min 400 mm with 5 mm thickness Ø min 16" with 1/5" thickness	
Max. working width **	3000 mm - 9.84 ft	
Min. weldable thickness	3 mm - 1/8"	
Max. weldable thickness **	30 mm - 1.2"	
Compress air supply	10 bar	
Memory	4000 cycles	
Report	PDF	
Pre-set customized	15	
Dimensions machine body	4200 x 1540 x 840 mm 165.3" x 60.6" x 33" (folded brackets)	
	4200 x 1540 x 1960 mm 165.3" x 60.6" x 77.2" (unfolded brackets)	

^{*} Contact RITMO

^{**} The welding dimensions refer to PP / HDPE with welding pressure of 0.17 N / mm2









POLYFUSION 3-50

POLYFUSION 3-50 is CNC automatic butt fusion machines, suitable for welding thermoplastic sheets made of HDPE, PP, PVC*. The butt fusion machine is also able to weld twin-wall HDPE and PP sheets. The machine can operate in compliance with the D.V.S. 2207.

POLYFUSION is an hydraulic welding machine equipped with a control panel, which allows easily and safely setting and performance of the whole welding process.

According to the user's needs, it is also possible to input the type of material and the dimension of the thermoplastic sheet, and therefore proceed to weld. The CNC can store up to 4000 cycles. It is possible to download the PDF file via USB slot; possibility to pre-set 15 customized welding cycles. The machine has foldable side supports.

The machine can be operated both horizontally and vertically, which allow to perform different types of weld (horizontal, circular and vertical joints).



Types of welding





Materials	PP, PVC*, HDPE, Twin Wall sheets
Power supply	400 V Three Phase 50/60 Hz
Total absorbed power	12500 W
Types of welding	line, 90° and Circular (on request) Ø min 800 mm with 12 mm thickness Ø min 31.5" with 1/2" thickness
Max. working width **	3000 mm - 9.84 ft
Min. weldable thickness	3 mm - 1/8"
Max. weldable thickness **	50 mm - 2"
Compress air supply	10 bar
Dimensions machine body	4200 x 1540 x 840 mm 165.3" x 60.6" x 33" (folded brackets) 4200 x 1540 x 1960 mm 165.3" x 60.6" x 77.2" (unfolded brackets)

- * Contact RITMO

 ** The welding dimensions refer to PP / HDPE with welding pressure of 0.17 N / mm2











POLYFUSION 4-30

POLYFUSION 4-30 is CNC automatic butt fusion machines, suitable for welding thermoplastic sheets made of HDPE, PP, PVC*. The butt fusion machine is also able to weld twin-wall HDPE and PP sheets. The machine can operate in compliance with the D.V.S. 2207.

POLYFUSION 4-30 is an hydraulic welding machine equipped with a control panel, which allows easily and safely setting and performance of the whole welding process. According to the user's needs, it is also possible to input the type of material and the dimension of the thermoplastic sheet, and therefore proceed to weld. The welding area and the clamping bars are compacts; this allow to build a small circular joint (\emptyset min 400 mm with 5 mm thickness; \emptyset min 16" with 1/5" thickness).

The CNC can store up to 4000 cycles. It is possible to download the PDF file via USB slot; possibility to pre-set 15 customized welding cycles. The machine has foldable side supports.

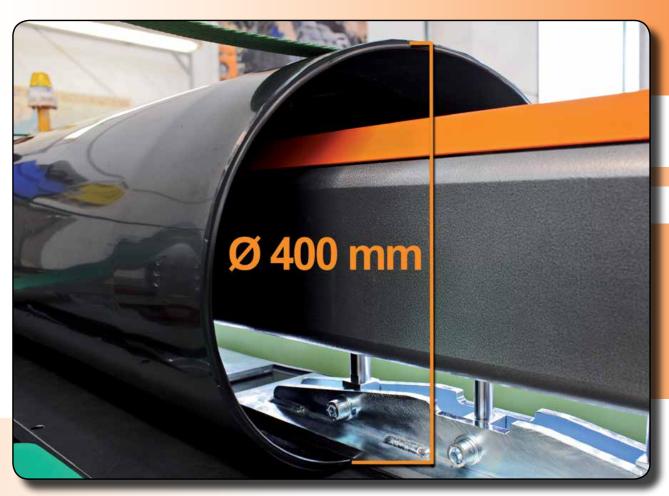
POLYFUSION 4-30 performs different types of weld horizontal, circular and 90° joints.







	PP, PVC*, HDPE,	
Materials	Twin Wall sheets	
Power supply	400 V Three Phase 50/60 Hz	
Total absorbed power	14500 W	
Types of welding	Line, 90° and Circular (on request) Ø min 400 mm with 5 mm thickness Ø min 16" with 1/5" thickness	
Max. working width **	4000 mm - 13.12 ft	
Min. weldable thickness	3 mm - 1/8"	
Max. weldable thickness **	30 mm - 1.2"	
Compress air supply	10 bar	
Memory	4000 cycles	
Report	PDF	
Pre-set customized	15	
Dimensions machine body	5200 x 1260 x 840 mm 204,7" x 49.6" x 33" (folded brackets)	
	5200 x 1260 x 1960 mm 204,7" x 49.6" x 77.2" (unfolded brackets)	



^{*} Contact RITMO

** The welding dimensions refer to PP/HDPE with welding pressure of 0.17 N/mm2





POLYFUSION 4-50

POLYFUSION 4-50 is CNC automatic butt fusion machines, suitable for welding thermoplastic sheets made of HDPE, PP, PVC*. The butt fusion machine is also able to weld twin-wall HDPE and PP sheets. The machine can operate in compliance with the D.V.S. 2207.

POLYFUSION is an hydraulic welding machine equipped with a control panel, which allows easily and safely setting and performance of the whole welding process.

According to the user's needs, it is also possible to input the type of material and the dimension of the thermoplastic sheet, and therefore proceed to weld. The CNC can store up to 4000 cycles. It is possible to download the PDF file via USB slot; possibility to pre-set 15 customized welding cycles. The machine has foldable side supports.

The machine can be operated both horizontally and vertically, which allow to perform different types of weld (horizontal, circular and vertical joints).

Types of welding











Materials	PP, PVC*, HDPE, Twin Wall sheets				
Power supply	400 V Three Phase 50/60 Hz				
Total absorbed power	14500 W				
Types of welding	line, 90° and Circular (on request) Ø min 800 mm with 12 mm thickness Ø min 31.5" with 1/2" thickness				
Max. working width **	4000 mm - 13.12 ft				
Min. weldable thickness	3 mm - 1/8"				
Max. weldable thickness **	50 mm - 2"				
Compress air supply	10 bar				
Dimensions machine body	5200 x 1540 x 840 mm (folded brackets) 204,7" x 60.6" x 33" 5200 x 1540 x 1960 mm 204,7" x 60.6" x 77.2" (unfolded brackets)				



watch the video

- * Contact RITMO
- ** The welding dimensions refer to PP / HDPE with welding pressure of 0.17 N / mm2





PRODUCTS OVERVIEW

	POLYFUSION 1-25	POLYFUSION 2 - 25	POLYFUSION 2-50	POLYFUSION 2-100	POLYFUSION 3-30	POLYFUSION 3-50	POLYFUSION 4-30	POLYFUSION 4 - 50
Min. weldable thickness	2 mm - 1/8"	3 mm - 1/8"	3 mm - 1/8"	3 mm - 1/8"	3 mm - 1/8"	3 mm - 1/8"	3 mm - 1/8"	3 mm - 1/8"
Max. weldable thickness	25 mm - 1"	25 mm - 1"	50 mm - 2"	100 mm - 4"	50 mm - 2"	50 mm - 2"	30 mm - 1.18"	50 mm - 2"
Max working width	1 m - 3.28 ft	2 m - 6.56 ft	2 m - 6.56 ft	2 m - 6.56 ft	3 m - 9.84 ft	3 m - 9.84 ft	4 m - 13.12 ft	4 m - 13.12 ft
Welding line	٧	٧	٧	٧	٧	٧	٧	٧
Welding 90°	٧	٧	٧	٧	٧	٧	٧	٧
Welding circular	٧	٧	٧	٧	٧	٧	٧	٧
Min. welding circular Ø	-	Ø 500 mm with 12 mm thickness; Ø 20" with 1/2" thickness	Ø 500 mm with 12 mm thickness; Ø 20" with 1/2" thickness	Ø 500 mm with 12 mm thickness; Ø 20" with 1/2" thickness	Ø 400 mm with 5 mm thickness; Ø 16" with 1/5" thickness	Ø 800 mm with 12 mm thickness; Ø 31.5" with 1/2" thickness	Ø 400 mm with 5 mm thickness; Ø 16" with 1/5" thickness	Ø 800 mm with 12 mm thickness; Ø 31.5" with 1/2" thickness
Sheet locking clamps	mechanical manual	mechanical manual	mechanical manual	hydraulic	hydraulic	hydraulic	hydraulic	hydraulic
Locking 90° sheets	mechanical	mechanical	mechanical	mechanical	pneumatic	pneumatic	pneumatic	pneumatic
Locking circular sheets	manual	kit	kit	kit	kit	kit	kit	kit
Adjusted ontrol panel	٧	٧	٧	٧	-	-	-	-
Heating plate lift	mechanical manual	mechanical manual	mechanical manual	mechanical manual	automatic	automatic	automatic	automatic
Welding system	manual hydraulic	manual hydraulic	manual hydraulic	manual hydraulic	CNC	CNC	CNC	CNC
PRE-SET 15 customized welding cycles	-	-	-	-	٧	٧	٧	٧
PDF file	-	-	-	-	٧	٧	٧	٧
Memory	-	-	-	-	4000 reports	4000 reports	4000 reports	4000 reports
Display	-	-	-	-	LCD	LCD	LCD	LCD





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Watch the Corporate Video