Ritmo
PLASTIC WELDING TECHNOLOGY

PRODUCTS CATALOGUE

"AT EASE IN YOUR CONSTRUCTION SITE"

www.ritmo.it



Ritmo
PLASTIC WELDING TECHNOLOGY

Ritmo meets all your welding needs in your jobsite



The information and photos in this publication are not binding and RITMO S.P.A. is free to make any alterations without prior notice.

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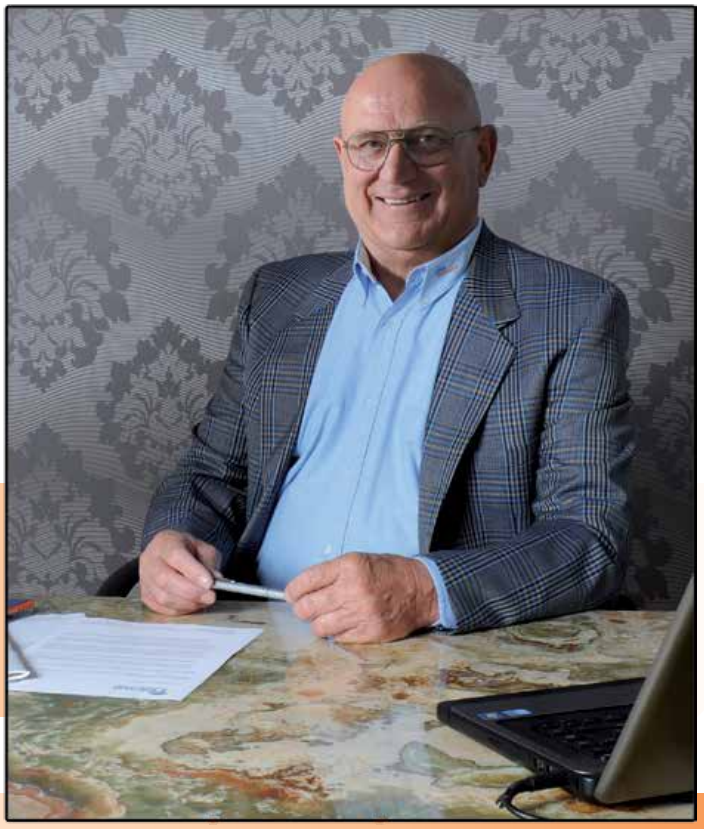


Since 1979 RITMO S.P.A. is a world leader in manufacturing of plastic welding equipment. All products are designed and built according to International standards and directives (UNI, ISO, CEE). Since the very beginning, quality and technology innovation are RITMO's milestones, and time after time, this philosophy is always more recognized by the global market. RITMO strong points are its ideas to design and produce accurate, fast, versatile, modular and easy-to-use welding machines. Products range includes butt fusion, electrofusion and extrusion equipment. Ritmo is also providing a complete line of accessories and useful instruments for pipe cutting and weld preparation such as the band saws. RITMO's regards towards the client has brought to the new-born "RITMO FUSION OPERATOR SCHOOL", which is a welding school with the goal of building qualified personnel and spread the knowledge about the technical potentiality of RITMO's equipment: TECHNOLOGY MADE IN ITALY.





Rossella Contiero - Managing Director



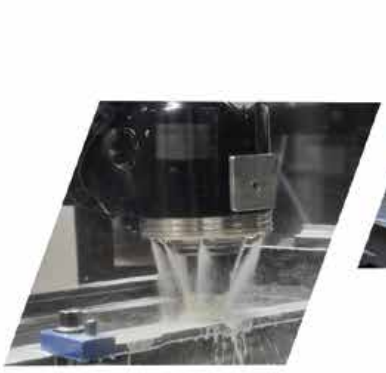
Renzo Bortoli - President



1979 year of RITMO's foundation
1979 launched Delta line
1983 launched Alfa line
1986 moved into the new headquarters
1995 reached 50 employees
2002 first Easy Life welding machine
2003 reached 100 employees
2006 launched All Terrain line
2008 launched Elektra line
2009 launched Basic line
2010 launched Omega line
2012 launched Polyfusion line
2015 launched APP "Set & Go"
2017 launched K-SB extruder welders
2020 launched LINK extruder welders
2020 launched New Elektra models
2021 launched Remedy line



- **OVER 100 PRODUCTS ON CATALOG**
- **90% EXPORT**
- **130 COUNTRIES**
  where RITMO has been supplying products











MADE IN ITALY PRODUCTION

HUMAN RESOURCES CARE

BUSINESS SUSTAINABILITY



ADVANTAGE RITMO



RITMO WORLDWIDE

Ritmo has professional distributors and resellers all over the world. Our staff is ready to assist you in English, Spanish, French, German, Arab, Italian, Russian and Portuguese.

TRAINING

From many years now, we have decided that the best way to grant a client/ distributor a perfect knowledge of our products Is to invest in custom training, in our own premises. These courses are aimed to teach how to operate the products in the best way, and how to supply the “first aid” when necessary.

PRESALES TECHNICAL ASSISTANCE

When a client or a potential client wants to buy us a product, it is our standard procedure to help find the best solution to its needs.

GLOBAL ADVICE

In such a technical field as ours, the customer requires the best assistance. Thanks to the experience developed along the years, and to the co-operation with several manufacturers, institutions, schools and training institutes, RITMO is able to give the most comprehensive advice to no matter which related issue. Our company is a long-time member of a UNIPLAST’s (UNI-Italian National Plastics Standards Body) working group dedicated to the study and draw up of new standards within our field. The importance of this group is linked to the fact that the expansion of the plastic welding field ought to be followed by a crescent sensitivity for safety issues, so to have a sustainable and continuous growth. The working group prepares draws, hence present them to the UNI to be discussed and eventually transformed into new standards.

AFTER SALES TECHNICAL ASSISTANCE

Ritmo’s Service Centre can solve all kind of technical issues, as well as overhaul our machines. Ritmo has other Service Centres abroad, linked to its official distributors.

STARTING AND TESTING

RITMO’ technicians are prepared to make the starting and testing of workshop machines at the client’ own premises, so that the fittings production can start almost immediately.

Ritmo
FUSION OPERATOR SCHOOL

IMPROVE YOUR KNOWLEDGE ON RITMO'S EQUIPMENT

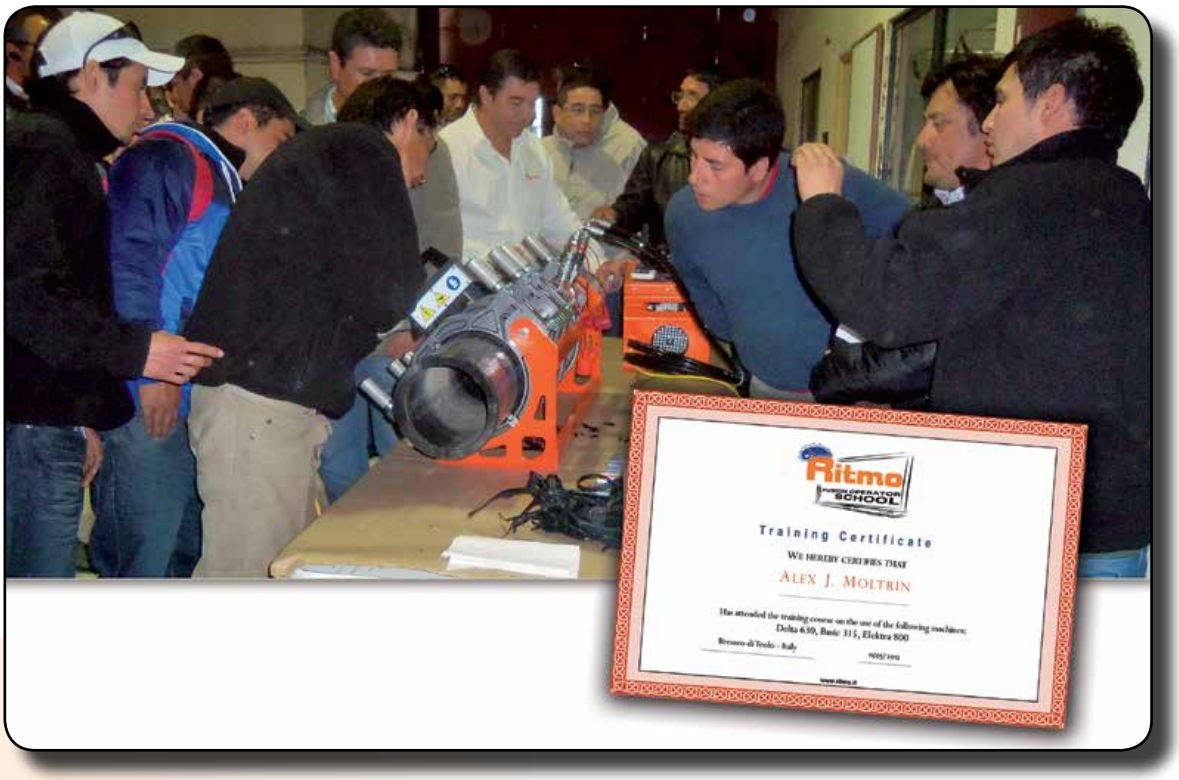
The aim of the course is to prepare specialized operators on the use of Ritmo Products.

Some of the subjects discussed such as the correct preparation of pipes, welding parameters and welding techniques, allow to learn essential information; not only for those who are new in the field but also for experts. The course includes theory and practice.

At the end of the course, participants will receive a Training Certificate.



for more details: info@ritmo.it





Ritmo
PLASTIC WELDING TECHNOLOGY









RITMO'S BUTT FUSION MACHINES: WORK PHILOSOPHY AVAILABLE TO EVERYONE!

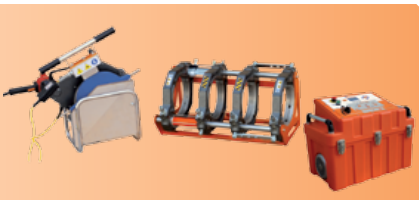
- MANUAL
welding machines without hydraulic gearcase



- HYDRAULIC
welding machines with hydraulic gearcase



- EASY LIFE SYSTEM *HIGH LEVEL PERFORMANCE*
automated welding cycle
welding machines with special hydraulic gearcase
Hardware and Software interact to the entire workflow
repetition of welding cycles
GPS, data-logging and report PDF,
APP "SET & GO PRO" (optional)



- ALL TERRAIN/REMEDY *HIGH LEVEL PERFORMANCE*
self-contained generator on board
self-propelled
trolley with wheels
welding machines with special hydraulic gearcase
automated welding cycle
Hardware and Software interact to the entire workflow
repetition of welding cycles
GPS, data-logging and report PDF,



- CNC *HIGH LEVEL PERFORMANCE*
automatic welding cycle
special hydraulic gearcase and machine body with integrated mechanical extraction of heating plate
Hardware and Software interact to the entire workflow
repetition of welding cycles
GPS, data-logging and report PDF



BUTT FUSION MACHINES REFERENCE



WORKING RANGE Ø mm	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	450	500	560	630	710	800	900	1000	1200	1400	1600
GAMMA 160		40	50	63	75	90	110	125	140	160																			
DELTA 160 M	32	40	50	63	75	90	110	125	140	160																			
DELTA 200 M				63	75	90	110	125	140	160	180	200																	
BASIC 160		40	50	63	75	90	110	125	140	160																			
BASIC 200				63	75	90	110	125	140	160	180	200																	
BASIC 250					75	90	110	125	140	160	180	200	225	250															
BASIC 315						90	110	125	140	160	180	200	225	250	280	315													
BASIC 355								125	140	160	180	200	225	250	280	315	355												
COMPACT 355								125	140	160	180	200	225	250	280	315	355												
BASIC 160 EASY LIFE		40	50	63	75	90	110	125	140	160																			
BASIC 200 EASY LIFE				63	75	90	110	125	140	160	180	200																	
BASIC 250 EASY LIFE					75	90	110	125	140	160	180	200	225	250															
BASIC 315 EASY LIFE						90	110	125	140	160	180	200	225	250	280	315													
BASIC 355 EASY LIFE								125	140	160	180	200	225	250	280	315	355												
DELTA 500 EASY LIFE												200	225	250	280	315	355	400	450	500									
DELTA 630 EASY LIFE															280	315	355	400	450	500	560	630							
DELTA 500												200	225	250	280	315	355	400	450	500									
DELTA 630															280	315	355	400	450	500	560	630							
DELTA 800																				500	560	630	710	800					
DELTA 1000																						630	710	800	900	1000			
DELTA 1200																							710	800	900	1000	1200		
DELTA 1600 ECO / 1600 HDR																								800	900	1000	1200	1400	1600
DELTA 250 TRAILER / MANUAL					75	90	110	125	140	160	180	200	225	250															
DELTA 355 TRAILER DELTA 355 ALL TERRAIN								125	140	160	180	200	225	250	280	315	355												
DELTA 500 TRAILER DELTA 500 ALL TERRAIN												200	225	250	280	315	355	400	450	500									
REMEDY 500 FA														250	280	315	355	400	450	500									
DELTA 630 TRAILER DELTA 630 ALL TERRAIN													225	250	280	315	355	400	450	500	560	630							
DELTA 1000 TRAILER																315	355	400	450	500	560	630	710	800	900	1000			
REMEDY 1000 EL																315	355	400	450	500	560	630	710	800	900	1000			
DELTA DRAGON 250 CNC					75	90	110	125	140	160	180	200	225	250															
DELTA DRAGON 315 CNC						90	110	125	140	160	180	200	225	250	280	315													
WORKING RANGE Ø mm	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	450	500	560	630	710	800	900	1000	1200	1400	1600

Ø ON REQUEST

WORKING RANGE Ø CTS	1"	1¼"	1½"	2"																											
WORKING RANGE Ø IPS					1"	1¼"	1½"	2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	34"	36"	42"	48"	52"	54"	63"
GAMMA 160					1"	1¼"	1½"	2"	3"	4"	5"																					
DELTA 160 M	1"	1¼"	1½"	2"	1"	1¼"	1½"	2"	3"	4"	5"																				
DELTA 200 M								2"	3"	4"	5"	6"																			
BASIC 160 / BASIC 160 EASY LIFE					1"	1¼"	1½"	2"	3"	4"	5"																				
BASIC 200 / BASIC 200 EASY LIFE								2"	3"	4"	5"	6"																			
BASIC 250 / BASIC 250 EASY LIFE								2"	3"	4"	5"	6"	8"																		
BASIC 315 / BASIC 315 EASY LIFE									3"	4"	5"	6"	8"	10"																	
BASIC 355 / BASIC 355 EASY LIFE										4"	5"	6"	8"	10"	12"	14"															
COMPACT 355										4"	5"	6"	8"	10"	12"	14"															
DELTA 500 / DELTA 500 EASY LIFE													8"	10"	12"	14"	16"	18"													
DELTA 630 / DELTA 630 EASY LIFE														10"	12"	14"	16"	18"	20"	22"	24"										
DELTA 800																			20"	22"	24"	26"	28"	30"							
DELTA 1000																					24"	26"	28"	30"	32"	34"	36"				
DELTA 48"																							28"	30"	32"	34"	36"	42"	48"		
DELTA 1600 ECO / DELTA 1600 HDR																									32"	34"	36"	42"	48"	52"	54"	63"
DELTA 250 TRAILER / MANUAL								2"	3"	4"	5"	6"	8"																		
DELTA 355 TRAILER DELTA 355 ALL TERRAIN										4"	5"	6"	8"	10"	12"	14"															
DELTA 500 TRAILER DELTA 500 ALL TERRAIN												6"	8"	10"	12"	14"	16"	18"	20"												
DELTA 630 TRAILER DELTA 630 ALL TERRAIN													8"	10"	12"	14"	16"	18"	20"	22"	24"										
DELTA 1000 TRAILER																14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	34"	36"				
REMEDY 1000 EL																14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	34"	36"				
WORKING RANGE Ø IPS					1"	1¼"	1½"	2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	34"	36"	42"	48"	52"	54"	63"

WORKING RANGE Ø DIPS	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	42"	48"	54"	60"
GAMMA 160	3"	4"															
DELTA 160 M	3"	4"															
DELTA 200 M	3"	4"	6"														
BASIC 160 / BASIC 160 EASY LIFE	3"	4"															
BASIC 200 / BASIC 200 EASY LIFE	3"	4"	6"														
BASIC 250 / BASIC 250 EASY LIFE	3"	4"	6"	8"													
BASIC 315 / BASIC 315 EASY LIFE	3"	4"	6"	8"	10"												
BASIC 355 / BASIC 355 EASY LIFE		4"	6"	8"	10"	12"											
COMPACT 355		4"	6"	8"	10"	12"											
DELTA 500 / DELTA 500 EASY LIFE				8"	10"	12"	14"	16"	18"								
DELTA 630 / DELTA 630 EASY LIFE					10"	12"	14"	16"	18"	20"							
DELTA 800									18"	20"	24"						
DELTA 48"												30"	36"	42"			
DELTA 1600 ECO / DELTA 1600 HDR												30"	36"	42"	48"	54"	60"
DELTA 250 TRAILER / MANUAL	3"	4"	6"	8"													
DELTA 355 TRAILER DELTA 355 ALL TERRAIN		4"	6"	8"	10"	12"	14"										
DELTA 500 TRAILER DELTA 500 ALL TERRAIN			6"	8"	10"	12"	14"	16"	18"	20"							
DELTA 630 TRAILER DELTA 630 ALL TERRAIN				8"	10"	12"	14"	16"	18"	20"	24"						
DELTA 1000 TRAILER							14"	16"	18"	20"	24"	30"	36"				
REMEDY 1000 EL							14"	16"	18"	20"	24"	30"	36"				
WORKING RANGE Ø DIPS	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	42"	48"	54"	60"





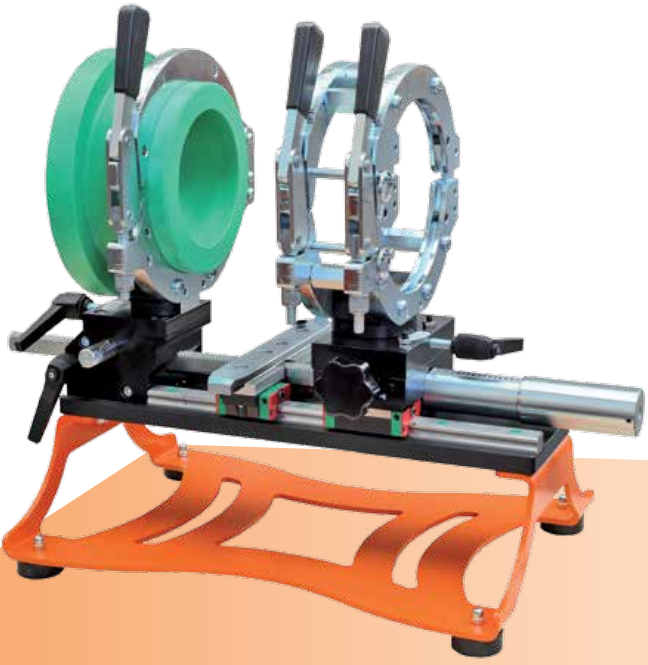
GAMMA 160

GAMMA 160 is a manual butt welding machine for HDPE and PP pipes up to Ø 160 mm (4" DIPS). GAMMA 160 features special jaws for **manufacturing elbows**. Machine can also weld moulded fittings like bends, tees, wyes (Y) and flange necks up to Ø160 mm; short flange necks can be welded with the help of a stub end holder (on request), applied to the clamps. Machine body of GAMMA 160 is compact and easy to transport. Avalaible in the 110 V or 230 V version.

STANDARD COMPOSITION

- A machine body with pressure regulating device of the bench vice closure
- A steel frame for the support of the machine body
- Steel sliding clamps with fast closing system
- An heating plate with an electronic temperature control device
- An electrically controlled milling cutter for levelling the ends of the pipe and/or fitting, with safety micro-switch against accidental starters
- A support for the milling cutter and the heating plate
- Steel adapters Ø 40, 50, 63, 75, 90, 110, 125, 140 mm (1¼" IPS ÷ 4" DIPS)
- A case for the adapters





TECHNICAL FEATURES

PLUS

MANUFACTURING ELBOWS

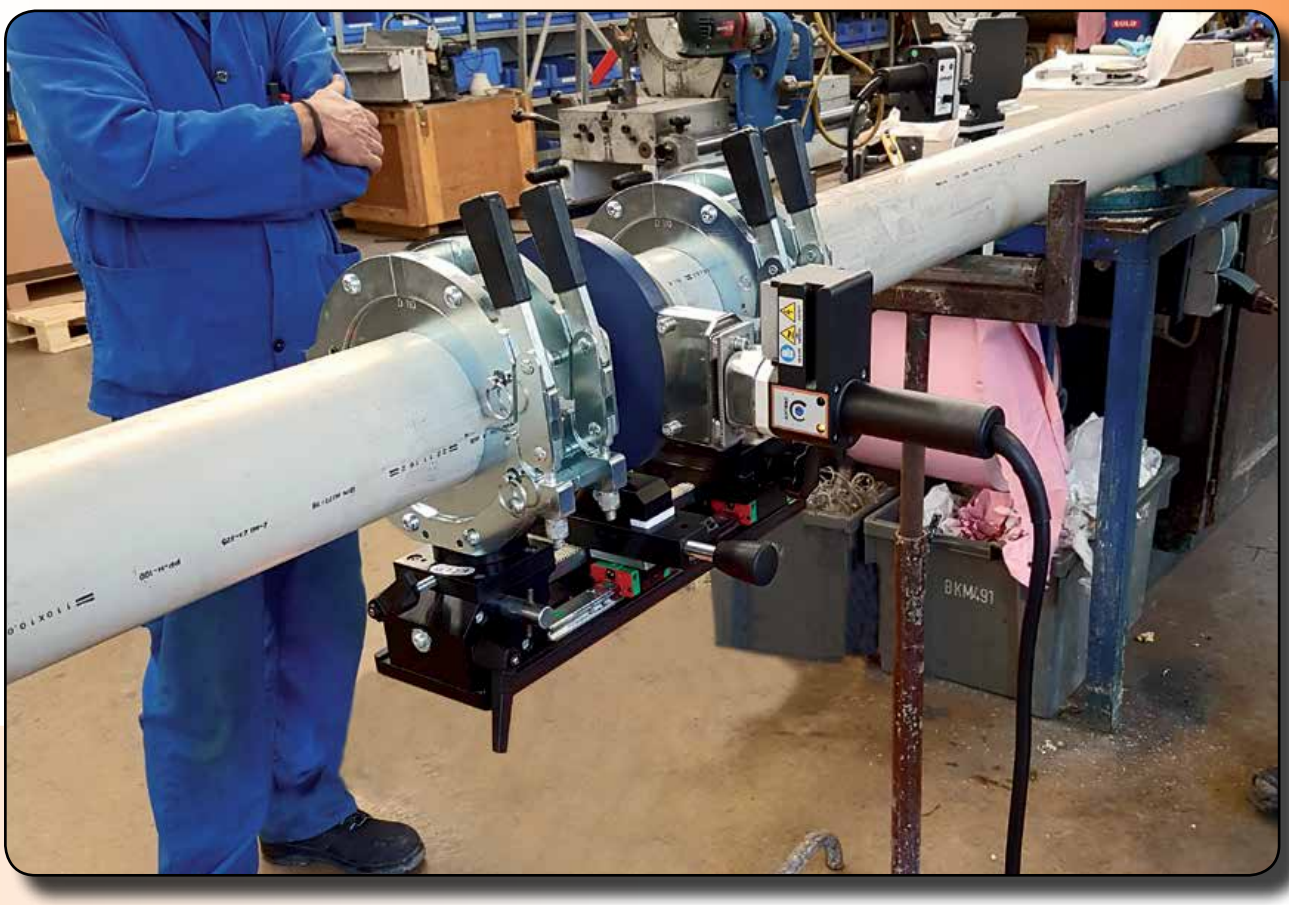
SPECIAL CLAMP FOR FITTINGS

Working range	40 ÷ 160 mm; 1¼" IPS ÷ 4" DIPS Ø 32 mm on request
Materials	HDPE, PP, PVDF For other materials contact RITMO S.P.A.
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Total absorbed power	2020 W (110 V) 1600 W (230 V)
Weight machine body	25 Kg (55.1 lb)
Weight standard composition	85 Kg (187,4 lb)
Dimensions machine body	610 x 300 x 470 mm 24" x 11.8" x 18,5"

ON REQUEST

Insert Ø 32 mm,
Ø 1¼" ÷ 4" DIPS;
tool for flange necks,
thin single clamp.





PLUS

32 ÷ 160 mm

CLAMP-ALIGNER SYSTEM PATENTED BY RITMO



DELTA 160 M

DELTA 160 M is a manual butt fusion welder for pipes up to Ø 160 mm up to 4" DIPS. Leading particulars are the restricted weight, minimum overall dimensions and versatility. Featuring: a machine body, two clamps, an extractable electric milling cutter provided with a safety micro-switch, an extractable heating plate (with an independent thermometer to see the real working temperature and an electronic thermoregulator "Digital Dragon" with display), and two lateral supports on request. DELTA 160 M have a locking device clamps - aligner RITMO Patented, that helps the operator to apply the necessary welding force. The Digital Dragon is an high precision electronic thermoregulator (± 1° C accuracy) with digital display and regulating buttons. This new system includes Led indicators to check if the machine is working normally (live tension and working temperature), contingent probe's failures and/or temperature anomalies.

STANDARD COMPOSITION

- Machine body
- Heating plate with digital electronic temperature control
- Milling cutter
- Milling cutter/Heating plate support with pre-insulate bag

ON REQUEST

Clamps' inserts from Ø 32 to 140 mm;
Ø 1" ÷ 2" CTS; Ø 1" ÷ 4" IPS; Ø 3" ÷ 4" DIPS
Lateral support (while stocks last)
Trolley for machine transportation and support (while stocks last)



TECHNICAL FEATURES

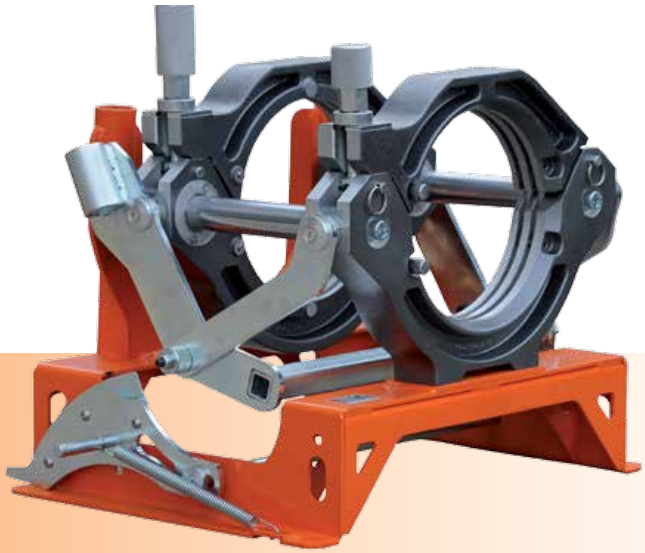
Working range	32 ÷ 160 mm: 1" CTS ÷ 4" DIPS
Materials	HDPE, PP For other materials contact RITMO S.P.A.
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Total absorbed power*	2020 W (110 V) 1600 W (230 V)
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Weight machine body	35 Kg (77.1 lb)
Dimensions machine body	450 x 384 x 830 mm 17.7" x 15.1" x 32.6"

* Suggested power generator 3,5 ÷ 4kVA

PLUS

63 ÷ 200 mm

DIGITAL DRAGON
High-Precision
Electronic
Thermoregulator



DELTA 200 M

DELTA 200 M is a manual butt fusion welder for pipes up to Ø 200 mm (6" DISP). Leading particulars are the restricted weight, minimum overall dimensions and versatility. Featuring: a machine body, two clamps, an extractable electric milling cutter provided with a safety micro-switch, an extractable heating plate (with an independent thermometer to see the real working temperature and an electronic thermoregulator "Digital Dragon" with display), DELTA 200 M have a locking device clamps - aligner that helps the operator to apply the necessary welding force. The Digital Dragon is an high precision electronic thermoregulator (± 1° C accuracy) with digital display and regulating buttons. This new system includes Led indicators to check if the machine is working normally (live tension and working temperature), contingent probe's failures and/or temperature anomalies.

STANDARD COMPOSITION

- Machine body
- Heating plate with digital electronic temperature control
- Milling cutter
- Milling cutter/Heating plate support with pre-insulated bag for heating plate

ON REQUEST

Clamps' inserts from Ø 63 to 180 mm;
Ø 2" ÷ 6" IPS; Ø 3" ÷ 6" DIPS
Trolley for machine transportation and support



TECHNICAL FEATURES

Working range	63 ÷ 200 mm: 2" IPS ÷ 6" DIPS
Materials	HDPE, PP For other materials contact RITMO S.P.A.
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Total absorbed power*	3000 W (110 V) 3000 W (230 V)
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C; (14° ÷ 104° F)
Weight machine body	30 Kg (66.1 lb)
Dimensions machine body	529 x 499 x 1100 mm 20.8" x 19.6" x 43.3"

* Suggested power generator 5,5 ÷ 6kVA



PH. Aquatherm GmbH

COMPACT 355

COMPACT 355 is a worksite machine for pre-insulated pipes in PE, HDPE, PP, from OD 125 to 355 mm.
Its small dimensions allow it to operate easily inside a dig, plus:
- the machine has a 2-clamp machine body, to lock the outer coating of the pre-insulated pipe
- its heating plate features the well known Digital Dragon high precision thermoregulator
- the electrohydraulic gearcase comes inside a protective box
- the milling cutter has a safety microswitch



STANDARD COMPOSITION

Machine body, electrohydraulic gearcase, milling cutter, heating plate with high precision thermoregulator and detach device, milling cutter/heating plate support, tool kit.

ON REQUEST

OD Ø 125 ÷ 315 mm inserts with a Master Ø 250 mm adapter,
tool for flange necks.

TECHNICAL FEATURES

Working range	125 ÷ 355 mm
Materials	HDPE, PP For other materials contact RITMO S.P.A.
Power supply	230 V Single Phase 50/60 Hz
Total absorbed power	5100 W
Weight machine body	59 Kg (130 lb)
Weight standard composition	144 Kg (317,5 lb)
Dimensions machine body	458 x 790 x 580 mm 18” x 31.1” x 22,8”





Heating plate
detach device



EASY LIFE CONCEPT

EASY LIKE PUSHING A BUTTON

This is the concept that developed the EASY LIFE welding system: ***"to simplify the work in the jobsite avoiding human mistakes"***; this is the philosophy that it hold in its name ***"Style and Technology"*** by RITMO. EASY LIFE is a whole RITMO's project for all and accessible to everybody. **Easy Life is "Wi-Fi" ready and works together with the App "SET & GO - PRO".**

HOW DOES IT WORK

Hardware and software have been developed to interact to each other sharing data during the entire workflow. Once set the welding parameters up, the system guarantees the repetition of the welding cycle, avoiding errors. The operator only has to confirm the work phases on the gear case when asked to, just pushing a button. Besides, during the "welding phase", where sometimes some pressure adjustments are needed, the electronic system solve automatically this specific problem.

QUALITY IN WELDING

The Easy Life system incorporates a data-logging that saves the data in an internal hard-drive capable to store up to 4000 welds. Possibility to pre-set 50 customized welding cycles. The data will be available through PDF reports, downloadable in a USB pen drive.

EXTREME RELIABILITY

Born on 2002, the EASY LIFE system is now at its fourth evolution.

"SET & GO PRO" APP

HIGH QUALITY ON BUTT FUSION WELDING



"SET & GO PRO" a Professional application for smartphones and tablets (Android) that changes forever the way to work with the Ritmo Easy Life butt fusion machines.

"SET & GO PRO" Put together the ease of use, innovation and quality, in a system with the advantages of a CNC welding system, but reducing significantly the costs of it.



ADVANTAGES

It eliminates the expensive hardware of a data-logging and offer the highest quality at the lowest cost.

Google play

Download on the App Store

From APP STORE you can use only SET & GO
SET & GO PRO isn't available.



PLUS

EASY SETTING
WI-FI READY

GEOLOCATION MAP

DATA-LOGGING

REPORT PDF







watch the video



HOW DOES IT WORK?

Set-up the easy life welding machine through your smart-phone/tablet with few and easy steps: choose the international welding standards (ISO, DVS, UNI, ASTM, etc.), pipe diameter and SDR.

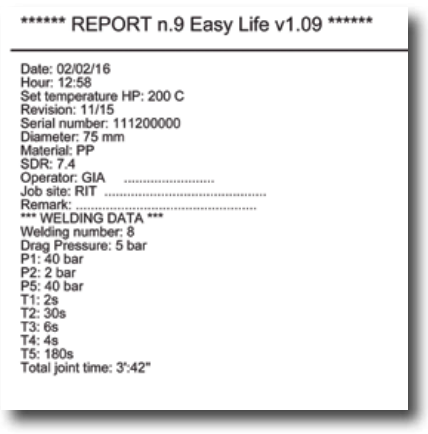
With the GPS and smartphone scanner you can collect, transfer, and store information by project name. You can record the exact location of each pipe weld as well as the construction site, you can scan pipe and fitting barcodes, scan operator badge, and take a photo before and after the installation.

With a detailed report at the end of each weld you have all the technical data with exact graphs and parameters to compare against international welding standards and geolocation map.
You can quickly share the welding reports in pdf format via email and whatsapp or save them to your phone or on a cloud archive.

Choose "SET & GO PRO" because safety and quality are part of your job!



Report by
EASY LIFE + “SET & GO! PRO”



Report by EASY LIFE



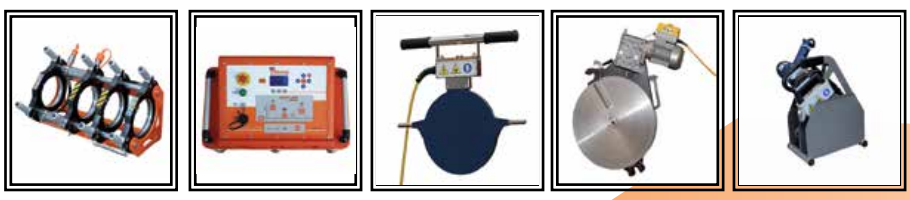
BASIC 160 EASY LIFE

Self-aligning hydraulic butt fusion machine, suitable for welding under-pressure pipes for water, gas and other fluids up to Ø160 mm 5" IPS. BASIC 160 EASY LIFE, thanks to a special gearcase, is able to manage the automated welding process. Built according to the International standards (UNI 10565, ISO 12176-1), BASIC 160 EASY LIFE includes:

- A machine body built with a supporting frame, four clamps and two hydraulic cylinders with fast non-drip coupling connections.
- A Teflon-coated (PTFE) heating plate with a built-in independent thermometer to check the working temperature.
- An extractable electric milling cutter to face the heads of the pipes and/or fittings. It includes a safety micro-switch and a thermal circuit breaker.
- An electro-hydraulic gearcase protected from crashes and atmospheric corrosion by a plastic box. The electronic system guarantees the continuous repeat of the welding cycles and automatic control of the preset parameters, therefore the operator needs only to validate the welding phases. **Easy Life is "Wi-Fi" ready and works together with the App "SET & GO PRO".** The user-friendly graphic display allows a quick setting of the desired parameters. The EASY LIFE system can store up to 4000 welding cycles and sum them up into a PDF file. This report can be transferred to a PC/laptop through a USB port and data-management software. Possibility to pre-set 50 customized welding cycles. The EASY LIFE system data logging now shows the time!
- A milling cutter/ heating plate support

BASIC 160 EASY LIFE is able to weld fittings like elbows, tees, Y-branches and flanges necks.
Available in 230 V versions.

STANDARD COMPOSITION



Machine body | Gearcase | Heating plate | Milling cutter | Support

TECHNICAL FEATURES

PLUS

AUTOMATED WELDING PROCESS

Wi-Fi ready
App SET & GO - PRO

* Suggested power generator
5,5 ÷ 6kVA

Working range	40 ÷ 160 mm; 1” IPS ÷ 5” IPS
Materials	HDPE, PP, PP-R, PVDF For other materials contact RITMO S.P.A.
Power supply	230 V Single Phase 50/60 Hz
Total absorbed power*	3000 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 20’
Memory	4000 cycles
Pre-set welding cycles	50 customized
Wi-Fi ready	App "SET & GO PRO"
Dimensions machine body (W x D x H)	606 x 365 x 375 mm (24” x 14.5” x 15”)
Dimensions gearcase (W x D x H)	585 x 384 x 463 mm (23” x 15.1” x 18.2”)
Weight machine body	32 Kg (70.5 lb)
Weight standard composition	88 Kg (194.1 lb)

ON REQUEST



Inserts
Ø 40 ÷ 140 mm



Trolley

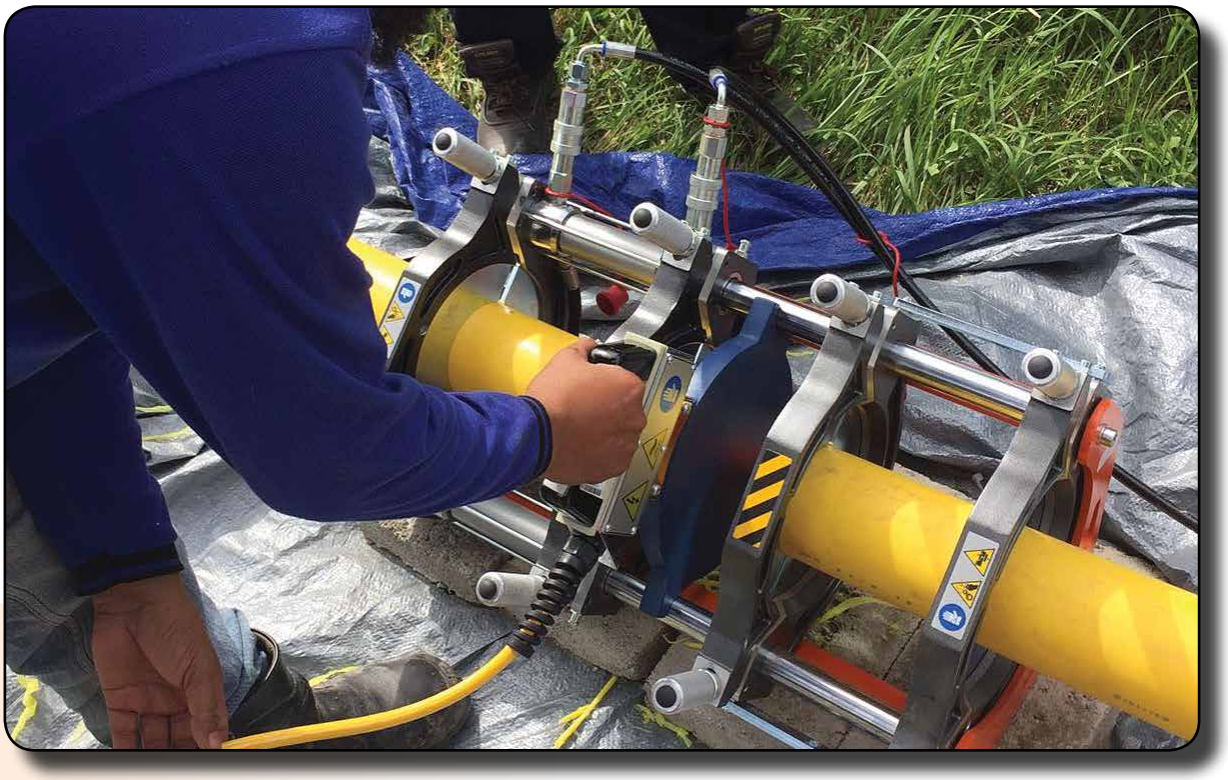


Rollers



App
“Set & Go Pro”

and:
Inserts Ø 1”÷ 5” IPS; 3”÷ 4” DIPS
pre-insulated bag for heating plate











BASIC 200 EASY LIFE

Self-aligning hydraulic butt fusion machine, suitable for welding under-pressure pipes for water, gas and other fluids up to Ø 200 mm 6" DIPS. BASIC 200 EASY LIFE, thanks to a special gearcase, is able to manage the automated welding process. Built according to the International standards (UNI 10565, ISO 12176-1), BASIC 200 EASY LIFE includes:

- A machine body built with a supporting frame, four clamps and two hydraulic cylinders with fast non-drip coupling connections.
- A Teflon-coated (PTFE) heating plate with a built-in independent thermometer to check the working temperature.
- An extractable electric milling cutter to face the heads of the pipes and/or fittings. It includes a safety micro-switch and a thermal circuit breaker.
- An electro-hydraulic gearcase protected from crashes and atmospheric corrosion by a plastic box. The electronic system guarantees the continuous repeat of the welding cycles and automatic control of the preset parameters, therefore the operator needs only to validate the welding phases. **Easy Life is "Wi-Fi" ready and works together with the App "SET & GO PRO".** The user-friendly graphic display allows a quick setting of the desired parameters. The EASY LIFE system can store up to 4000 welding cycles and sum them up into a PDF file. This report can be transferred to a PC/laptop through a USB port and data-management software. Possibility to pre-set 50 customized welding cycles. The EASY LIFE system data logging now shows the time!
- A milling cutter/ heating plate support

BASIC 200 EASY LIFE is able to weld fittings like elbows, tees, Y-branches and flanges necks.
Available in 230 V versions.

STANDARD COMPOSITION


Machine body


Gearcase


Heating plate


Milling cutter


Support

TECHNICAL FEATURES

PLUS

AUTOMATED WELDING PROCESS

Wi-Fi ready
App SET & GO - PRO

* Suggested power generator
5,5 ÷ 6kVA

Working range	63 ÷ 200 mm; 2” IPS ÷ 6” DIPS
Materials	HDPE, PP, PP-R, PB, PVDF For other materials contact RITMO S.P.A.
Power supply	230 V Single Phase 50/60 Hz
Total absorbed power*	4100 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 20’
Memory	4000 cycles
Pre-set welding cycles	50 customized
Wi-Fi ready	App "SET & GO PRO"
Dimensions machine body (W x D x H)	685 x 460 x 420 mm (27” x 18” x 15.5”)
Dimensions gearcase (W x D x H)	585 x 384 x 463 mm (23” x 15.1” x 18.2”)
Weight machine body	39 Kg (86 lb)
Weight standard composition	100 Kg (220,5 lb)

ON REQUEST



Inserts
Ø 63 ÷ 180 mm



Trolley



Rollers



App
“Set & Go Pro”



Tool for flange necks

and:
Inserts
Ø 2”÷ 6” IPS; 3”÷ 6” DIPS
pre-insulated bag
for heating plate





BASIC 250 EASY LIFE

Self-aligning hydraulic butt fusion machine, suitable for welding under-pressure pipes for water, gas and other fluids up to Ø 250 mm 8" DIPS. BASIC 250 EASY LIFE, thanks to a special gearcase, is able to manage the automated welding process. Built according to the International standards (UNI 10565, ISO 12176-1), BASIC 250 EASY LIFE includes:

- A machine body built with a supporting frame, four clamps and two hydraulic cylinders with fast non-drip coupling connections. It comes with the fast-locking-adapters system SMARTLocK patented by Ritmo
- A Teflon-coated (PTFE) heating plate with a built-in independent thermometer to check the working temperature.
- An extractable electric milling cutter to face the heads of the pipes and/or fittings. It includes a safety micro-switch and a thermal circuit breaker.
- An electro-hydraulic gearcase protected from crashes and atmospheric corrosion by a plastic box. The electronic system guarantees the continuous repeat of the welding cycles and automatic control of the preset parameters, therefore the operator needs only to validate the welding phases. **Easy Life is "Wi-Fi" ready and works together with the App "SET & GO PRO".** The user-friendly graphic display allows a quick setting of the desired parameters. The EASY LIFE system can store up to 4000 welding cycles and sum them up into a PDF file. This report can be transferred to a PC/laptop through a USB port and data-management software. Possibility to pre-set 50 customized welding cycles. The EASY LIFE system data logging now shows the time!
- A milling cutter/ heating plate support

BASIC 250 EASY LIFE is able to weld fittings like elbows, tees, Y-branches and flanges necks.
Available in the 110 V and 230 V versions.

STANDARD COMPOSITION



Machine body | Detach device for heater | Gearcase | Heating plate | Milling cutter | Support

TECHNICAL FEATURES

PLUS

AUTOMATED WELDING PROCESS

Wi-Fi ready
App SET & GO - PRO

* Suggested power generator
5,5 ÷ 6kVA

Working range	75 ÷ 250 mm; 2” IPS ÷ 8” DIPS
Materials	HDPE, PP, PP-R, PB, PVDF For other materials contact RITMO S.P.A.
Power supply	230 V Single Phase 50/60 Hz 110 V Single Phase 50/60 Hz
Total absorbed power*	4200 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 20’
Memory	4000 cycles
Pre-set welding cycles	50 customized
Wi-Fi ready	App "SET & GO PRO"
Dimensions machine body (W x D x H)	850 x 470 x 400 mm (33.5” x 18.5” x 16”)
Dimensions gearcase (W x D x H)	585 x 384 x 463 mm (23” x 15.1” x 18.2”)
Weight machine body	63 Kg (139 lb)
Weight standard composition	132 Kg (291 lb)

ON REQUEST


Inserts
Ø 75 ÷ 225 mm


Tool for flange necks


Trolley for machine body


App
“Set & Go Pro”


Top Clamp Short Elbows/Tee


Rollers

and:
Inserts Ø 2”÷ 8” IPS; 3”÷ 8” DIPS
pre-insulated bag for heating plate, trolley for milling cutter/heating plate, wooden case for inserts





BASIC 315 EASY LIFE

Self-aligning hydraulic butt fusion machine, suitable for welding under-pressure pipes for water, gas and other fluids up to Ø 315 mm 10" DIPS. BASIC 315 EASY LIFE, thanks to a special gearcase, is able to manage the automated welding process. Built according to the International standards (UNI 10565, ISO 12176-1), BASIC 315 EASY LIFE includes:

- A machine body built with a supporting frame, four clamps and two hydraulic cylinders with fast non-drip coupling connections. It comes with the fast-locking-adapters system SMARTLocK patented by Ritmo
- A Teflon-coated (PTFE) heating plate with a built-in independent thermometer to check the working temperature.
- An extractable electric milling cutter to face the heads of the pipes and/or fittings. It includes a safety micro-switch and a thermal circuit breaker.
- An electro-hydraulic gearcase protected from crashes and atmospheric corrosion by a plastic box. The electronic system guarantees the continuous repeat of the welding cycles and automatic control of the preset parameters, therefore the operator needs only to validate the welding phases. **Easy Life is "Wi-Fi" ready and works together with the App "SET & GO - PRO".** The user-friendly graphic display allows a quick setting of the desired parameters. The EASY LIFE system can store up to 4000 welding cycles and sum them up into a PDF file. This report can be transferred to a PC/laptop through a USB port and data-management software. Possibility to pre-set 50 customized welding cycles. The EASY LIFE system data logging now shows the time!
- A milling cutter/ heating plate support

BASIC 315 EASY LIFE is able to weld fittings like elbows, tees, Y-branches and flanges necks.
Available in 230 V versions.

STANDARD COMPOSITION



Machine body | Detach device for heater | Gearcase | Heating plate | Milling cutter | Support

TECHNICAL FEATURES

PLUS

AUTOMATED WELDING PROCESS

Wi-Fi ready
App SET & GO - PRO

* Suggested power generator
6,5 ÷ 7kVA

Working range	90 ÷ 315 mm; 3” IPS ÷ 10” DIPS
Materials	HDPE, PP, PP-R, PB, PVDF For other materials contact RITMO S.P.A.
Power supply	230 V Single Phase 50/60 Hz
Total absorbed power*	5050 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 20’
Memory	4000 cycles
Pre-set welding cycles	50 customized
Wi-Fi ready	App "SET & GO PRO"
Dimensions machine body (W x D x H)	981x 586 x 520 mm (38.6” x 23” x 20.5”)
Dimensions gearcase (W x D x H)	585 x 384 x 463 mm (23” x 15.1” x 18.2”)
Weight machine body	86 Kg (190 lb)
Weight standard composition	174 Kg (383 lb)

ON REQUEST



Inserts
Ø 90 ÷ 280mm
master Ø 250 mm



Tool for flange necks



Trolley for machine body



App
“Set & Go Pro”



Rollers

and:
Inserts Ø 3”÷ 10” IPS; 3”÷ 10” DIPS
pre-insulated bag for heating plate, trolley for milling cutter/heating plate, wooden case for inserts





BASIC 355 EASY LIFE

Self-aligning hydraulic butt fusion machines, suitable for welding under-pressure pipes for water, gas and other fluids. Built accor-ding to the International standards (UNI 10565, ISO 12176-1), BASIC 355 includes:

- A machine body built with a supporting frame, four clamps and two hydraulic cylinders with fast non-drip coupling connections. It comes with the fast-locking-adapters system SMARTLocK patented by Ritmo
- A Teflon-coated (PTFE) heating plate with a built-in independent thermometer to check the working temperature.
- An extractable electric milling cutter to face the heads of the pipes and/or fittings. It includes a safety micro-switch and a thermal circuit breaker.
- An electro-hydraulic gearcase protected from crashes and atmospheric corrosion by a plastic box. The electronic system guarantees the continuous repeat of the welding cycles and automatic control of the preset parameters, therefore the operator needs only to validate the welding phases. **Easy Life is "Wi-Fi" ready and works together with the App "SET & GO PRO".** The user-friendly graphic display allows a quick setting of the desired parameters. The EASY LIFE system can store up to 4000 welding cycles and sum them up into a PDF file. This report can be transferred to a PC/laptop through a USB port and data-management software. Possibility to pre-set 50 customized welding cycles. The EASY LIFE system data logging now shows the time!
- A milling cutter/ heating plate support

BASIC 355 is able to weld fittings like elbows, tees, Y-branches and flanges necks.
Available in the 230 V versions.

STANDARD COMPOSITION



Machine body | Detach device for heater | Gearcase | Heating plate | Milling cutter | Support

TECHNICAL FEATURES

PLUS

AUTOMATED WELDING PROCESS

Wi-Fi ready
App SET & GO - PRO

* Suggested power generator
8 ÷ 8,5kVA

Working range	125 ÷ 355 mm; 4” IPS ÷ 14” IPS
Materials	HDPE, PP, PP-R, PB, PVDF For other materials contact RITMO S.P.A.
Power supply	230 V Single Phase 50/60 Hz
Total absorbed power*	5750 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 20’
Memory	4000 cycles
Pre-set welding cycles	50 customized
Wi-Fi ready	App "SET & GO PRO"
Dimensions machine body (W x D x H)	1077 x 510 x 715 mm (42,4” x 20" x 28”)
Dimensions gearcase (W x D x H)	585 x 384 x 463 mm (23” x 15.1” x 18.2”)
Weight machine body	100 Kg (220.5 lb)
Weight standard composition	216 Kg (476 lb)

ON REQUEST



Inserts
Ø 125 ÷ 315 mm
master Ø 250 mm



Tool for flange necks



Trolley



App
“Set & Go Pro”



Rollers

and:
Inserts Ø 4”÷ 12” IPS; 4”÷ 12” DIPS master Ø 250 mm
pre-insulated bag for heating plate, wooden case for inserts





DELTA 500 EASY LIFE

This is a self-aligning machine, suitable for welding ducts for the transport of water, gas and other fluids under pressure, up to Ø 500 mm 18" DISP). The DELTA 500 was designed in accordance to the International correspondent standards (UNI 10565, ISO 12176-1), and consists of:

- A machine body with a steel bearing frame, four steel clamps and two hydraulic thrust cylinders with non-drip quick couplings and steel inserts.
- Self detaching device: helps removing the heating plate during welding procedure.
- An extractable heating plate with separate thermometer for reading the working temperature.
- An extractable electric milling cutter for leveling the ends of the pipe and/or fitting, with a safety microswitch and overload cutout. Milling cutter's plastic control box is protected by a metal frame, and equipped with a fast removing system to speed up the extraction from machine body.
- An electro-hydraulic gearcase protected from crashes and atmospheric corrosion by a plastic box. The electronic system guarantees the continuous repeat of the welding cycles and automatic control of the preset parameters, therefore the operator needs only to validate the welding phases. **Easy Life is "Wi-Fi" ready and works together with the App "SET & GO PRO".** The user-friendly graphic display allows a quick setting of the desired parameters. The EASY LIFE system can store up to 4000 welding cycles and sum them up into a PDF file. This report can be transferred to a PC/laptop through a USB port and data-management software. Possibility to pre-set 50 customized welding cycles. The EASY LIFE system data logging now shows the time!
- A milling cutter/ heating plate support

With DELTA 500 it is possible to weld fittings such as elbows, tees, wyes and stub ends. This is possible because the 3rd clamp can be anchored to the 1st and 2nd (movable) and slide along with the pipe. The fitting have to be locked in the 4th clamp. Short neck stub ends can be welded with the help of a special tool (on request).
Available in the 230 V and 400 V versions.

STANDARD COMPOSITION


Machine body


Detach device for heater


Gearcase


Milling cutter


Heating plate


Support

TECHNICAL FEATURES

PLUS

AUTOMATED WELDING PROCESS

Wi-Fi ready
App SET & GO - PRO

Working range	200 ÷ 500 mm; 8” IPS÷ 18” DIPS
Materials	HDPE, PP, PVDF For other materials contact RITMO S.P.A.
Power supply	230 Single Phase 50/60 Hz 400 V Three Phase 50/60 HZ
Total absorbed power*	7550 W (230 V) 7200 W (400 V)
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 20’
Memory	4000 cycles
Pre-set welding cycles	50 customized
Wi-Fi ready	App "SET & GO PRO"
Dimensions machine body (W x D x H)	1265 x 790 x 780 mm (50” x 31” x 31”)
Dimensions gearcase (W x D x H)	585 x 384 x 463 mm (23” x 15” x 18.5”)
Weight machine body	230 Kg (507 lb)
Weight standard composition	418 Kg (921.5 lb)

* Suggested power generator 12kVA

ON REQUEST


Inserts Ø 200 ÷ 450 mm


Tool for flange necks


Trolley


Electrical crane


Rollers


App “Set & Go Pro”

and:
Inserts Ø 8”÷ 18” IPS; 8”÷ 18” DIPS
pre-insulated bag for heating plate, special transport wooden case or metal cage for:
body machine/trolley - gearcase/plate/cutter





DELTA 630 EASY LIFE

This is a self-aligning machine, suitable for welding ducts for the transport of water, gas and other fluids under pressure, up to Ø 630 mm - 24" IPS. The DELTA 630 was designed in accordance to the International correspondent standards (UNI 10565, ISO 12176-1), and consists of:

- A machine body with a steel bearing frame, four steel clamps and two hydraulic thrust cylinders with non-drip quick couplings and steel inserts.
- Self detaching device: helps removing the heating plate during welding procedure.
- An extractable heating plate with separate thermometer for reading the working temperature.
- An extractable electric milling cutter for leveling the ends of the pipe and/or fitting, with a safety microswitch and overload cutout. Milling cutter's plastic control box is protected by a metal frame, and equipped with a fast removing system to speed up the extraction from machine body.
- An electro-hydraulic gearcase protected from crashes and atmospheric corrosion by a plastic box. The electronic system guarantees the continuous repeat of the welding cycles and automatic control of the preset parameters, therefore the operator needs only to validate the welding phases. **Easy Life is "Wi-Fi" ready and works together with the App "SET & GO PRO".** The user-friendly graphic display allows a quick setting of the desired parameters. The EASY LIFE system can store up to 4000 welding cycles and sum them up into a PDF file. This report can be transferred to a PC/laptop through a USB port and data-management software. Possibility to pre-set 50 customized welding cycles. The EASY LIFE system data logging now shows the time!
- A milling cutter/ heating plate support

With DELTA 630 it is possible to weld fittings such as elbows, tees, wyes and stub ends. This is possible because the 3rd clamp can be anchored to the 1st and 2nd (movable) and slide along with the pipe. The fitting have to be locked in the 4th clamp. Short neck stub ends can be welded with the help of a special tool (on request).

STANDARD COMPOSITION


Machine body


Detach device for heater


Gearcase


Milling cutter


Heating plate


Support

TECHNICAL FEATURES

PLUS

AUTOMATED WELDING PROCESS

Wi-Fi ready
App SET & GO - PRO

* Suggested power generator 18kVA

Working range	280 ÷ 630 mm; 10” IPS ÷ 24” IPS
Materials	HDPE, PP, PVDF For other materials contact RITMO S.P.A.
Power supply	230 V three phase 50/60 HZ 400 V three phase 50/60 HZ
Total absorbed power*	12350 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14 ° ÷ 104° F)
Time to reach welding temperature	< 20’
Memory	4000 cycles
Pre-set welding cycles	50 customized
Wi-Fi ready	App "SET & GO PRO"
Dimensions machine body (W x D x H)	1550 x 1010 x 1000 mm (61” x 40” x 40”)
Dimensions gearcase (W x D x H)	1000 x 580 x 680 mm (39.5” x 23” x 27”)
Weight machine body	415 Kg (915 lb)
Weight standard composition	700 Kg (1543 lb)

ON REQUEST


Inserts
Ø 280 ÷560 mm


Tool for flange necks


Trolley


Electrical crane

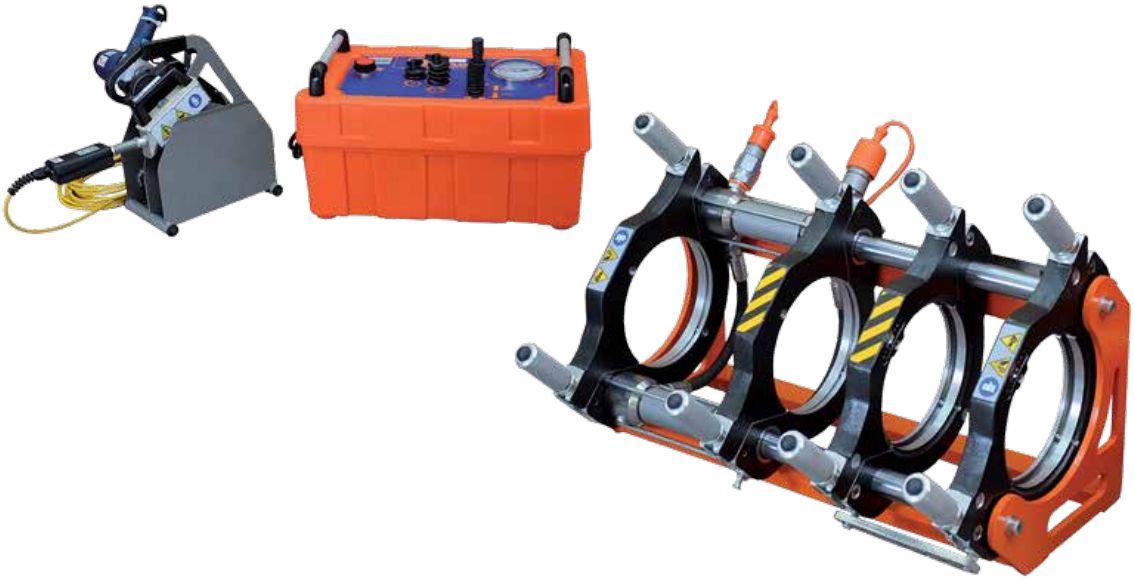

Hydraulic Rollers


Rollers


App
“Set & Go Pro”

and:
Inserts Ø 10”÷ 24” IPS; 10”÷ 20” DIPS;
special transport wooden case or metal cage for body machine/trolley - gearcase/plate/cutter





BASIC 160

Self-aligning hydraulic butt fusion machine, suitable for welding under-pressure pipes for water, gas and other fluids up to Ø 160 mm 5" IPS. Built according to the International standards (UNI 10565, ISO 12176-1), BASIC 160 includes:

- A machine body built with a supporting frame, four clamps and two hydraulic cylinders with fast non-drip coupling connections.
- A Teflon-coated (PTFE) heating plate with a built-in independent thermometer, to check the working temperature, and an high-precision electronic thermoregulator "Digital Dragon" (±1°C) with digital display and regulating buttons. This system includes Led indicators to check if the machine is working normally (live tension and working temperature), contingent probe's failures and/or temperature anomalies.
- An extractable electric milling cutter to face the heads of the pipes and/or fittings. It includes a safety micro-switch and a thermal circuit breaker.
- An electro-hydraulic gearcase protected from crashes and atmospheric corrosion by a plastic box. It includes a control lever, to open and close the clamps, maximum pressure and discharge valves (useful also for the "Dual Pressure" welding process), hydraulic connection hoses with non-drip fast couplings and timer (to check the warming and welding time). The machine is preset for the connection of the electronic controller THE INSPECTOR.
- A milling cutter/ heating plate support

BASIC 160 is able to weld fittings like elbows, tees, Y-branches and flanges necks.
Available in the 110 V and 230 V versions.

STANDARD COMPOSITION


Machine body


Gearcase


Heating plate with Digital Dragon


Milling cutter


Support

TECHNICAL FEATURES

PLUS

DIGITAL DRAGON
High-Precision
Electronic
Thermoregulator

Working range	40 ÷ 160 mm; 1” IPS ÷ 5” IPS
Materials	HDPE, PP, PP-R, PVDF For other materials contact RITMO S.P.A.
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Total absorbed power*	2320 W (110 V) 2220 W (230 V)
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 20’
Dimensions machine body (W x D x H)	606 x 365 x 375 mm (24” x 14.5” x 15”)
Weight machine body	32 Kg (70.5 lb)
Weight standard composition	77 Kg (170 lb)

* Suggested power generator
3,5 ÷ 4kVA

ON REQUEST



Inserts
Ø 40 ÷ 140 mm



Trolley



The INSPECTOR
Data-logging

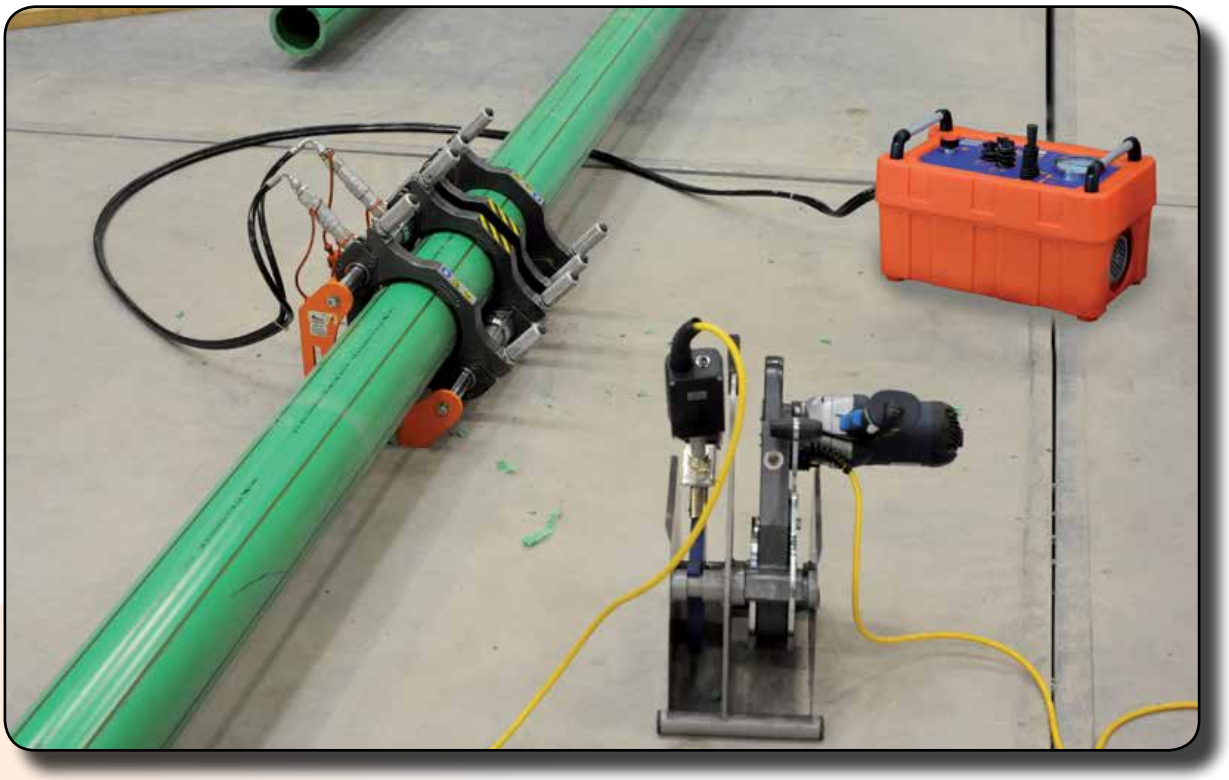


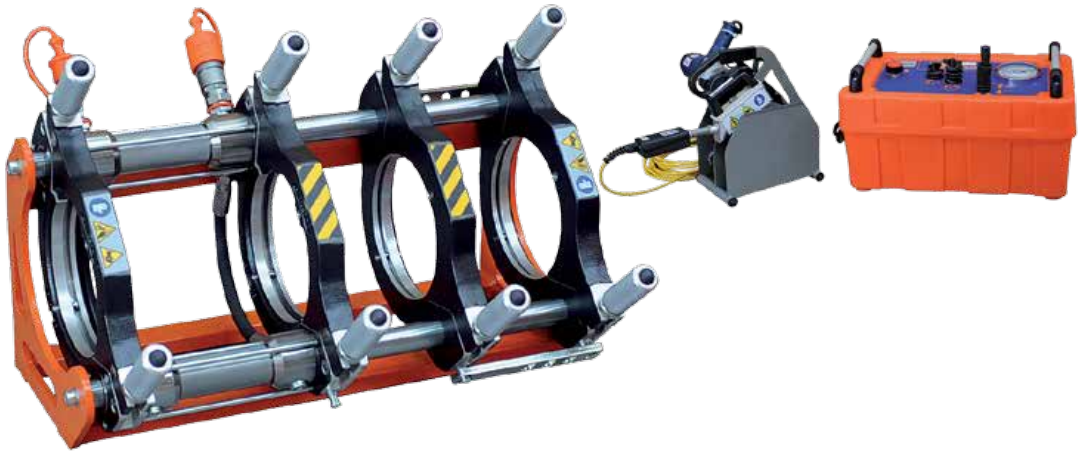
Rollers

watch the video

and:
Inserts Ø 1”÷ 5” IPS; 3”÷ 4” DIPS
pre-insulated bag for heating plate

Italy





BASIC 200

Self-aligning hydraulic butt fusion machine, suitable for welding under-pressure pipes for water, gas and other fluids up to Ø 200 mm. Built according to the International standards (UNI 10565, ISO 12176-1), BASIC 100 includes:

- A machine body built with a supporting frame, four clamps and two hydraulic cylinders with fast non-drip coupling connections.
- A Teflon-coated (PTFE) heating plate with a built-in independent thermometer, to check the working temperature, and an high-precision electronic thermoregulator “Digital Dragon” (±1°C) with digital display and regulating buttons. This system includes Led indicators to check if the machine is working normally (live tension and working temperature), contingent probe’s failures and/or temperature anomalies.
- An extractable electric milling cutter to face the heads of the pipes and/or fittings. It includes a safety micro-switch and a thermal circuit breaker.
- An electro-hydraulic gearcase protected from crashes and atmospheric corrosion by a plastic box. It includes a control lever, to open and close the clamps, maximum pressure and discharge valves (useful also for the “Dual Pressure” welding process), hydraulic connection hoses with non-drip fast couplings and timer (to check the warming and welding time). The machine is preset for the connection of the electronic controller THE INSPECTOR.
- A milling cutter/ heating plate support

BASIC 200 is able to weld fittings like elbows, tees, Y-branches and flanges necks.
Available in the 110 V and 230 V versions.

STANDARD COMPOSITION



Machine body



Gearcase



Heating plate with Digital Dragon



Milling cutter



Support

TECHNICAL FEATURES

PLUS

DIGITAL DRAGON
High-Precision
Electronic
Thermoregulator

Working range	63 ÷ 200 mm; 2” IPS ÷ 6” DIPS
Materials	HDPE, PP, PP-R, PB, PVDF For other materials contact RITMO S.P.A.
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Total absorbed power*	3250 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 20’
Dimensions machine body (W x D x H)	685 x 460 x 420 mm (27” x 18” x 15.5”)
Weight machine body	39 Kg (86 lb)
Weight standard composition	93 Kg (205 lb)

* Suggested power generator
5,5 ÷ 6kVA

ON REQUEST


Inserts
Ø 63 ÷ 180 mm


Tool for flange necks


Trolley


The INSPECTOR Data-logging


Rollers

watch the video

and:
Inserts Ø 2”÷ 6” IPS; 3”÷ 6” DIPS
pre-insulated bag for heating plate

Italy



www.ritmo.it



BASIC 250

Self-aligning hydraulic butt fusion machines, suitable for welding under-pressure pipes for water, gas and other fluids. Built accor-ding to the International standards (UNI 10565, ISO 12176-1), BASIC 250 includes:

- A machine body built with a supporting frame, four clamps and two hydraulic cylinders with fast non-drip coupling connections. It comes with the fast-locking-adapters system SMARTLocK patented by Ritmo
- A Teflon-coated (PTFE) heating plate with a built-in independent thermometer, to check the working temperature, and an high-precision electronic thermoregulator “Digital Dragon” (±1°C) with digital display and regulating buttons. This system includes Led indicators to check if the machine is working normally (live tension and working temperature), contingent probe’s failures and/or temperature anomalies.
- An extractable electric milling cutter to face the heads of the pipes and/or fittings. It includes a safety micro-switch and a thermal circuit breaker.
- An electro-hydraulic gearcase protected from crashes and atmospheric corrosion by a plastic box. It includes a control lever, to open and close the clamps, maximum pressure and discharge valves (useful also for the “Dual Pressure” welding process), hydraulic connection hoses with non-drip fast couplings and timer (to check the warming and welding time). The machine is preset for the connection of the electronic controller THE INSPECTOR.
- A milling cutter/ heating plate support

BASIC 250 is able to weld fittings like elbows, tees, Y-branches and flanges necks.
Available in the 110 V and 230 V versions.

STANDARD COMPOSITION



Machine body | Detach device for heater | Gearcase | Heating plate with Digital Dragon | Milling cutter | Support

TECHNICAL FEATURES

PLUS

SMARTLOCK PATENTED BY RITMO
fast-locking adapters system

DIGITAL DRAGON
High-Precision Electronic Thermoregulator

* Suggested power generator 5,5 ÷ 6kVA

Working range	75 ÷ 250 mm; 2” IPS ÷ 8” DIPS
Materials	HDPE, PP, PP-R, PB, PVDF For other materials contact RITMO S.P.A.
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Total absorbed power*	3450 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 20’
Dimensions machine body (W x D x H)	850 x 470 x 400 mm (33.5” x 18.5” x 16”)
Weight machine body	63 Kg (139 lb)
Weight standard composition	124 Kg (273.4 lb)

ON REQUEST


Inserts Ø 75 ÷ 225 mm


Tool for flange necks


Trolley for machine body


The INSPECTOR Data-logging


Top Clamp Short Elbows/Tee


Rollers

watch the video

and:
Inserts Ø 2”÷ 8” IPS; 3”÷ 8” DIPS
pre-insulated bag for heating plate, trolley for milling cutter/heating plate, wooden case for inserts

Italy





BASIC 315

Self-aligning hydraulic butt fusion machines, suitable for welding under-pressure pipes for water, gas and other fluids. Built accor-ding to the International standards (UNI 10565, ISO 12176-1), BASIC 315 includes:

- A machine body built with a supporting frame, four clamps and two hydraulic cylinders with fast non-drip coupling connections. It comes with the fast-locking-adapters system SMARTLocK patented by Ritmo
- A Teflon-coated (PTFE) heating plate with a built-in independent thermometer, to check the working temperature, and an high-precision electronic thermoregulator “Digital Dragon” (±1°C) with digital display and regulating buttons. This system includes Led indicators to check if the machine is working normally (live tension and working temperature), contingent probe’s failures and/or temperature anomalies.
- An extractable electric milling cutter to face the heads of the pipes and/or fittings. It includes a safety micro-switch and a thermal circuit breaker.
- An electro-hydraulic gearcase protected from crashes and atmospheric corrosion by a plastic box. It includes a control lever, to open and close the clamps, maximum pressure and discharge valves (useful also for the “Dual Pressure” welding process), hydraulic connection hoses with non-drip fast couplings and timer (to check the warming and welding time). The machine is preset for the connection of the electronic controller THE INSPECTOR.
- A milling cutter/ heating plate support

BASIC 315 is able to weld fittings like elbows, tees, Y-branches and flanges necks.
Available in the 110 V and 230 V versions.

STANDARD COMPOSITION



Machine body | Detach device for heater | Gearcase | Heating plate with Digital Dragon | Milling cutter | Support

TECHNICAL FEATURES

PLUS

SMARTLOCK PATENTED BY RITMO
fast-locking adapters system

DIGITAL DRAGON
High-Precision Electronic Thermoregulator

* Suggested power generator 6,5 ÷ 7kVA

Working range	90 ÷ 315 mm; 3” IPS ÷ 10” DIPS
Materials	HDPE, PP, PP-R, PVDF For other materials contact RITMO S.P.A.
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Total absorbed power*	3900 W (110 V) 4500W (230 V)
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 20’
Dimensions machine body (W x D x H)	981 x 586 x 520 mm (37” x 23” x 20.5”)
Weight machine body	86 Kg (190 lb)
Weight standard composition	166 Kg (366 lb)

ON REQUEST



Inserts
Ø 90 ÷ 280 mm
master Ø 250 mm



Tool for flange necks



Trolley for machine body



The INSPECTOR Data-logging



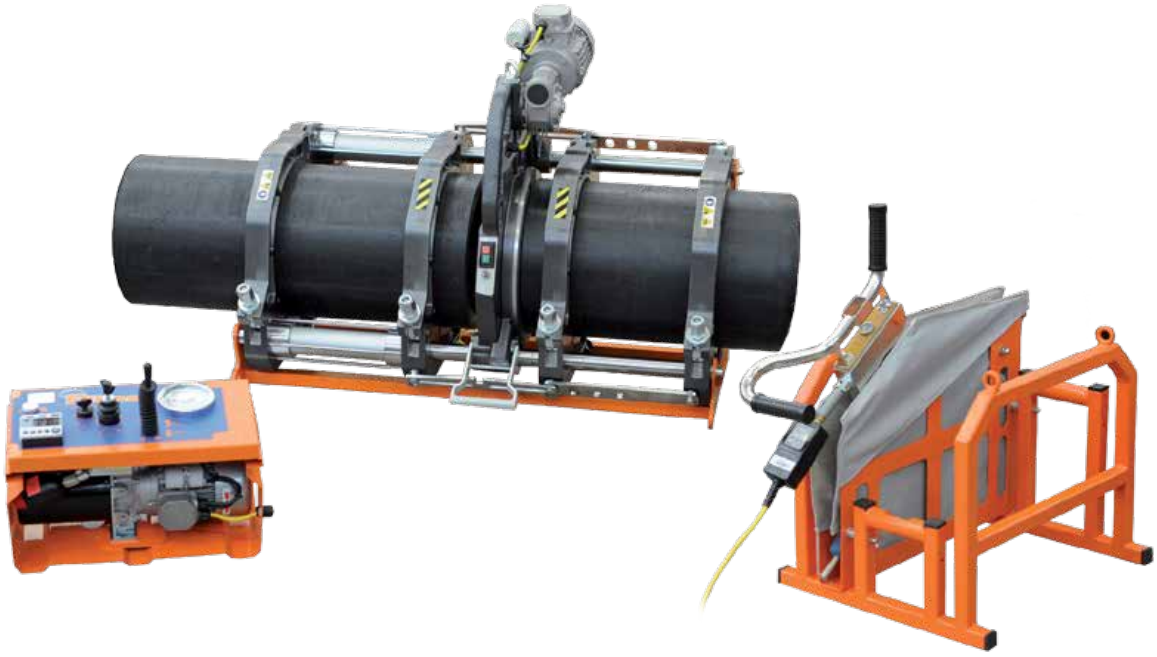
Rollers

watch the video

and:
Inserts Ø 3”÷ 10” IPS; 3”÷ 10” DIPS
pre-insulated bag for heating plate, trolley for milling cutter/heating plate, wooden case for inserts

Italy





BASIC 355

Self-aligning hydraulic butt fusion machines, suitable for welding under-pressure pipes for water, gas and other fluids. Built accor-ding to the International standards (UNI 10565, ISO 12176-1), BASIC 355 includes:

- A machine body built with a supporting frame, four clamps and two hydraulic cylinders with fast non-drip coupling connections. It comes with the fast-locking-adapters system SMARTLocK patented by Ritmo
- A Teflon-coated (PTFE) heating plate with a built-in independent thermometer, to check the working temperature, and an high-precision electronic thermoregulator “Digital Dragon” (±1°C) with digital display and regulating buttons. This system includes Led indicators to check if the machine is working normally (live tension and working temperature), contingent probe’s failures and/or temperature anomalies.
- An extractable electric milling cutter to face the heads of the pipes and/or fittings. It includes a safety micro-switch and a thermal circuit breaker.
- An electrohydraulic gearcase with a clamps opening and closing lever, maximum pressure and release valves (also useful when welding with the “Dual Pressure” procedure), hydraulic hoses with non-drip quick couplings, a timer (for the heating and welding phases). The machine is preset for the connection of the electronic controller THE INSPECTOR.
- A milling cutter/ heating plate support

BASIC 355 is able to weld fittings like elbows, tees, Y-branches and flanges necks.
Available in the 230 V versions.

STANDARD COMPOSITION



Machine body



Detach device for heater



Gearcase



Heating plate with Digital Dragon



Milling cutter



Support

TECHNICAL FEATURES

PLUS

SMARTLOCK PATENTED BY RITMO
fast-locking adapters system

DIGITAL DRAGON
High-Precision Electronic Thermoregulator

Working range	125 ÷ 355 mm; 4” IPS ÷ 14” IPS
Materials	HDPE, PP, PP-R, PVDF For other materials contact RITMO S.P.A.
Power supply	230 V Single Phase 50/60 Hz
Total absorbed power*	5750 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 20’
Dimensions machine body (W x D x H)	1077 x 510 x 715 mm (42.5” x 20” x 28”)
Weight machine body	100 Kg (220.5 lb)
Weight standard composition	205 Kg (452 lb)

* Suggested power generator 8 ÷ 8,5kVA

ON REQUEST



Inserts Ø 125 ÷ 315 mm master Ø 250 mm



Tool for flange necks



Trolley



The INSPECTOR Data-logging



Rollers

watch the video

and:
Inserts Ø 4”÷ 12” IPS; 4”÷ 12” DIPS master Ø 250 mm
pre-insulated bag for heating plate, wooden case for inserts

Peru





DELTA 500

This is a self-aligning machine, suitable for welding ducts for the transport of water, gas and other fluids under pressure, up to Ø 500 mm 18" DISP). The DELTA 500 was designed in accordance to the International correspondent standards (UNI 10565, ISO 12176-1), and consists of:

- A machine body with a steel bearing frame, four steel clamps and two hydraulic thrust cylinders with non-drip quick couplings and steel inserts.
- Self detaching device: helps removing the heating plate during welding procedure.
- An extractable heating plate with separate thermometer for reading the working temperature.
- An extractable electric milling cutter for leveling the ends of the pipe and/or fitting, with a safety microswitch and overload cutout. Milling cutter's plastic control box is protected by a metal frame, and equipped with a fast removing system to speed up the extraction from machine body.
- An electrohydraulic gearcase with a clamps opening and closing lever, maximum pressure and release valves (also useful when welding with the "Dual Pressure" procedure), hydraulic hoses with non-drip quick couplings, a timer (for the heating and welding phases). The machine is preset for the connection of the electronic controller THE INSPECTOR.
- Digital electric connections box with the high precision (± 1°C) "Digital Dragon" temperature controller protected by a special container and equipped with a reading display and keys for temperature adjustment.
- A milling cutter/heating plate support.

With DELTA 500 it is possible to weld fittings such as elbows, tees, wyes and stub ends. This is possible because the 3rd clamp can be anchored to the 1st and 2nd (movable) and slide along with the pipe. The fitting have to be locked in the 4th clamp. Short neck stub ends can be welded with the help of a special tool (on request). Available in 230 V and 400 V.

STANDARD COMPOSITION


Machine body


Detach device for heater



Gearcase


Electronic thermoregulator


Milling cutter


Heating plate


Support

TECHNICAL FEATURES

PLUS

200 ÷ 500 mm
water - gas - oil

FACER
fast removing system

“DIGITAL DRAGON”

* Suggested power generator 12kVA

Working range	200 ÷ 500 mm; 8” IPS÷ 18” DIPS
Materials	HDPE, PP, PVDF For other materials contact RITMO S.P.A.
Power supply	230 Single Phase 50/60 Hz 400 V Three Phase 50/60 HZ
Total absorbed power*	7950 W (230 V) 7200 W (400 V)
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 20’
Dimensions machine body (W x D x H)	1265 x 790 x 780 mm (50” x 31” x 31”)
Weight machine body	230 Kg (507 lb)
Weight standard composition	408 Kg (900 lb)

ON REQUEST


Inserts Ø 200 ÷ 450 mm


Tool for flange necks


Trolley


Electrical crane


The INSPECTOR Data-logging


Rollers

and:
Inserts Ø 8”÷ 18” IPS; 8”÷ 18” DIPS
pre-insulated bag for heating plate, special transport wooden case or metal cage for:
body machine/trolley - gearcase/plate/cutter

Russia



www.ritmo.it



DELTA 630

This is a self-aligning machine, suitable for welding ducts for the transport of water, gas and other fluids under pressure, up to Ø 630 mm - 24" IPS. The DELTA 630 was designed in accordance to the International correspondent standards (UNI 10565, ISO 12176-1), and consists of:

- A machine body with a steel bearing frame, four steel clamps and two hydraulic thrust cylinders with non-drip quick couplings and steel inserts.
- Self detaching device: helps removing the heating plate during welding procedure.
- An extractable heating plate with separate thermometer for reading the working temperature.
- An extractable electric milling cutter for leveling the ends of the pipe and/or fitting, with a safety microswitch and overload cutout. Milling cutter's plastic control box is protected by a metal frame, and equipped with a fast removing system to speed up the extraction from machine body.
- An electrohydraulic gearcase with a clamps opening and closing lever, maximum pressure and release valves (also useful when welding with the "Dual Pressure" procedure), hydraulic hoses with non-drip quick couplings, a timer (for the heating and welding phases). The machine is preset for the connection of the electronic controller THE INSPECTOR.
- Digital electric connections box with the high precision (± 1°C) "Digital Dragon" temperature controller protected by a special container and equipped with a reading display and keys for temperature adjustment.
- A milling cutter/heating plate support.

With DELTA 630 it is possible to weld fittings such as elbows, tees, wyes and stub ends. This is possible because the 3rd clamp can be anchored to the 1st and 2nd (movable) and slide along with the pipe. The fitting have to be locked in the 4th clamp. Short neck stub ends can be welded with the help of a special tool (on request).

STANDARD COMPOSITION


Machine body


Detach device for heater


Gearcase


Electronic thermoregulator


Milling cutter


Heating plate


Support

TECHNICAL FEATURES

PLUS

280 ÷ 630 mm
water - gas - oil

FACER
fast removing system

"DIGITAL DRAGON"

* Suggested power generator 18kVA

Working range	280 ÷ 630 mm; 10" IPS ÷ 24" IPS
Materials	HDPE, PP, PVDF For other materials contact RITMO S.P.A.
Power supply	230 V three phase 50/60 HZ 400 V three phase 50/60 HZ
Total absorbed power*	12350 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14 ° ÷ 104° F)
Time to reach welding temperature	< 20'
Dimensions machine body (W x D x H)	1550 x 1010 x 1000 mm (61" x 40" x 40")
Weight machine body	415 Kg (915 lb)
Weight standard composition	708 Kg (1560 lb)

ON REQUEST


Inserts Ø 280 ÷560 mm


Tool for flange necks


Trolley


Electrical crane


The INSPECTOR Data-logging


Hydraulic Rollers


Rollers

and:
Inserts Ø 10"÷ 24" IPS; 10"÷ 20" DIPS;
special transport wooden case or metal cage for body machine/trolley - gearcase/plate/cutter

Brazil



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DELTA 800

This is a self-aligning machine, suitable for welding ducts for the transport of water, gas and other fluids under pressure, up to Ø 800 mm 30" IPS. The DELTA 800 was designed in accordance to the International correspondent standards (UNI 10565, ISO 12176-1), and consists of:

- A machine body with a bearing frame, four clamps and two hydraulic thrust cylinders with non-drip quick couplings, and steel inserts.
- An extractable heating plate with separate thermometer for reading the working temperature.
- An extractable electrically controlled milling cutter for levelling the ends of the pipe and/or fitting, with a safety microswitch and overload cutout.
- An electrohydraulic gearcase with a clamp opening and closing lever, maximum pressure and discharge valves (useful also during the "Dual Pressure" welding), hydraulic hoses with non-drip quick couplings, a timer (for the heating and welding phases), an extractable electrical panel with power outlet for the heating plate, an electronic thermoregulator for the control of the working temperature, a differential circuit breaker, and a special connection for the electronic data-logging THE INSPECTOR.
- A milling cutter/heating plate support.

The DELTA 800 can weld fittings such as bends, tees, branches and flange necks. This is possible because the 3rd clamp can be anchored to the 1st and 2nd (movable) and slide along with the pipe. The fitting must be locked in the 4th clamp. Necks with a highly reduced tang can be welded with the help of a special tool (on request), applied to the clamps.

STANDARD COMPOSITION


Machine body


Detach device for heater


Gearcase


Electronic thermoregulator


Milling cutter


Heating plate


Support

TECHNICAL FEATURES

PLUS

500 ÷ 800 mm
water - gas - oil

FACER
fast removing system

“DIGITAL DRAGON”

* Suggested power generator 30kVA

Working range	500 ÷ 800 mm 20” IPS ÷ 30” IPS
Materials	HDPE, PP, PVDF For other materials contact RITMO S.P.A.
Power supply	400 V 3F+N+PE 50/60 HZ
Total absorbed power*	16500 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 45’
Dimensions machine body (W x D x H)	2100 x 1350 x 1300 mm (83” x 53” x 51”)
Weight machine body	821 Kg (1810 lb)
Weight standard composition	1260 Kg (2777 lb)

ON REQUEST


Inserts Ø 500 ÷710 mm


Tool for flange necks


Trolley


Electrical crane


The INSPECTOR Data-logging


Rollers

and:
Inserts Ø 20”÷ 30” IPS; 18”÷ 24” DIPS

Israel



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DELTA 1000

This is a self-aligning machine, suitable for welding ducts for the transport of water and other fluids under pressure, up to Ø 1000 mm - 36" IPS. The DELTA 1000 was designed in accordance to the International correspondent standards (UNI 10565, ISO 12176-1), and consists of:

- Machine body with a bearing frame, four steel clamps and two hydraulic thrust cylinders with non-drip quick couplings and steel inserts.
- Extractable heating plate with separate thermometer for reading the working temperature.
- Extractable electrically controlled milling cutter (with self detaching device) for levelling the ends of the pipe and/or fitting, with a safety microswitch, overload cut out, and emergency push button.
- Electrohydraulic gearcase with a clamp opening and closing lever, maximum pressure and discharge valves (useful also during the "Dual Pressure" welding), hydraulic hoses with non-drip quick couplings, a timer (for the heating and welding phases) and an electrical panel with a differential circuit breaker.
- Milling cutter/heating plate support with an electronic thermoregulator for the control of the working temperatures.

Holes on the chassis to hook the machine for a rapid and easier handling.

DELTA 1000 can weld fittings such as bends, tees, branches and flange necks. This is possible because the 3rd clamp can be anchored to the 1 st and 2nd (movable) and slide along with the pipe. The fitting must be locked in the 4th clamp. Necks with a highly reduced tang can be welded with the help of a special tool (on request), applied to the clamps.

STANDARD COMPOSITION


Machine body


Detach device for heater


Gearcase


Electronic thermoregulator


Milling cutter


Heating plate


Support

TECHNICAL FEATURES

PLUS

630 ÷ 1000 mm

HOLE FOR RAPID AND EASIER HANDLING

Working range	630 ÷ 1000 mm; 24” IPS ÷ 36” IPS
Materials	HDPE, PP, For other materials contact RITMO S.P.A.
Power supply	400 V 3F+N+PE 50/60 HZ
Total absorbed power*	25000 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 45’
Dimensions machine body (W x D x H)	2386 x 1746 x 1711 mm (94” x 69” x 67”)
Weight machine body	2090 Kg (4607 lb)
Weight standard composition	2942 Kg (6486 lb)

* Suggested power generator 40kVA

ON REQUEST



Inserts
Ø 630 ÷900 mm



Tool for flange necks



Trolley



Electrical crane



The INSPECTOR Data-logging



Rollers

and:
Inserts Ø 24”÷ 36” IPS

Oman





DELTA 1200 and DELTA 48”

Self-aligning welding machines, suitable for welding HDPE pipes and ducts for the transport of water and other fluids under pressure, up to Ø 1200 (Delta 1200) 48” IPS (DELTA 48”). The DELTA 1200 and DELTA 48" were designed in accordance to international standards (UNI 10565, ISO 12176-1), and consists of:

- Machine body with a bearing frame, four steel clamps and two hydraulic thrust cylinders with non-drip quick couplings and steel inserts.
- Extractable heating plate with separate thermometer for reading the working temperature.
- Extractable electrically controlled milling cutter (with self detaching device) for levelling the ends of the pipe and/or fitting, with a safety microswitch, overload cut out, and emergency push button.
- Electrohydraulic gearcase with a clamp opening and closing lever, maximum pressure and discharge valves (useful also during the “Dual Pressure” welding), hydraulic hoses with non-drip quick couplings, a timer (for the heating and welding phases) and an electrical panel with a differential circuit breaker.
- Milling cutter/heating plate support with an electronic thermoregulator for the control of the working temperatures.

Holes on the chassis to hook the machine for a rapid and easier handling.

DELTA 1200 and DELTA 48” can weld fittings such as elbows, tees, branches and flange necks. This is possible because the 3rd clamp can be anchored to the 1st and 2nd (movable) and slide along with the pipe. The fitting must be locked in the 4th clamp. Necks with a highly reduced tang can be welded with the help of a special tool (on request), applied to the clamps.

STANDARD COMPOSITION


Machine body


Detach device for heater


Gearcase


Electronic thermoregulator


Milling cutter


Heating plate


Support

TECHNICAL FEATURES

PLUS

DELTA 1200
710 ÷ 1200 mm

DELTA 48"
28” IPS ÷ 48” IPS

MASTER 1000 mm

* Suggested power generator 50kVA

Working range	**DELTA 1200** 710 ÷ 1200 mm
	DELTA 48" 28” IPS ÷ 48” IPS
Materials	HDPE, PP For other materials contact RITMO S.P.A.
Power supply	400 V 3F+N+PE 50/60 HZ
Total absorbed power*	28200 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 45’
Dimensions machine body (W x D x H)	2465 x 1870 x 1900 mm (97” x 73.5” x 75”)
Weight machine body	2500 Kg (5510 lb)
Weight trolley	830 Kg (1830 lb)

ON REQUEST



Inserts **Delta 1200**
Ø 710 ÷1100 mm
Master Ø 1000 mm



Tool for flange necks



Trolley for machine body



Electrical crane



The INSPECTOR Data-logging



Rollers

Delta 48"
Ø 28” ÷ 48” IPS;
Ø 30” ÷ 42” DIPS

and Trolley for support Heating Plate/Facer

Venezuela



www.ritmo.it



DELTA 1600 ECO

Self-aligning welding machines, suitable for welding HDPE pipes and ducts for the transport of water and other fluids under pressure, up to Ø 1600.
DELTA 1600 ECO is designed in accordance to international standards (UNI 10565, ISO 12176-1), and consists of:

- Machine body with a bearing frame, four steel clamps and two hydraulic thrust cylinders with non-drip quick couplings and steel inserts.
- Extractable heating plate with separate thermometer for reading the working temperature.
- Extractable electrically controlled milling cutter (with self detaching device) for levelling the ends of the pipe and/or fitting, with a safety microswitch, overload cut out, and emergency push button.
- Electrohydraulic gearcase with a clamp opening and closing lever, maximum pressure and discharge valves (useful also during the “Dual Pressure” welding), hydraulic hoses with non-drip quick couplings, a timer (for the heating and welding phases) and an electrical panel with a differential circuit breaker.
- Milling cutter/heating plate support with an electronic thermoregulator for the control of the working temperatures.

Holes on the chassis to hook the machine for a rapid and easier handling.

DELTA 1600 ECO welds fittings such as elbows, tees, branches and flange necks. This is possible because the 3rd clamp can be anchored to the 1st and 2nd (movable) and slide along with the pipe. The fitting must be locked in the 4th clamp. Necks with a highly reduced tang can be welded with the help of a special tool (on request), applied to the clamps.

STANDARD COMPOSITION



Machine body | Detach device for heater | Gearcase | Electronic thermoregulator | Milling cutter | Heating plate | Support

TECHNICAL FEATURES

PLUS

800 ÷ 1600 mm

MASTER 1000 mm

HOLE FOR RAPID AND EASIER HANDLING

Working range	800 ÷ 1600 mm
Materials	HDPE, PP For other materials contact RITMO S.P.A.
Power supply	400 V 3F+N+PE 50/60 HZ
Total absorbed power	55500 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 45’
Dimensions machine body (W x D x H)	3534 x 2236 x 2226 mm (139,1” x 88” x 87,6”)
Weight machine body	4100 Kg (9040 lb)
Weight standard composition	6000 Kg (13.230 lb)

ON REQUEST



Ø 800 ÷1400 mm
Master Ø 1200 mm



Tool for flange necks



Working area



Electrical crane



The INSPECTOR Data-logging





DELTA 1600 HDR

This is a self-aligning welding machine with hydraulic clamps suitable for welding HDPE pipes for the transport of water and other fluids under pressure, up to Ø 1600 mm.
The DELTA 1600 HDR is designed in accordance to International standards (UNI 10565, ISO 12176-1). The DELTA 1600 HDR can weld fittings such as elbows, tees, branches and flange necks.

- Robust machine body made of steel
- Steel hydraulic clamping
- Automatic detaching device of heating plate
- Raised platform deck for perfect monitoring of fusion process
- Easy to operate control panel
- THE INSPECTOR data-logging compatible
- On board hydraulic control gearcase
- Pressure adjustment and pressure release valves for easy operations
- Hydraulically controller facer with safety microswitch
- Teflon coated heating plate with indipendent thermometer



STANDARD COMPOSITION


Machine body


Detach device for heater


Hydraulic clamps


Working area


Milling cutter


Heating plate


Support

TECHNICAL FEATURES

PLUS

800 ÷ 1600 mm

HYDRAULIC CLAMPS and ROLLERS

HEAVY DUTY CHASSIS 4,8 Ton

Working range	800 ÷ 1600 mm; 32” IPS ÷ 60” DISP
Materials	HDPE, PP For other materials contact RITMO S.P.A.
Power supply	400 V 3F+N+PE 50/60 HZ
Total absorbed power*	45000 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Dimensions machine body (W x D x H)	3550 x 2400 x 2550 mm (140” x 94.4” x 100.5”)
Weight machine body	4800 Kg (10585 lb)
Weight milling cutter/heating plate/support	1580 Kg (3485 lb)

* Suggested power generator 75kVA

ON REQUEST



Inserts Ø 800 ÷1400 mm



Tool for flange necks



Trolley



The INSPECTOR Data-logging



Hydraulic Rollers

watch the video

and:
Inserts Ø 32”÷ 54” IPS; 30”÷ 60” DIPS

Bahrein





DELTA DRAGON CNC

Butt fusion welding can be managed automatically by using the Delta Dragon CNC system; this would eliminate any risk of error due to the operator. It is available in two versions: **SA with manual extraction of heating plate, FA with integrated mechanical extraction of heating plate.**

The CNC system is available for two machines: Delta Dragon 250 and 315. The gearcase it is equipped with a compact and innovative plastic casing, which can resist to the most extreme job site working conditions; particular attention was paid to the connections as well, by applying military type plugs. An easy to use software and control panel allow to view the most widely used welding standards (ISO, GIS, DVS and other). By selecting any one of the standard and pipe diameter/SDR, all the welding parameters (pressure, time, temperature) would be automatically calculated according to the standard itself. If the chosen welding cycle is not included in the standards listed above, it is possible to manually input the welding parameters (diameter, SDR, type of material, welding time and pressure...) by simply entering the "out of standard" mode. In both cases, the machine is able to automatically manage all the phases of the welding cycle, including milling and heating control. At the end of the welding cycle, all data are stored in the in-built memory, up to 4000 records. Serial ports enable the operator to connect the gearcase to a portable serial printer (to obtain an immediate report) or to a PC. The gearcase is equipped with GPS, USB port for welding report in PDF and to firmware upgrade.

The complete configuration includes:
- a linear transducer applied to the machine body
- a manually extractable heating element (SA) or an automatically extractable heating element (FA)
- hydraulic hoses with non-drip quick couplings for connecting the gearcase to the machine body
- a milling cutter
- a transducer cable for connecting the gearcase to the machine body
- a milling cutter/heating plate support

ON REQUEST



Inserts smartlock
Ø 75 ÷225 mm
Ø 90 ÷280 mm



Tool for flange necks



Bar code reader



Rollers

PLUS

GPS

CNC ELIMINATE ANY RISK OF ERROR

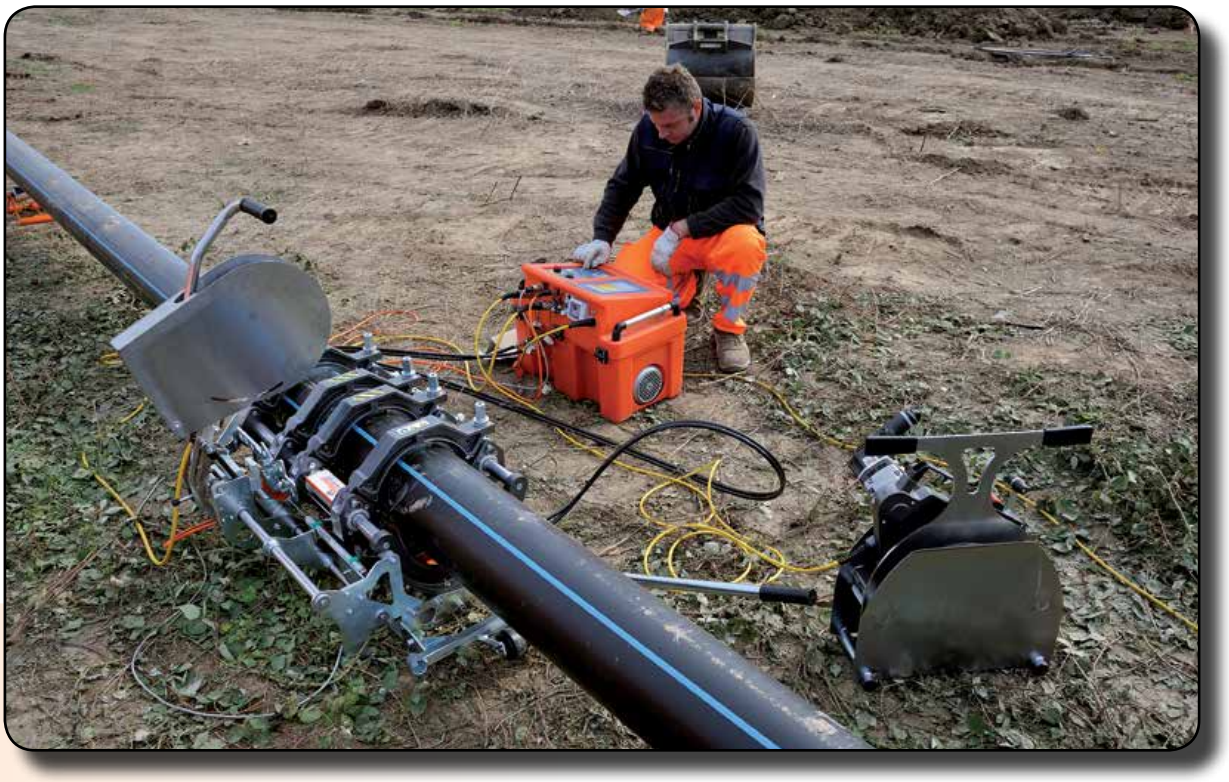
TECHNICAL FEATURES

	DELTA DRAGON CNC 250	DELTA DRAGON CNC 315
Working range	75 ÷ 250 mm	90 ÷ 315 mm
Materials	HDPE, PP, PB, PVDF For other materials contact RITMO S.P.A.	HDPE, PP, PB, PVDF For other materials contact RITMO S.P.A.
Power supply	110 Vac 50/60 HZ 230 Vac 50/60 HZ	110 Vac 50/60 HZ 230 Vac 50/60 HZ
Total absorbed power*	4000 W (110 V) 4150 W (230 V)	4500 W (110 V) 5150 W (230 V)
Welding cycle	Semi-Automatic Fully-Automatic	Semi-Automatic Fully-Automatic
Memory capacity	4000 welding cycles	4000 welding cycles
Dimensions machine body (W x D x H)	1000 x 820 x 1000 mm	1150 x 970 x 1170 mm
Dimensions gearcase (W x D x H)	580 x 461 x 490 mm 22.8” x 18.2” x 19.3”	580 x 461 x 490 mm 22.8” x 18.2” x 19.3”
Weight machine body	90 Kg (198.5 lb)	125 Kg (275.6 lb)
Weight gearcase	39 Kg (86 lb)	39 Kg (86 lb)
Protection degree	IP 54	IP 54
	* Suggested power generator 6,5 ÷ 7kVA	* Suggested power generator 8 ÷ 8,5kVA



INTUITIVE CONTROL PANEL
GPS
LARGE GRAPHIC DISPLAY
EASY TO USE
USB PORT
REPORT PDF

Italy



ALL TERRAIN - TRAILER - REMEDY LINE

HIGH LEVEL PERFORMANCE



DIFFERENCES BETWEEN ALL TERRAIN, TRAILER AND REMEDY LINE

PLUS

HIGH PERFORMANCE

ENHANCES PRODUCTIVITY

	ALL TERRAIN	TRAILER	REMEDY
Working standards mm	√	√	√
Working standards “IPS /“DIPS	√	√	√
International standards ISO 21307 HIGH PRESSURE and ASTM F2620	√	√	√
Welds fittings	√	√	√
Easy Life Welding System	√	√	√
Data-logging	√	√	√
PRE-SET 20 customized welding cycles	√	√	√
Intuitive control panel	√	√	√
GPS traceability	√	√	√
Report PDF	√	√	√
Self-contained Generator on-board	√	-	√
Heater/Facer on-board	√	√	√
Insert - Fast-locking system	√	√	√
Trolley with wheels	√	√	-
Self-propelled on wheel	√	-	-
Self-propelled on track	-	-	√
Remote control track	-	-	√
Remotely wire-controlled IN-DITCH USE up to 12 m (39 ft)	√	√	√
Carriage can be removed for in-ditch use	√	√	√
Lateral rollers	√	√	√



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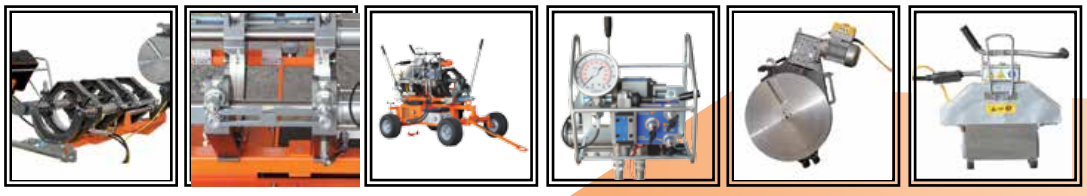
DELTA 250 TRAILER MANUAL

Self-aligning hydraulic butt fusion machine, suitable for welding underpressure pipes for water, gas and other fluids up to Ø 250 mm (8" DIPS). Welds according to the International standards ISO 21307 HIGH PRESSURE and ASTM F2620.
DELTA 250 TRAILER MANUALincludes:

- A trailer-mounted machine body, easily removable from the trolley in order to perform also into the ditch, adapting to the conditions of the job site. It comes with the fast-locking adapters system SMARTLocK RITMO Patented, thanks to which is possible to change adapters in few seconds.
- A manaul control panel
- An on-board electric milling cutter that is equipped with a safety microswitch to prevent from accidental starts, a thermal circuit breaker to protect the engine and also features an ergonomic docking system and on/off switches. To allow the weld in ditches, the milling cutter is easily removable from the trolley/machine body in order to reduce the overall dimensions of the machine and ease the load/unload process.
- An extractable heating plate Teflon-coated (PTFE) equipped with an independent thermometer to check the working emperature.
- A heating plate support which comes with a high-temperature-proof bag, which also avoid the heating element from being scratched.

DELTA 250 TRAILER MANUAL is able to weld fittings like elbows, tees, Y-branches and flanges necks.
Available in the 110 V and 230 V versions.

STANDARD COMPOSITION



Detachable machine body | Detach device for heater | Trolley | Manual panel | Milling cutter | Heating plate and support

TECHNICAL FEATURES

PLUS

75 ÷ 250 mm
water - gas - oil

SMARTLOCK
fast-locking adapters
system Ritmo
patented

Working range	75 ÷ 250 mm; 2” IPS ÷ 8” DIPS
Materials	HDPE, PP, PB, PVDF For other materials contact RITMO S.P.A.
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Total absorbed power	4600 W (110 V) 4600 W (230 V)
Working temperature	180° ÷ 260° C (356° ÷ 500° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 20’
Dimensions machine body (W x D x H)	1100 x 1340 x 1300 mm 43.3” x 52.7” x 51,1”
Weight machine body	105 Kg (232 lb)
Weight standard composition	227 Kg (500 lb)
Suggested power generator	5,5 ÷ 6kVA

ON REQUEST



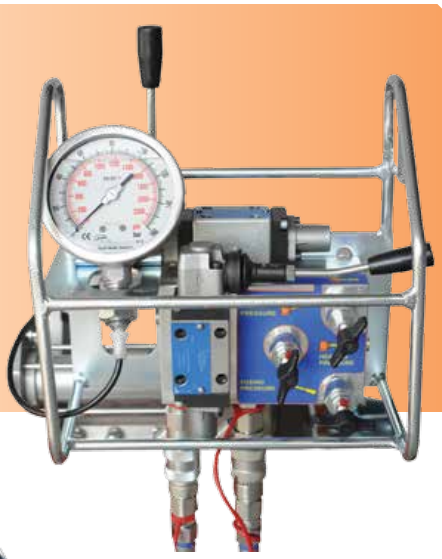
Inserts
Ø 75 ÷ 225 mm
Ø 2” ÷ 8” IPS
Ø 3” ÷ 8” DIPS



Tool for flange necks



HS rollers 250









DELTA 250 TRAILER

Self-aligning hydraulic butt fusion machine, suitable for welding underpressure pipes for water, gas and other fluids up to Ø 250 mm (8" DIPS). Built according to the International standards ISO 21307 HIGH PRESSURE and ASTM F2620. DELTA 250 TRAILER includes:

- A trailer-mounted machine body, easily removable from the trolley in order to perform also into the ditch, adapting to the conditions of the job site. It comes with the fast-locking adapters system SMARTLocK RITMO Patented, thanks to which is possible to change adapters in few seconds.
- An on-board electric milling cutter that is equipped with a safety microswitch to prevent from accidental starts, a thermal circuit breaker to protect the engine and also features an ergonomic docking system and on/off switches. To allow the weld in ditches, the milling cutter is easily removable from the trolley/machine body in order to reduce the overall dimensions of the machine and ease the load/unload process.
- An extractable heating plate Teflon-coated (PTFE) equipped with an independent thermometer to check the working temperature.
- An EASY LIFE control panel which is also removable from the machine body to be able to check the welding phases outside from the ditches. It allows the operator to program and pilot all the welding duty cycle in an easy, fast and very intuitive way. It also controls the temperature of the heating plate, always visible on the display. It includes GPS and a data-logging system to store the welding data; USB port for download welding report PDF, or a printer ESC-POS connection, or firmware upgrade. The EASY LIFE system can store up to 4000 joint reports. Possibility to pre-set 20 customized welding cycles.
- A heating plate support which comes with a high-temperature-proof bag, which also avoid the heating element from being scratched.

DELTA 250 TRAILER is able to weld fittings like elbows, tees, Y-branches and flanges necks.
Available in the 110 V and 230 V versions.

STANDARD COMPOSITION


Machine body


Detach device for heater


Trolley


Control panel with GPS


Milling cutter


Heating plate

TECHNICAL FEATURES

PLUS

75 ÷ 250 mm
water - gas - oil

SMARTLOCK
fast-locking adapters
system Ritmo
patented

* Suggested power generator
5,5 ÷ 6kVA

Working range	75 ÷ 250 mm; 2" IPS ÷ 8" DIPS
Materials	HDPE, PP, PB, PVDF For other materials contact RITMO S.P.A.
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Total absorbed power*	4400 W (110 V) 4200 W (230 V)
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 20'
Dimensions machine body (W x D x H)	1080 x 1380 x 1330 mm 42.5" x 54.3" x 52,4"
Weight machine body	85 Kg (187,4 lb)
Weight standard composition	200 Kg (441 lb)

ON REQUEST



Inserts
Ø 75 ÷ 225 mm



Tool for flange necks



HS rollers 250

and:
Inserts Ø 2" ÷ 8" IPS; 3" ÷ 8" DIPS

India





DELTA 355 ALL TERRAIN

DELTA 355 ALL TERRAIN welds HDPE, PP pipes and fittings for the transportation of gas, water and other fluids under pressure from 125 mm to 355 mm (4" IPS ÷ 14" IPS). It is designed to work according to welding standard ISO 21307 High Pressure and ASTM F2620. DELTA 355 ALL TERRAIN can be equipped with two types of engine: diesel low vibration and petrol. The engine, like an electrical generator, indipendently gives the necessary power supply to the machine during all its working and movement phases.

Machine composition:
- Removable control panel with data-logging, memory up to 4000 welding reports, GPS treacebility; USB port for welding PDF report / data download / firmware upgrade .
- Easy-life welding control system: hardware and software have been developed to interact to each other sharing data during the entire workflow. Once set the welding parameters up, the system guarantees the repetition of the welding cycles, avoiding errors. The operator only have to confirm the work phases on the just pushing a button. Possibility to pre-set 20 customized welding cycles.
- Chassis is equipped with front steering wheels and rear traction; parking brake, machine frame design for forklift lifting
- Removable machine body to work in tight spaces with shavings collection tray.
- Dragging bar designed to weld between the 3rd and 4th clamp.
- Ritmo patented insert quick release SMARTLOCK SYSTEM.
- On-board electrical milling cutter with integrated locking handle system, safety switch-off device, motor thermic protection and gas spring to easily lift/lower the facer.
- On-board heating plate with protection frame and insulated protection bag; gas-spring for easy lift/lower the heating plate
- Heating plate and facer locking system for safe transportation .
- Two hydraulic rollers for pipe loading and unloading.
- Kit for network power supply connection (upon request) excluding the machine engine and weld in closed enviroments
- 25 lt capacity tank for more than 12 working hours operating time.

STANDARD COMPOSITION


Machine body


Hydraulic Rollers


Trolley


Control panel with GPS


Milling cutter


Heating plate

TECHNICAL FEATURES

PLUS

125 ÷ 355 mm
4” IPS ÷ 14” IPS

SELF CONTAINED
GPS
EASY LIFE
WELDING SYSTEM

Working range	125 ÷ 355 mm 4” IPS ÷ 14” IPS
Materials	HDPE, PP, for other materials contact RITMO S.P.A.
Power supply	self contained / indipendent **Diesel -** Kohler-Lombardini - 8,6 kW **Gasoline -** Honda - 14,5 kW
Fuel tank capacity	25 Litres
Operational tank capacity	over 12 Hours
Absorbed power Max	5,6 kW (230 V Single Phase) it refers to the welding machine use when connected to network power supply (excluding on-board generator)
Memory	4000 Reports
Dimensions (W x D x H)	2210 x 1600 x 1335 mm 83” x 63” x 52.5”
Weight machine body	275 Kg (606 lb)
Weight standard composition	755 Kg (1665 lb)

ON REQUEST

Inserts Ø 125 ÷ 315 mm;
Ø 4”÷ 12” IPS;
Ø 4”÷ 12” DIPS;
Tool for flange necks,
HS 355 rollers,
Kit for for IN-DITCH use, Plug for network power supply connection, Lifting kit.

DELTA 355 TRAILER

DELTA 355 TRAILER welds HDPE, PP pipes and fittings for the transportation of gas, water and other fluids under pressure from 125 mm to 355 mm (from 4” IPS to 14” IPS). **DELTA 355 TRAILER does not have an on board generator and needs external power supply; no traction.**



Delta 355 All Terrain lifting



Only machine body lifting



Gasoline or Diesel generator available

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DELTA 500 TRAILER

DELTA 500 TRAILER is a self-aligning fusion machine, suitable for welding thermoplastic pipes for the transport of water, gas and other fluids under pressure, up to Ø 500 mm (6" IPS ÷ 20" IPS). Machine can fuse pipes according to the ISO 21307 High Pressure standard and ASTM F2620. Standard machine features:

- Machine body mounted on a 4 wheeled chassis, easily removable for working in tight spaces.
- New RITMO Patented assisted system to open/close/lift clamps-heater-facer.
- Machine body with an automatic heating plate detaching device: helps removing the heating plate safely and fast
- Fast-locking system which allows to place and remove inserts in seconds.
- 4 wheeled chassis with 2 steering wheels and a safety brake .
- An on-board milling cutter that is equipped with a safety microswitch to prevent from accidental starts, a thermal circuit breaker to protect motor and also features an ergonomic docking system and on/off switches.
- An on-board heating plate Teflon-coated (PTFE) which comes with a high-temperature-proof bag, which also avoid the heating element from being scratched.
- Removable control panel with data-logging, memory up to 4000 welding reports, GPS treacebility; USB port for welding PDF report / data download / firmware upgrade .
- Easy-life welding control system: hardware and software have been developed to interact to each other sharing data during the entire workflow. Once set the welding parameters up, the system guarantees the repetition of the welding cycles, avoiding errors. The operator only have to confirm the work phases on the just pushing a button. Possibility to pre-set 20 customized welding cycles.
- Two hydraulic rollers for pipe loading and unloading.

DELTA 500 TRAILER allows to easily weld fittings like elbows, tees, Y-branches and stub flanges. Available in 230 V single phase or three phase.

STANDARD COMPOSITION


Machine body


Hydraulic Rollers


Trolley


Control panel with GPS


Milling cutter


Heating plate

TECHNICAL FEATURES

PLUS

200 ÷ 500 mm

ISO 21307
HIGH PRESSURE

Assisted system to open/close/lift clamps-heater-facer

Working range	200 ÷ 500 mm; 6” IPS ÷ 20” IPS
Materials	HDPE, PP For other materials contact RITMO S.P.A.
Power supply	230 V Single Phase 50/60 Hz 230 V Three Phase 50/60 Hz
Total absorbed power*	7250 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14 ° ÷ 104° F)
Dimensions machine body (W x D x H)	1822 x 1152 x 814 mm 71.8”x 45.4” x 32”
Dimensions trolley (W x D x H)	3295 x 1385 x 1331 mm 130” x 53” x 52.4”
Weight machine body	580 Kg (1279 lb)
Weight Trolley	270 Kg (595.3 lb)
Weight standard composition	850 Kg (1830 lb)

* Suggested power generator 12kVA



ON REQUEST



Inserts
Ø 200 ÷ 500 mm



Tool for flange necks

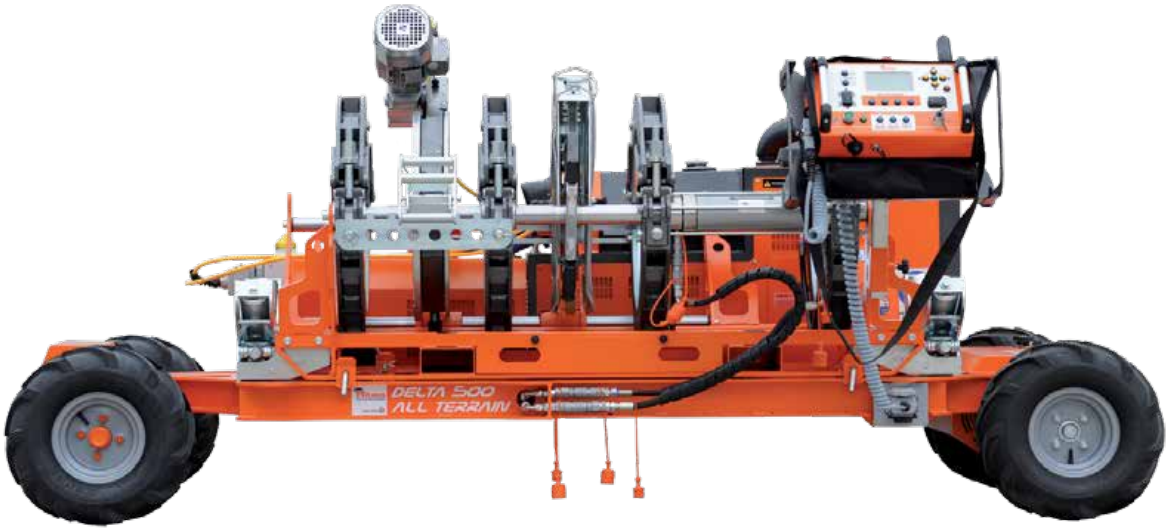


HS Rollers 630

and:
Inserts Ø 6”÷ 18” IPS; 6”÷ 18” DIPS; KIT for IN-DITCH USE

India





DELTA 500 ALL TERRAIN

DELTA 500 ALL TERRAIN is powered by a low-vibration diesel engine and equipped with front steering wheels and rear traction. The machine is suitable for welding pressure pipes (HDPE, PP) for the transportation of water, gas and other fluids up to Ø 500 mm (20 “IPS). Built according to the International standards ISO 21307 HIGH PRESSURE and ASTM F2620.

- Working range from Ø 200 to 500 mm (6” IPS ÷ 20” IPS).
- Welds fittings like elbows, tees, Y-branches and stub flanges.
- New RITMO Patented assisted system to open/close/lift clamps-heater-facer.
- Fast-locking system which allows to place and remove inserts in seconds.
- Intuitive control panel and large graphic display.
- Removable control panel with data-logging.
- Memory up to 4000 welding reports.
- GPS treacebility.
- USB port for welding PDF report / data download / firmware upgrade
- Easy-life welding control system: hardware and software have been developed to interact to each other sharing data during the entire workflow. Once set the welding parameters up, the system guarantees the repetition of the welding cycles, avoiding errors. The operator only have to confirm the work phases on the just pushing a button. Possibility to pre-set 20 customized welding cycles.
- Machine body and on-board generator easily removable for working in tight spaces.
- Machine can be powered using 230 V Three phase 50/60 Hz.
- Wheeled chassis designed to be lifted using a forklift.
- Two hydraulic rollers for pipe loading and unloading.
- On-board electric milling cutter that is equipped with a safety microswitch.
- On-board generator removable for independent use.

STANDARD COMPOSITION


Machine body


Hydraulic Rollers


Trolley


Control panel with GPS


Milling cutter


Heating plate

TECHNICAL FEATURES

PLUS

200 ÷ 500 mm

ISO 21307
HIGH PRESSURE

Assisted system to open/close/lift clamps-heater-facer

Working range	200 ÷ 500 mm; 6” IPS ÷ 20” IPS
Materials	HDPE, PP For other materials contact RITMO S.P.A.
Power supply	self contained - diesel engine 230 V Three Phase 50/60 Hz
Total absorbed power	7250 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Dimensions machine body (W x D x H)	1822 x 1152 x 990 mm 71.7” x 45,4” x 39”
Dimensions trailer (W x D x H)	2955 x 1578 x 1370 mm 116,4” x 62.1” x 54”
Weight standard composition	1350 Kg 2976 lb)



ON REQUEST



Inserts
Ø 200 ÷ 500 mm



Tool for flange necks

and:
Inserts Ø 6”÷ 18” IPS; 6”÷ 18” DIPS; KIT for IN-DITCH USE,
HS Roller 630; Plug for network power supply connection

Italy





REMEDY 500 FA

REMEDY 500 FA is an on-site welding machine equipped with a low-vibration diesel engine and tracks. The machine is suitable for welding pressure pipes (HDPE, PP) for the transportation of water, gas and other fluids up to Ø 500 mm. Built according to International Standards.

- Working range from Ø 250 to 500 mm
- CNC welding control system: hardware and software have been developed to interact to each other sharing data during the entire workflow. Once set the welding parameters up, the system guarantees the repetition of the welding cycles, avoiding errors.
- FA: Fully Automatic with integrated mechanical extraction of heating plate
- Welds fittings like elbows, tees, Y-branches and stub flanges.
- Machine body easily removable for working in tight spaces.
- RITMO Patented assisted system to open/close/lift clamps
- Fast-locking system which allows to place and remove inserts in seconds.
- Intuitive control panel and large graphic display.
- Removable control panel with data-logging.
- Memory up to 4000 welding reports.
- GPS treacebility.
- USB port for welding PDF report / data download / firmware upgrade.
- On-board electrical milling cutter that is equipped with a safety microswitch and hydraulic movement on the machine.
- On-board hydraulic heating plate Teflon-coated (PTFE) which comes with a high-temperature-proof bag, which also avoid the heating element from being scratched.
- Ground and slope: straight slope with a gradient higher than 30% and side slope with gradient above 16%.
- Remote control track up to 100 m (328 ft).
- Two hydraulic rollers for pipe loading and unloading.

Available a model with manual welding cycle.

STANDARD COMPOSITION


Machine body


Hydraulic Rollers


Tracks


Control panel with GPS


Milling cutter


Heating plate

TECHNICAL FEATURES

PLUS

250 ÷ 500 mm
water - gas - oil

FA:
FULLY AUTOMATIC
extraction of heating plate

Working range	250 ÷ 500 mm
Materials	HDPE, PP, For other materials contact RITMO S.P.A.
Working temperature	180° ÷ 260° C (356 ÷ 500°F)
Outside temperature range	-5° ÷ 40° C (23 ÷ 104°F)
Power supply	self contained / indipendent Diesel - Kubota
Engine	1123 cc - 17 KW
Fuel tank capacity	43 Litres (11.3 gal)
Fuel consumption	3.6 Litres/hr (1 gal/hr)
Hydraulics reservoir capacity	90 Litres (24 gal)
Length for ditch welding Extensions	7 m (22,9 ft)
Remote control track	up to 100 m (328 ft)
Dimensions machine on site (W x D x H)	2818 x 2060 x 1349 mm 9.2 x 6,7 x 4.4 ft
Weight standard composition	2200 Kg (4850 lb)





Italy





DELTA 630 TRAILER

DELTA 630 TRAILER is a self-aligning fusion machine, suitable for welding thermoplastic pipes for the transport of water, gas and other fluids under pressure, up to Ø 630 mm. Machine can fuse pipes according to the ISO 21307 High Pressure standard and ASTM F2620.

- Machine body mounted on a 4 wheeled chassis, easily removable for working in tight spaces; steel hydraulic clamping with the fast-locking inserts, which allows to place and remove inserts in seconds; self detaching device: helps removing the heating plate during welding procedure.
- 4 wheeled chassis with 2 steering wheels and a safety brake.
- An on-board electric milling cutter that is equipped with a safety microswitch to prevent from accidental starts, a thermal circuit breaker to protect motor and hydraulic movement on the machine.
- An on-board hydraulic heating plate Teflon-coated (PTFE) which comes with a high-temperature-proof bag, which also avoid the heating element from being scratched.
- An EASY LIFE control panel with a large graphic display and GPS traceability, which is also removable from the machine body to be able to weld from outside the ditch. Allows the operator to program and pilot all the welding cycle in an easy, fast and very intuitive way. Includes a data-logging system to store full welding data, downloadable through a USB port. The EASY LIFE system has the capability store up to 4000 joint reports. Possibility to pre-set 20 customized welding cycles.
- Two innovative lateral rollers that can be operated by a cordless drill.
- Control panel for hydraulic movements.

DELTA 630 TRAILER allows to easily weld fittings like elbows, tees, Y-branches and stub flanges.

STANDARD COMPOSITION


Machine body


Rollers


Hydraulic clamps


Control panel with GPS


Milling cutter


Heating plate

TECHNICAL FEATURES

PLUS

225 ÷ 630 mm

ISO 21307
HIGH PRESSURE

Steel Hydraulic clamping

Working range	225* ÷ 630 mm; 8” IPS ÷ 24” DIPS
Materials	HDPE, PP For other materials contact RITMO S.P.A.
Power supply	230 V Three Phase 50/60 Hz 400 V Three Phase 50/60 Hz
Total absorbed power**	9300 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14 ° ÷ 104° F)
Dimensions machine body (W x D x H)	1822 x 1152 x 990 mm 71.7” x 53” x 39”
Dimensions trailer (W x D x H)	2955 x 1578 x 1370 mm 116,3” x 62,1” x 54”
Weight standard composition	1320 Kg (2910 lb)
Weight trolley	435 Kg (960 lb)

** Suggested power generator 18kVA

* 225 mm from SDR 26 to SDR 7



ON REQUEST



Inserts
Ø 225 ÷ 630 mm



Tool for flange necks

and:
Inserts Ø 8”÷ 24” IPS; 8”÷ 20” DIPS; KIT for IN-DITCH USE, HS Roller 630, KIT hoist, metal cage for transport

India



www.ritmo.it



watch the video

DELTA 630 ALL TERRAIN

DELTA 630 ALL TERRAIN is powered by a low-vibration diesel engine, suitable for welding thermoplastic pipes for the transport of water, gas and other fluids under pressure, up to Ø 630 mm (24” IPS”). Machine can fuse pipes according to the ISO 21307 High Pressure standard and ASTM F2620
Standard machine features:

- Working range: Ø 225* - 630 mm (8” IPS - 24” DIPS); *Ø 225 mm from SDR 26 to SDR 7
- 4 steering wheels drive
- Diesel-engine 2200 cc 22,7 Kw
- Self-contained with on-board generator
- Sliding 3rd CLAMP for fittings welding
- Automatic welding System “Easy Life”. possibility to pre-set 20 customized welding cycles
- DATA-LOGGING with GPS; memory 4000 report
- Detachable Control Panel
- Remotely wire-controlled up to 12 m
- Trench-Friendly
- SmartLock Inserts
- Hydraulic Lifts
- Hydraulic-controlled Clamps and Milling cutter
- Climbs rough terrain up to 30%

STANDARD COMPOSITION



Machine body | Hydraulic Rollers | Hydraulic clamps | Control panel with GPS | Milling cutter | Heating plate

TECHNICAL FEATURES

PLUS

225 ÷ 630 mm

4 STEERING WHEELS DRIVE

SELF CONTAINED WITH ON-BOARD GENERATOR

Working range	225* ÷ 630 mm; 8” IPS ÷ 24” DIPS
Materials	HDPE, PP For other materials contact RITMO S.P.A.
Engine	2200 cc - 22,7 Kw
Fuel type	Diesel
Fuel tank capacity	40 Litres
Operational tank capacity	12 Hours
Hydraulics reservoir capacity	80 Litres
Dimensions machine body (W x D x H)	2200 x 3100 x 2000 mm 86.6” x 122” x 78.8”
Weight machine body	800 Kg (1764 lb)
Weight standard composition	3000 Kg (6614 lb)

*225 mm from SDR 26 to SDR 7

ON REQUEST



Inserts
Ø 225 ÷ 630 mm



Tool for flange necks

and:
Inserts Ø 8”÷ 24” IPS; 8”÷ 20” DIPS; KIT for IN-DITCH USE, HS Roller 630, KIT hoist, metal cage for transport



U.S.A.



www.ritmo.it



DELTA 1000 TRAILER

DELTA 1000 TRAILER is a self-aligning fusion machine, suitable for welding thermoplastic pipes for the transport of water, gas and other fluids under pressure, up to Ø 1000 mm.
Machine can fuse pipes according to the ISO 21307 High Pressure standard and ASTM F2620.

Standard machine features:

- Machine body mounted on a 4 wheeled chassis, easily removable for working in tight spaces; steel hydraulic clamping with the fast-locking inserts, which allows to place and remove inserts in seconds; self detaching device: helps removing the heating plate during welding procedure.
- 4 wheeled chassis with 2 steering wheels and a safety brake.
- An on-board electric milling cutter that is equipped with a safety microswitch to prevent from accidental starts, a thermal circuit breaker to protect motor and hydraulic movement on the machine.
- An on-board hydraulic heating plate Teflon-coated (PTFE) which comes with a high-temperature-proof bag, which also avoid the heating element from being scratched.
- An EASY LIFE control panel with a large graphic display and GPS traceability, which is also removable from the machine body to be able to weld from outside the ditch. Allows the operator to program and pilot all the welding cycle in an easy, fast and very intuitive way. Includes a data-logging system to store full welding data, downloadable through a USB port. The EASY LIFE system has the capability store up to 4000 joint reports. Possibility to pre-set 20 customized welding cycles.
- Two hydraulic lateral rollers.
- Control panel for hydraulic movements.

DELTA 1000 TRAILER allows to easily weld fittings like elbows, tees, Y-branches and stub flanges.

STANDARD COMPOSITION


Machine body


Hydraulic Rollers


Hydraulic clamps


Control panel with GPS


Milling cutter


Heating plate

TECHNICAL FEATURES

PLUS

355 ÷ 1000 mm

HYDRAULIC MOVEMENTS CLAMPS, FACER HEATER

Two hydraulic lateral rollers

* Suggested power generator 40kVA

Working range	355 ÷ 1000 mm; 14” IPS ÷ 36” IPS/DIPS
Materials	HDPE, PP For other materials contact RITMO S.P.A.
Power supply	230 V Three Phase 50/60 Hz 400 V Three Phase 50/60 Hz
Total absorbed power*	32000 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14° ÷ 104° F)
Time to reach welding temperature	< 45’
Dimensions machine body (W x D x H)	3890 x 2890 x 2845 mm 153.1” x 113.8” x 112”
Dimensions trolley (W x D)	4450 x 2285 mm 175,2” x 90”
Weight machine body	4385 Kg (9667 lb)
Weight Trolley	830 Kg (1830 lb)

ON REQUEST



Inserts Ø355÷900 mm



Tool for flange necks



Trolley



HS Roller 1000

watch the video

and:
Inserts Ø 14”÷ 36” IPS; 14”÷ 36” DIPS; KIT for IN-DITCH USE , KIT hoist, pallet for transport

Isreael





REMEDY 1000 EL

REMEDY 1000 EL is an independent, high-productivity welding machine driven by tracks and powered by a Diesel 3.6-cylinder in-line Turbo-Common Rail on-board generator. The machine designed for butt-welding HDPE and PP pipes up to Ø 1000 mm for the transportation of water, gas and other fluids under pressure. The machine can weld according to ISO 21307 High Pressure and ASTM F2620 standards.

- Working range from Ø 355 to 1000 mm
- EASY LIFE welding system that allows the operator to program and control the machine welding cycle in a simple, fast and intuitive way. The system incorporates a data-logging for welding data record and a GPS for traceability data storage. The internal memory allows to record up to 4000 welds (including diameter and SDR settings) and to download them in PDF via USB port. The welding machine memory can store up to 20 customized working parameters for immediate recall.
- The machine body it's easily removable from the tracks so to be able to work in confined spaces. An extension kit for working in the ditch is available on request. It is also possible to disconnect the welding machine from its generator and connect it to an mainline or another external generator.
- Hydraulic system for opening and closing the clamps.
- Electrohydraulic milling cutter on board with safety microswitch and hydraulic movement on the machine
- Heating plate with hydraulic movement on the machine, coated with Teflon (PTFE) and supplied with a high temperature resistant casing, which prevents the plate from being damaged by scratches.
- Terrain and slope: drives up to 30% slopes
- Remote tracks control for driving the machine on ground (up to 100m range).
- Control panels for the hydraulic movement of the hotplate cutter and lateral roller. Controlled by intuitive and practical levers.
- Removable Easy Life welding cycle panel with graphic display.
- Hydraulic side rollers to facilitate pipe loading and handling.
- Raised working position with platform for working and operating comfortably.
- Adjustable width between tracks for easy transportation.
- REMEDY 1000 EL is able to weld fittings such as bends, tees, branches and collars for flanges.

A fully manual control welding cycle version is also available.

STANDARD COMPOSITION


Machine body


Hydraulic Rollers


Tracks


Control panel with GPS


Milling cutter


Heating plate

TECHNICAL FEATURES

Working range	355 ÷ 1000 mm; 14” IPS ÷ 36” IPS/DIPS
Materials	HDPE, PP For other materials contact RITMO S.P.A.
On board generator	3600 cc - 85 Kw 2300 Rpm
Fuel	Diesel
Fuel tank	160 Litres (42.2 gal)
Autonomy min.	10,5 Hours
Hourly consumption	max 15 Litres
Max absorption*	32000 W
Power supply *	400 V Three Phase50/60 Hz
Max operator side noise	79 dB
Tracks driving speed	1.5 Km/h o 3 Km/h
Length of tracks	450 mm (17.7")
Max operating slope	30%
Body machine sizes Max dimentions on site (W x D x H)	3530 x 3370 x 2817 mm 11.1 x 11 x 9.4 ft
Body machine + tracks, platform max dimentions on site (W x D x H)	4424 x 2780 x 3496 mm 14.5 x 9.1 x 11.4 ft
Tracks dimentions (W x D x H)	4424 x 2220 x 2159 mm 14.5 x 9.5 x 7 ft
Weight tracks and generator	5500 Kg (12.125 lb)
Total weight of the machine at standard composition	9200 Kg (20.280 lb)

PLUS

355 ÷ 1000 mm

HYDRAULIC MOVEMENTS CLAMPS, FACER HEATER

Two hydraulic lateral rollers

*** Voluntary action.**
The welding machine is independent, has a generator on board and does not require an external power supply.
However, it is possible to connect an external generator to the machine body only.
Recommended power 42000 W

ON TREQUEST



Inserts
Ø355÷900 mm



Tool
for flange necks

and:
Inserts Ø 14”÷ 36” IPS; 14”÷ 36” DIPS; KIT for IN-DITCH USE, HS Roller 1000




WOODRID
Esta





PLUS

LARGE GRAPHIC DISPLAY

"OPEN SYSTEM"

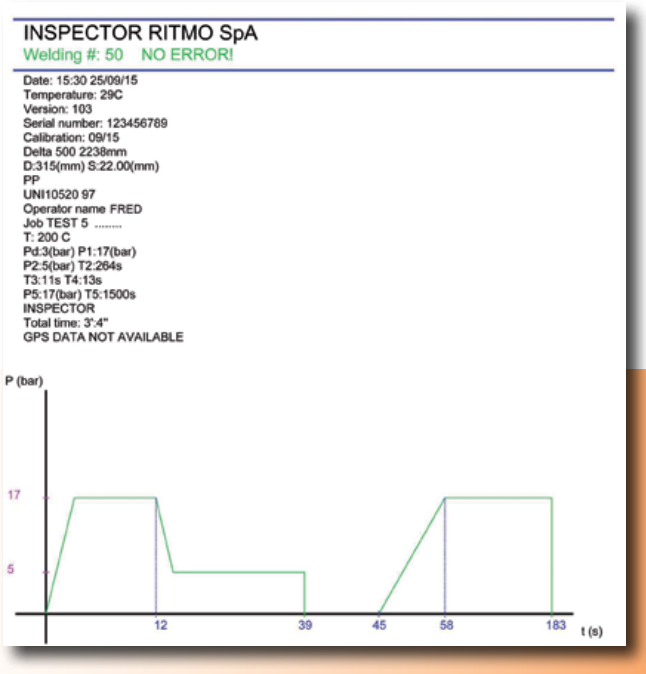


THE INSPECTOR

THE INSPECTOR - DATA LOGGING that controls, records and generates a PDF report of the entire welding process. The Inspector is an "open system" that can be used with Ritmo machines or others. The large graphic display allows an easy reading of welding reports.
THE INSPECTOR is installed in a hard case made of PP, with protection degree IP 67. It is sold with a bag that contains the data logging and the battery charger with international adapters.

- Preloaded Major Welding Standard (ISO, DVS, and others)
- Memory of 1000 cycles
- USB port for Welding Report in PDF
- Integrated GPS
- Firmware upgradable via USB
- Battery operated (24 hr of operational work)
- Battery charger with international adapters
- Built-in plastic case in PP with IP67 protection class
- Transport bag
- Applicable to Ritmo machines and other

POWER SUPPLY 24 V DC
Outside Temperature Range -10° C 40° C (14° ÷ 104° F)
Protection Degree IP 67
Dimensions Data Logging 240 x 265 x 110 mm (9.4" x 10.4" x 4.3")
Weight 2,6 Kg (5,7 lb)



STANDARD COMPOSITION
THE INSPECTOR, transport bag, battery, charger and International adapters

ON REQUEST
Transducer connection cables; the cable and the transducer may vary according to the welder model (see price list for the correspondent codes)
Infrared thermometer



PLUS

INTUITIVE
EASY TO USE
ACCURATE
VERSATILE

COMPOSED OF FEW PARTS

RID - RITMO INTERNAL DEBEADER

Internal Debeader by RITMO S.p.A. covering a range from Ø 90 up to 630 mm (3” ÷ 24 IPS).
A complete kit set is composed by:

- 6 pcs of alloy rods 2,15 mtr (84.6”) each (one is acting as turn handle)
- 5 pcs of centering brackets to ensure that the rods are in center of the pipe.
- Alloy rods are delivered in a special carrying bag with a handle
- Internal Debeader Head 90 - 110 mm (* 3" IPS)
- Internal Debeader Head 125 - 160 mm (* 4" ÷ 5" IPS)
- Internal Debeader Head 160 - 200 mm (* 5" ÷ 6" IPS)
- Internal Debeader Head 225 - 315 mm (* 8" ÷ 10" IPS)
- Internal Debeader Head 355 - 500 mm (* 12" ÷ 18" IPS)

Sold separately:
- Internal Debeader Head 560 - 630 mm (* 22" ÷ 24" IPS)

watch the video



TECHNICAL FEATURES

Models	Max Bead width
Ø 90 ÷ 110 mm; 3" IPS ÷ 3" DIPS	20 mm
Ø 125 ÷ 160 mm; 4" ÷ 5" IPS	25 mm
Ø 160 ÷ 200 mm; 5" ÷ 6" IPS	25 mm
Ø 225 ÷ 315 mm; 8" ÷ 10" IPS	35 mm
Ø 355 ÷ 500 mm; 12" ÷ 18" IPS	35 mm
Ø 560 ÷ 630 mm; 22" ÷ 24" IPS	45 mm
Materials	HDPE, PP, PP-R, PVDF For other materials contact RITMO S.P.A.

*Contact us or your distributor for reference chart of SDR covered

PLUS

INTUITIVE
EASY TO USE
ACCURATE
VERSATILE

FOR PIPES
UP TO 1200 mm
AND SHEETS

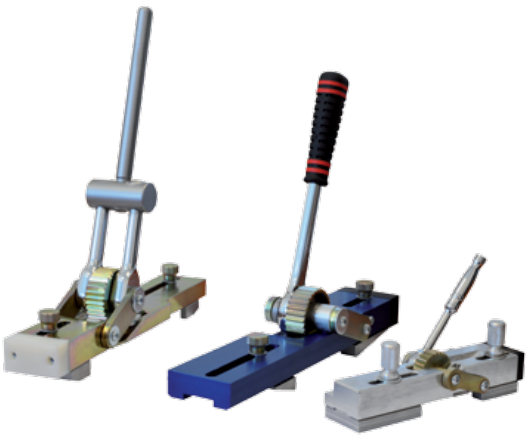


RED - RITMO EXTERNAL DEBEADER

External Debeader by RITMO S.p.A. covering a range from Ø 63 up to 1200 mm; 2” IPS ÷ 48” IPS

Designed to remove the external bead from a complete butt fusion welded joint.
The tool knocks onto the pipe bead, then alignment blocks slide against the pipe surface to guide it around the pipe
The blade cuts the under the bead and the handle helps pull the tool around the pipe, cutting the bead away.
RED works on flat surfaces too and removes the bead from plastic sheets without the guides for pipes.

Available in three different sizes
- RED 63 - 125
- RED 90 - 400
- RED 400 - 1200





TECHNICAL FEATURES

Models	Working range
RED 63 - 125	Ø 63 ÷ 125 mm; 2” IPS ÷ 4” IPS
RED 90 - 400	Ø 90 ÷ 400 mm; 3” IPS ÷ 14” DIPS
RED 400 - 1200	Ø 400 ÷ 1200 mm; 16” IPS ÷ 48” IPS
Material	HDPE - PP



ROLLERS 355

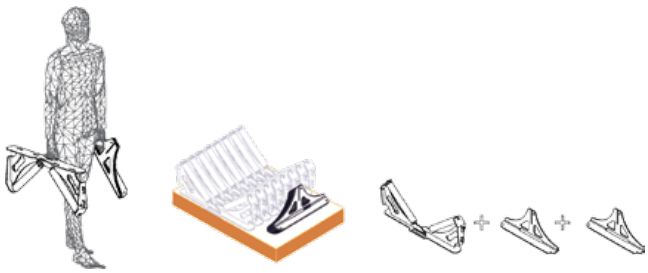
ROLLERS

This device is essential for supporting the pipes while they are being welded with the butt fusion machines. The roller minimizes pipe friction and drag force independently of the jobsite conditions.

- ROLLER 355 can sustain pipes up to Ø 355 mm - 14” IPS. Easy to use and light

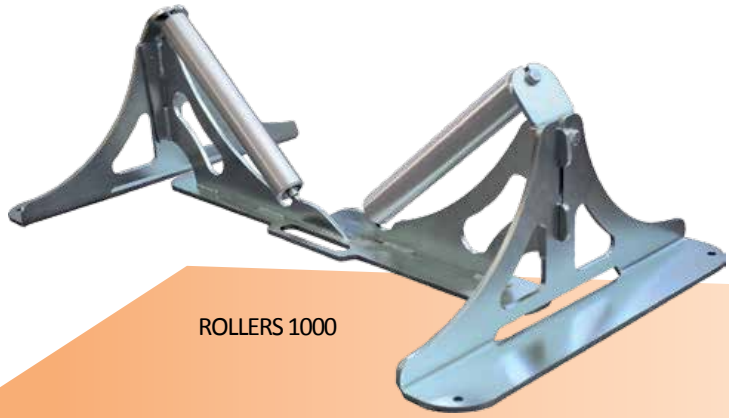
- ROLLER 1000 can sustain pipes from up to 1000 mm - 36” DIPS. The structure is light, so it is easy to carry and can be disassembled and reassembled in a few steps. This feature allows to store up to eight rollers in a single pallet thus improving transportation and logistics. Another advantage is the misalignment of the rollers in order to move the pipe easily even with the presence of weld beads. Working range from Ø 315 to 1000 mm (10” DISP - 36” DIPS).

STANDARD COMPOSITION
Complete roller with tools



TECHNICAL FEATURES

Rollers 355	
Working range	Ø 0 ÷ 355 mm; up to 14” IPS
Dimensions	360 x 220 x 200 mm 14.1” x 8.6” x 7.9”
Weight	6 Kg (13.2 lb)
Rollers 1000	
Working range	Ø 315 ÷ 1000 mm Ø 10” DIPS ÷ 36” DISP
Dimensions	1040 x 600 x 320 mm 41” x 23.6” x 12.6”
Weight	27 Kg (59.5 lb)



ROLLERS 1000



HS ROLLERS

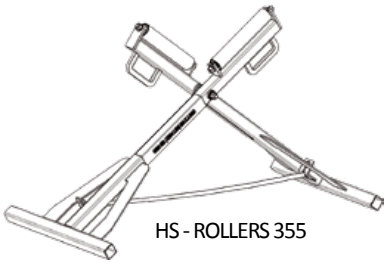
HIGH STAND ROLLERS, this device is essential for supporting the pipes while they are being welded with the butt fusion machines. The rollers minimise pipe friction and drag force no matter which is the construction site condition. Special design for All Terrain / Trailer Line.



HS - ROLLERS 250

HS ROLLERS 250

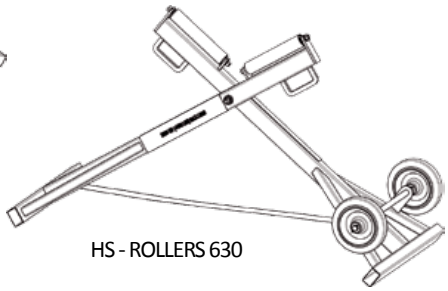
Working range max: Ø 250 mm (8" DIPS)
Overall dimension (W x D x H):
1150 x 500 x 756 mm
45.3" x 19.7" x 29.7"
Weight: 26 Kg 57.3 lb
Weight capacity: 500 Kg 1.100 lb



HS - ROLLERS 355

HS ROLLERS 355

Working range max: Ø 355 mm (14" IPS)
Overall dimension (W x D x H):
1421 x 600 x 818 mm
55.9" x 23.6" x 32.2"
Weight: 33 Kg 72.8 lb
Weight capacity: 1000 Kg 2.200 lb



HS - ROLLERS 630

HS ROLLERS 630

Working range max: Ø 630 mm (24" DIPS)
Overall dimension (W x D x H):
1766 x 800 x 982 mm
69.5" x 31.5" x 38.6"
Weight: 55 Kg 121.2 lb
Weight capacity: 2000 Kg 4.400 lb

HS ROLLERS 1000

Working range max: Ø 1000 mm (36" DIPS)
Weight: 140 Kg 309 lb
Weight capacity: 3000 Kg 6.600 lb



HS - ROLLERS 1000

RITMO ELECTROFUSION,
THE COMPLETE SYSTEM AROUND YOUR CONSTRUCTION SITE



Ritmo
PLASTIC WELDING TECHNOLOGY

ELECTROFUSION MACHINES



*** WORKING RANGE Ø mm**

HIGH PRESSURE	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	450	500	560	630	710	800	900	1000	> 1000
ELEKTRA LIGHT	20	25	32	40	50	63	75	90	110	125	140	160																	
ELEKTRA S	20	25	32	40	50	63	75	90	110	125	140	160	180	200	X	X	X	X											
ELEKTRA M	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	X	X	X	X							
ELEKTRA 315	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315											
ELEKTRA 500	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	450	500							
ELEKTRA 1000	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	450	500	560	630	710	800	900	1000	> 1000
ELEKTRA XL	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	450	500	560	630	710	800	900	1000	> 1000

LOW PRESSURE	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315
MUSTANG 160 V2			32	40	50	63	75	90	110	125	140	160						
UNIVERSAL 160 V1			32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315

* Working range might vary according to fittings brand. Check with the fitting manufacturer the power and the welding time required

x
ONLY 110 V MODEL



ELEKTRA S

ELEKTRA S is an universal electrofusion machine characterized by high performance and reduced weight. It is available in two different power supplies: 230V and 110V. The welding machine has been designed to weld EF fittings up to OD 200* mm (230 V version) or 315* mm (110 V version) for PE, PP, PP-R high pressure pipelines. It can weld EF fittings within the range 8 ÷ 48 V. Provided with:

- High resistance technopolymer shell
- "Defender" protection system against dust and rain
- Lifting handle and cable wrapping
- in-built memory of 4000 welding report
- Possibility to download the welding report thanks to the USB port in PDF, CSV, BIN format. For BIN format it is necessary the RITMO transfer software. The USB port is also used to upgrade the welding machine firmware and to plug the ESC-POS printer to get immediately the welding report printed on site.
- 2,4" LCD Graphic display
- Intuitive control panel with the possibility to customize the menu with 20 different languages
- 90° universal connectors 4.0-4.7mm, no need of adapters
- Laser scanner in order to read the EF fitting barcode and to set automatically the welding parameters according to the ISO 13950. The laser technology of the scanner enhances the reading quality in case of severe light reflections or contrasts. It is also possible to enter manually both the welding parameters (Voltage/Time) and the welding barcode digits.
- Traceability: ISO 12176-3 Operator traceability; ISO 12176-4 Fitting/ pipe traceability
- In-built GPS device (on request)

STANDARD COMPOSITION



90° Universal connectors 4.0-4.7mm



Laser Scanner



Manual scraper



Carrying case

ON REQUEST



Software Ritmo Transfer

TECHNICAL FEATURES

PLUS

HIGH PERFORMANCE

PDF WELDING REPORT

RESISTANT AGAINST GENERATOR POWER SURGES

Model	**ELEKTRA S**
Working range *	20 ÷ 315 mm 110 V* 20 ÷ 200 mm 230 V*
Materials	PE, PP, PP-R
Welding output voltage	8 ÷ 48 V
Power supply	110 V ±15% Single Phase 50/60 Hz 230 V ± 15% Single Phase 50/60 Hz
Absorbed power **	1700 W (110 V) 1800 W (230 V)
Max. output current	60 A (110 V) 70 A (230 V)
60% Duty Cycle output ISO 12176-2	45 A
Operating mode	ISO 13950 welding barcode Manual (barcode digits, tension/time)
Connections	USB port for the pen drive and for the ESC-POS printer
Memory	4000 welding report
Ambient temperature	-20° ÷ 50° C;
T° probe precision	± 1° C
Traceability	ISO 12176-3 ISO 12176-4
Protection degree	IP 54
Languages	20
Overall dimensions, machine body	246 x 390 x 240 mm
Overall dimensions, carrying case	290 x 445 x 295 mm
Weight machine body	5,75 Kg
Weight, machine body + welding and power supply cable + laser scanner	8,4 Kg
Recommended generator to cover the complete working range	3,5 ÷ 4 kVA

***** Working range might vary according to fittings brand. Check with the fitting manufacturer the power and the welding time required.

** Power at 60% Duty Cycle





ELEKTRA M

ELEKTRA M is an universal electrofusion machine characterized by high performance and reduced weight. It is available in two different power supplies: 230V and 110V. The welding machine has been designed to weld EF fittings up to OD 315* mm (230 V version) or 500* mm (110 V version) for PE, PP, PP-R high pressure pipelines. It can weld EF fittings within the range 8 ÷ 48 V. Provided with:

- High resistance technopolymer shell
- "Defender" protection system against dust and rain complete of removable filter
- Lifting handle and cable wrapping
- In-built memory of 4000 welding report
- Possibility to download the welding report thanks to the USB port in PDF, CSV, BIN format. For BIN format it is necessary the RITMO transfer software. The USB port is also used to upgrade the welding machine firmware and to plug the ESC- POS printer to get immediately the welding report printed on site.
- 2,4" LCD Graphic display
- Intuitive control panel with the possibility to customize the menu with 20 different languages
- 90° universal connectors 4.0-4.7mm, no need of adapters
- Laser scanner in order to read the EF fitting barcode and to set automatically the welding parameters according to the ISO 13950. The laser technology of the scanner enhances the reading quality in case of severe light reflections or contrasts. It is also possible to enter manually both the welding parameters (Voltage/Time) and the welding barcode digits.
- Traceability: ISO 12176-3 Operator traceability; ISO 12176-4 Fitting/ pipe traceability
- In-built GPS device (on request)

STANDARD COMPOSITION



90° Universal connectors 4.0-4.7mm



Laser Scanner



Manual scraper



Carrying case

ON REQUEST



Software Ritmo Transfer

TECHNICAL FEATURES

PLUS

HIGH PERFORMANCE

PDF WELDING REPORT

RESISTANT AGAINST GENERATOR POWER SURGES

Model	**ELEKTRA M**
Working range *	20 ÷ 500 mm 110 V* 20 ÷ 315 mm 230 V*
Materials	PE, PP, PP-R
Welding output voltage	8 ÷ 48 V
Power supply	110 V ±15% Single Phase 50/60 Hz 230 V ± 15% Single Phase 50/60 Hz
Absorbed power **	2200 W (110 V) 2300 W (230 V)
Max. output current	80 A (110 V) 100 A (230 V)
60% Duty Cycle output ISO 12176-2	60 A
Operating mode	ISO 13950 welding barcode Manual (barcode digits, tension/time)
Connections	USB port for the pen drive and for the ESC-POS printer
Memory	4000 welding report
Ambient temperature	-20° ÷ 50° C;
T° probe precision	± 1° C
Traceability	ISO 12176-3 ISO 12176-4
Protection degree	IP 54
Languages	20
Overall dimensions, machine body	246 x 390 x 240 mm
Overall dimensions, carrying case	290 x 445 x 295 mm
Weight machine body	6,55 Kg
Weight, machine body + welding and power supply cable + laser scanner	9,2 Kg
Recommended generator to cover the complete working range	5,5 ÷ 6 kVA

***** Working range might vary according to fittings brand. Check with the fitting manufacturer the power and the welding time required.

** Power at 60% Duty Cycle





ELEKTRA XL

ELEKTRA XL is an universal electrofusion machine characterized by high performance and reduced weight. The welding machine has been designed to weld EF fittings up to OD 1600* mm for PE, PP, PP-R high pressure pipelines. It is available in the 230 V version and in two different EF fittings range: 8 ÷ 48 V or 8÷80 V. Provided with:

- High resistance technopolymer shell
- "Defender" protection system against dust and rain complete of removable filter
- Lifting handle and cable wrapping
- In-built memory of 4000 welding report
- Possibility to download the welding report thanks to the USB port in PDF, CSV, BIN format. For BIN format it is necessary the RITMO transfer software. The USB port is also used to upgrade the welding machine firmware and to plug the ESC-POS printer to get immediately the welding report printed on site.
- 2,4" LCD Graphic display
- Intuitive control panel with the possibility to customize the menu with 20 different languages
- 90° universal connectors 4.0-4.7mm, no need of adapters
- Laser scanner in order to read the EF fitting barcode and to set automatically the welding parameters according to the ISO 13950. The laser technology of the scanner enhances the reading quality in case of severe light reflections or contrasts. It is also possible to enter manually both the welding parameters (Voltage/Time) and the welding barcode digits.
- Traceability: ISO 12176-3 Operator traceability; ISO 12176-4 Fitting/ pipe traceability
- In-built GPS device (on request)

STANDARD COMPOSITION



90° Universal connectors 4.0-4.7mm



Laser Scanner



Manual scraper



Carrying case

ON REQUEST



Software Ritmo Transfer

TECHNICAL FEATURES

PLUS

HIGH PERFORMANCE

PDF WELDING REPORT

RESISTANT AGAINST GENERATOR POWER SURGES

Model	**ELEKTRA XL**
Working range *	20 ÷ 1600 mm
Materials	PE, PP, PP-R
Welding output voltage	8 ÷ 48 V or 8 ÷ 80 V
Power supply	230 V ± 15% Single Phase 50/60 Hz
Absorbed power **	3500 W (230 V)
Max. output current	120 A (230 V)
60% Duty Cycle output ISO 12176-2	95 A
Operating mode	ISO 13950 welding barcode Manual (barcode digits, tension/time)
Connections	USB port for the pen drive and for the ESC-POS printer
Memory	4000 welding report
Ambient temperature	-20° ÷ 50° C;
T° probe precision	± 1° C
Traceability	ISO 12176-3 ISO 12176-4
Protection degree	IP 54
Languages	20
Overall dimensions, machine body	246 x 390 x 240 mm
Overall dimensions, carrying case	290 x 445 x 295 mm
Weight machine body	6,75 Kg
Weight, machine body + welding and power supply cable + laser scanner	9,4 Kg
Recommended generator to cover the complete working range	6,5 ÷ 7 kVA

* Working range might vary according to fittings brand. Check with the fitting manufacturer the power and the welding time required.

** Power at 60% Duty Cycle





ELEKTRA LIGHT

ELEKTRA LIGHT is an universal electrofusion machine, suitable for welding pipe/fittings for the transport of gas, water and for welding fire sprinkler system (HDPE, PP, PP-R couplings from 8 to 48 V). The Elektra Light machine is made in compliance with international standards. This is welding machine's structure is light weight, so it is extremely easy to carry around. Composed of: machine body, an in built memory with 325 welding cycles, featuring the possibility of transferring data to a Pc/Laptop, report in PDF file.

STANDARD COMPOSITION



Universal connectors 90°



Laser scanner



Manual scraper

ON REQUEST



Software Ritmo Transfer



Adapter DB9M-USB

* Working range might vary according to fittings brand. Check with the fitting manifacturer the power and the welding time required.

** Power at 60% Duty Cycle



TECHNICAL FEATURES

Working range*	20 ÷ 125/160 mm; ½" IPS ÷ 4"/6" IPS
Materials	HDPE, PP, PP-R
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Absorbed power**	1300 W
Max. output current	60 A
60% Duty Cycle output	23 A
Memory capacity	325 report
Protection degree	IP 54
Weight machine body	~ 7 Kg (15.4 lb)
Dimensions machine body	200 x 250 x 210 mm; 7.9" x 9.8" x 8.3"
Languages	19
Suggested power generator for full welding range	3,5 ÷ 4 kVA



ELEKTRA 315

ELEKTRA 315 is an universal electrofusion machine, suitable for welding pipe/fittings for the transport of gas, water and for welding fire sprinkler system (HDPE, PP, PP-R couplings from 8 to 48 V). The Elektra 315 machine is made in compliance with international standards. Composed of: machine body and carrying case, intuitive control panel an in built memory with 500 welding cycles, featuring the possibility of transferring data to a Pc/Laptop; an laser scanner - barcode reading system that allows the automatic setting of the welding parameters. Report in PDF file.

STANDARD COMPOSITION



Universal connectors 90°



Laser scanner



Manual scraper

ON REQUEST



Software Ritmo Transfer



Adapter DB9M-USB

* working range might vary according to fittings brand. Check with the fitting manifacturer the power and the welding time required.

** Power at 60% Duty Cycle



TECHNICAL FEATURES

Working range*	20 ÷ 315 mm; ½" IPS ÷ 10" DIPS
Materials	HDPE, PP, PP-R
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Absorbed power**	2600 W
Max. output current	100 A
60% Duty Cycle output	60 A
Memory capacity	500 report
Protection degree	IP 54
Weight machine body	~ 16 Kg (35.2 lb)
Dimensions machine body	263 x 240 x 300 mm; 10.3" x 9.4" x 1.8"
Dimensions transport case	405 x 285 x 340 mm; 16" x 11.2"x 13.4"
Languages	21
Suggested power generator for full welding range	5,5 ÷ 6 kVA



ELEKTRA 500 - ELEKTRA 1000

ELEKTRA is an high performance universal electrofusion machine, suitable for welding HDPE, PP, PP-R couplings (from 8 to 48 V). It is available in two versions: ELEKTRA 500, ELEKTRA 1000, and are composed of:

- machine body surrounded by a tubular steel frame, thus creating a protective structure that gives to the welding design and functionality while also serving as transport handle and cable winding
- large graphic display that stands out for the size and resolution of the icons, making them easy to read in the setting and welding stages
- intuitive control panel that simplifies and speeds up the setting of the welder
- Universal connectors 90° 4 - 4,7 mm; no need of adapters
- Laser scanner - barcode reading system that allows the welding parameters automatic setting. Possibility to set the welding parameters manually: by setting the welding Voltage/Time, or by entering the fiitting's numerical code indicated under the bar code. Traceability function ISO 12176
- internal memory of 4000 welds; the name of the operator among with the traditional welding data can be generated in PDF format. These reports can be downloaded to a PC through a USB port
- the USB port allows updating the welder firmware, the reports download or a printer ESC-POS connection
- GPS (on request)

STANDARD COMPOSITION



Universal connectors 90°



Laser scanner



Manual scraper



Transport case

Models available:
ELEKTRA 500
230 V CE or Schuko socket
ELEKTRA 1000
230 V CE or Schuko socket.

ELEKTRA 500 GPS 110 V or 230 V
ELEKTRA 1000 GPS 230 V

TECHNICAL FEATURES

PLUS

HIGH PERFORMANCE

REPORT PDF

DISPLAY 6,5”

Model	ELEKTRA 500	ELEKTRA 1000
Working range*	20 ÷ 500 mm ½” IPS ÷ 20” IPS	20 ÷ 1600 mm ½” IPS - 63” IPS
Materials	HDPE, PP, PP-R	HDPE, PP, PP-R
Welding output voltage	8 ÷ 48 V	8 ÷ 48 V
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz	230 V Single Phase 50/60 Hz
Absorbed power**	3100 W (110 V) 3100 W (230 V)	3500 W
Max. output current	100 A (110 V) 120 A (230 V)	120 A
60% Duty Cycle output	70 A	90 A
Operating mode	Barcode Manual (Numerical code or Voltage/Time)	Barcode Manual (Numerical code or Voltage/Time)
Connections	USB for external memory and ESC-POS	USB for external memory and ESC-POS
Memory	4000 Reports	4000 Reports
Outside temperature range	-20° ÷ 50° C; (-4° ÷ 122° F)	-20° ÷ 50° C (-4° ÷ 122° F)
T° reading probe precision	± 1° C (± 33,8° F)	± 1° C (± 33,8° F)
Traceability data	ISO 12176	ISO 12176
Protection degree	IP 54	IP 54
Languages	19	19
Dimensions machine body	255 x 270 x 385 mm 10” x 10.6” x 15.1”	255 x 270 x 385 mm 10” x 10.6” x 15.1”
Dimensions transport case	410 x 290 x 485 mm 16.1” x 11.4” x 19.1”	410 x 290 x 485 mm 16.1” x 11.4” x 19.1”
Weight with cables	~ 18 Kg (39.6 lb)	~ 20 Kg (44.1 lb)
Suggested power generator for full welding range	5,5 ÷ 6 kVA	6,5 ÷ 7 kVA

* Working range might vary according to fittings brand. Check with the fitting manifacturer the power and the welding time required.

** Power at 60% Duty Cycle

watch the video

Italy



ELEKTRA LINE - OVERVIEW

	ELEKTRA S	ELEKTRA M	ELEKTRA XL	ELEKTRA LIGHT	ELEKTRA 315	ELEKTRA 500	ELEKTRA 1000
Working range * 110 V	20 ÷ 315* ½" IPS ÷ 12 IPS*	20 ÷ 500* ½" IPS ÷ 20" IPS*	-	20 ÷ 125/160* ½" IPS ÷ 6" IPS*	20 ÷ 315* ½" IPS ÷ 10" DIPS*	20 ÷ 500* ½" IPS ÷ 20" IPS*	-
Working range * 230 V	20 ÷ 200* ½" IPS ÷ 6" DIPS*	20 ÷ 315* ½" IPS ÷ 12" IPS*	20 ÷ 1600* ½" IPS - 63" IPS*	20 ÷ 125/160* ½" IPS ÷ 6" IPS*	20 ÷ 315* ½" IPS ÷ 10" DIPS*	20 ÷ 500* ½" IPS ÷ 20" IPS*	20 ÷ 1600* ½" IPS - 63" IPS*
Automatic Temperature compensation	√	√	√	√	√	√	√
Constantly welding cycle monitored	√	√	√	√	√	√	√
Barcode scanner (ISO 13950)	√	√	√	√	√	√	√
Manual fusion input	√	√	√	√	√	√	√
Welding report	√	√	√	√	√	√	√
Connections	USB port Type A	USB port Type A	USB port Type A	Adapter DB9M-USB	Adapter DB9M-USB	USB port Type A	USB port Type A
Report file format	PDF - BIN	PDF - BIN	PDF - BIN	PDF - BIN	PDF - BIN	PDF - BIN - CSV	PDF - BIN - CSV
Memory	4000 cycles	4000 cycles	4000 cycles	325 cycles	500 cycles	4000 cycles	4000 cycles
Sound allarm	√	√	√	√	√	√	√
Error recognition	√	√	√	√	√	√	√
Fusion time	√	√	√	√	√	√	√
Cooling time	√	√	√	√	√	√	√
Connectors	90° universal adapters 4.00 - 4,7 mm	90° universal adapters 4.00 - 4,7 mm	90° universal adapters 4.00 - 4,7 mm	90° universal adapters 4.00 - 4,7 mm	90° universal adapters 4.00 - 4,7 mm	90° universal adapters 4.00 - 4,7 mm	90° universal adapters 4.00 - 4,7 mm
Outside Temperature range	-20° ÷ 50° C (-4° ÷ 122° F)	-20° ÷ 50° C (-4° ÷ 122° F)	-20° ÷ 50° C (-4° ÷ 122° F)	-10° ÷ 50° C (14° ÷ 122° F)	-10° ÷ 50° C (14° ÷ 122° F)	-20° ÷ 50° C (-4° ÷ 122° F)	-20° ÷ 50° C (-4° ÷ 122° F)
Power supply (Vac)	110 V or 230 V	110 V or 230 V	230 V	110 V or 230 V	110 V or 230 V	110 V or 230 V	230 V
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Max output current	60 A (110 V) 70 A (230 V)	80 A (110 V) 100 A (230 V)	120 A	60 A	100 A	100 A (110 V) 120 A (230 V)	120 A
Welding output voltage * **	8 ÷ 48 V	8 ÷ 48 V	8 ÷ 48 V or 8 ÷ 80 V	8 ÷ 48 V	8 ÷ 48 V	8 ÷ 48 V	8 ÷ 48 V
Absorbed power **	1700W (110 V) ** 1800 W (230 V) **	2200W (110 V) ** 2300 W (230 V) **	3500 W (230 V) **	1300 W **	2600 W (110 V) ** 2600 W (230 V) **	3100 W (110 V) ** 3100 W (230 V) **	3500 W **
Suggested power generator for full welding range	3,5 ÷ 4 kVA	5,5 ÷ 6 kVA	6,5 ÷ 7 kVA	3,5 ÷ 4 kVA	5,5 ÷ 6 kVA	5,5 ÷ 6 kVA	6,5 ÷ 7 kVA
Protection degree	IP 54	IP 54	IP 54	IP 54	IP 54	IP 54	IP 54
Electrical fuse protection	√	IP 54	IP 54	√	√	√	√
Display	Graphic LCD 2,4"	Graphic LCD 2,4"	Graphic LCD 2,4"	Single line LCD	Graphic LCD 2,4"	Graphic LCD 6,5"	Graphic LCD 6,5"
Machine body dimensions	246x390x240mm 7.9"x15.3"x9.4"	246x390x240mm 7.9"x15.3"x9.4"	246x390x240mm 7.9"x15.3"x9.4"	200x250x210mm 7.9"x9.8"x8.3"	263x240x300mm 10.3" x 9.4" x 1.8"	255x270x385mm 10" x 10.6" x 15.1"	255x270x385mm 10" x 10.6" x 15.1"
Carrying case dimensions	290x445x295mm 11.4"x17.5"x11.6"	290x445x295mm 11.4"x17.5"x11.6"	290x445x295mm 11.4"x17.5"x11.6"	-	405x285x340mm 16"x11.2"x13.4"	410x290x485mm 16.1"x11.4"x19.1"	410x290x485mm 16.1"x11.4"x19.1"
Weight machine + cables	8,4 Kg (18.5 lb)	9,2 Kg (20.2 lb)	9,4 Kg (20.7 lb)	~ 7 Kg (15.4 lb)	~ 16 Kg (35.3 lb)	~ 18 Kg (39.6 lb)	~ 20 Kg (44 lb)
Weight carrying case	4.3 Kg (9.4 lb)	4.3 Kg (9.4 lb)	4.3 Kg (9.4 lb)	-	3.9 Kg (8.6 lb)	4.8 Kg (10.5 lb)	4.8 Kg (10.5 lb)
Traceability ISO	**12176 - 3** **12176 - 4**	**12176 - 3** **12176 - 4**	**12176 - 3** **12176 - 4**	-	**12176 - 4** (only fitting)	**12176 - 3** **12176 - 4**	**12176 - 3** **12176 - 4**

* Working range might vary according to fittings brand. Check with the fitting manifacturer the power and the welding time required.
** Power at 60% Duty Cycle
*** Elektra XL is available in two version: for couplings 8 ÷ 48 V and couplings 8 ÷ 80 V

MUSTANG 160 V2

This electrofusion machine is suitable for welding electrofusion fittings in HDPE from Ø 32 to Ø 160 mm (1" IPS ÷ 5" IPS, for low pressure conduits (Vulcathene-Eurofusion, Akatherm-Eurofusion, Geberit, Valsir, Coes, Waviduo). MUSTANG 160 V2 automatically detects connection to the fitting to be welded and compensates current supplied according to ambient temperature. It is also capable of detecting any malfunction that could occur before or during welding procedures. MUSTANG 160 V2 is made in compliance with the current safety standards and Directives, and the structure is light weight which makes it extremely easy to carry around.

SUPPLIED WITH
- Welding machine complete with welding cable with 90 ° connectors, fixing carabiner, plastic carrying case and manual scraper transport case and manual scraper.



TECHNICAL FEATURES

Working range	32 ÷ 160 mm; 1" IPS ÷ 5" IPS
Materials	HDPE
Power supply	230 V Single Phase 50/60 Hz
Max. absorbed power	1000 W
Max. output curent	5 A (230 V)
Outside temperature range	- 10° ÷ 45° C (14° ÷ 113° F)
Ambient temperature probe	Electronic
Protection degree	IP 54
Weight machine body	1Kg (2.2 lb)
Weight with carrying case	3,5 Kg (7.7 lb)
Dimensions machine body	65 x 185 x 46 mmmm; 2.5" x 7.2" x 1.8"
Dimensions carrying case	400 x 330 x 160 mm; 15.7" x 13" x 6.2"

UNIVERSAL 315 V1

Electrofusion welding machine:
PP-R from Ø 20 mm** (optional cables)
- Graphic display
- Auto recognition of fittings
- Memory with 350 welding reports
- Report in PDF File
- Serial/USB connector (optional)
- Self-compensation of the current supplied (according to the ambient temperature)
- Transport case
- Firmware upgradable via USB



mod. 230 V


mod. 110 V

STANDARD COMPOSITION
- carrying suitcase
- welding cables (A00, A00+, A01, A02, A04)
- welding extension cable
- manual scraper
- shoulder belt

ON REQUEST
- serial/USB adapter (welding data transfer)
- welding cable (A05)
- Printer

** WELDING CABLES

A00 YELLOW 32 ÷ 160 mm (1" IPS ÷ 5" IPS)
Coes, Akatherm, Eurofusion, Geberit, Valsir, Wavin Vulcathene

A00+ BLACK 200 ÷ 315mm (6" DIPS ÷ 10" DIPS) Wavin (Waviduo)
A01 BLUE 200 ÷ 315mm (6" DIPS ÷ 10" DIPS)
Akatherm, Valsir, Eurofusion

A02 RED 200 ÷ 315mm (6" DIPS ÷ 10" DIPS) Geberit

A04 WHITE 200 ÷ 315mm (6" DIPS ÷ 10" DIPS) Coes (Coestilen)

OPTIONAL CABLE

A05 BROWN 20 ÷ 63mm (½" IPS ÷ 2" IPS)
(PP-R) Coes (Coestherm - not 8÷48 V)

TECHNICAL FEATURES

Working range	20** ÷ 315 mm; ½" IPS ÷ 10" DIPS
Power supply	230 V Single Phase 50/60 Hz 110 V Single Phase 50/60 Hz
Max. absorbed power	2470 W (230 V) 2700 (110 V)
Outside temperature range	-10° ÷ 45° C (14°÷ 113° F)
Temperature compensation	Automatic Electronic
Protection degree	IP 54
Weight machine body	3,4 Kg (7.5 lb) (230 V) 19 Kg (41.8 lb) (110 V)
Weight with carrying case	7,2 Kg (15.9 lb)
Dimensions machine body	255 x 180 x 110 mm; 10" x 7.1" x 4.3" (230 V) 330 x 270 x 220 mm; 13" x 10.6" x 8.6" (110 V)
Dimensions carrying case	220 x 450 x 180 mm; 8.7" x 17.7" x 7.1" (230 V) 410 x 290 x 485 mm; 16.1" x 11.4" x 19.1" (110 V)

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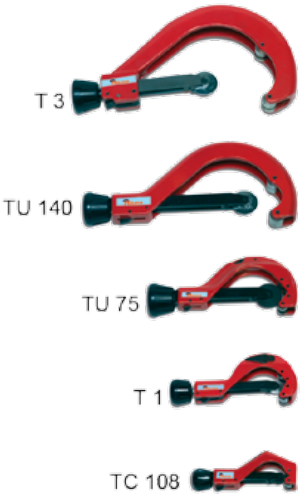
PIPE CUTTERS

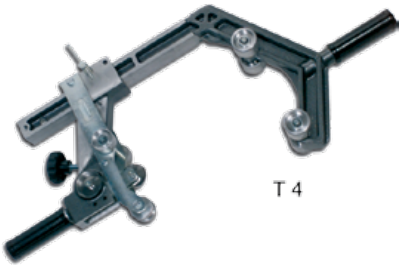
These are professional tools, essential for the manual cut of plastic pipes up to Ø 315 mm (10" DIPS). The TC 108, T1, TU 75, TU 140, T3 and T4 pipe cutters are made with the very best alloys, and are very manageable and practical to use. The pipe cutters can be fitted with various special blades with appropriate cutting heights and penetration capacities to cut pipes of different materials. The TC 108 and T1 pipe cutters (with special blades) can cut Copper (Cu) and multilayer (PEx/Al,PPr etc.) pipe.

STANDARD COMPOSITION
- Pipe cutter with blade:
TC 108
T 1 + blade Ø 25 mm (1")
TU 75 + blade Ø 44 mm (1.7")
TU 140 + blade Ø 53 mm (2.1")
T 3 + blade Ø 53 mm (2.1")
T 4 + blade Ø 53 mm (2.1")
(HDPE 80 - HDPE 100: Ø 250 SDR 13>; Ø 315 SDR 17,5 >)
- Carrying case (for the T4 pipe cutter, only)

ON REQUEST
- Blades of different diameters and heights







TECHNICAL FEATURES

MODEL	Working range Ø	Thickness	Overall dimensions	Weight
TC 108	6 ÷ 50 mm ½" CTS ÷ 1½" IPS	up to 4,2 mm	178 x 228 x 65 mm 7" x 9" x 2,5"	0,38 Kg (0.8 lb)
T1	6 ÷ 64 mm ½" CTS ÷ 2" IPS	up to 5,5 mm	222 x 282 x 95 mm 8.7" x 11.1" x 3.7"	0,60 Kg (1.3 lb)
TU 75	6 ÷ 76 mm ½" CTS ÷ 2" IPS	up to 11,5 mm	247 x 330 x 105 mm 9.7" x 13" x 4.1"	0,68 Kg (1.5 lb)
TU 140	50 ÷ 140 mm 2" IPS ÷ 5" IPS	up to 17,5 mm	351 x 483 x 155 mm 18.8" x 19" x 6.1"	1,38 Kg (3 lb)
T3	100 ÷ 160 mm 3" DIPS ÷ 5" IPS	up to 17,5 mm	372 x 465 x 200 mm 14.6" x 18.3" x 7.9"	1,65 Kg (3.6 lb)
T4	180 ÷ 315 mm 6" DIPS ÷ 10" DIPS	up to 19,4 mm	670 x 880 x 360 mm 26.4" x 34.6" x 14.2"	7 Kg (15.4 lb)

SHEARS

These are professional tools, essential for the manual cut of plastic pipes, such as PP and PP-R up to PN 25; HDPE, PB and PVDF up to Ø 75 mm (2" IPS). The C3 AC shears is entirely made in steel.

SUPPLIED WITH
- Shear body with blade



C 42



C2 AC



C3 AC

TECHNICAL FEATURES

MATERIALS	HDPE, PP, PP-R, PB, PVDF		
MODEL	Working range Ø	Overall dimensions	Weight
C 42	up to 42 mm 1 ¼" IPS	110 x 27 x 225 mm 4.3" x 1" x 8.9"	0,35 Kg (0.8 lb)
C2 AC	up to 42 mm 1 ¼" IPS	120 x 25 x 225 mm 4.7" x 1" x 8.9"	0,5 Kg (1.1 lb)
C3 AC	up to 75 mm 2" IPS	170 x 35 x 520 mm 6.7" x 1.4" x 20,5"	2,7 Kg (6 lb)





original

step 1 - facing

step 2 - scraping



watch the video

TURBO 20 - 63

TURBO is the pipe scraper patented by RITMO for pipes and fittings ranging from Ø 20 to 63 mm SDR 6 to 11 and from ½" CTS to 2" IPS". TURBO is simple and easy to use. This incredible pipe scraper can work in confined spaces substantially reducing working times, especially during repair operations. The rotating tool allows fast and precise scraping, without defects. Its blades also allow the perfect facing of the pipe ends which have been roughly cut due to a situation which makes the use of a pipe cutter difficult, like narrow spaces.

Fifteen different sizes of the TURBO are available, according to the pipe size (metric or inch). TURBO has to be used with a cordless drill.

TECHNICAL FEATURES





Transport box available



METRIC MODEL	Working range	Min ÷ Max Thickness	Scraping Lenght	Weight
TURBO 20	Ø 20 mm	2,3 ÷ 3,8 mm	45 mm	0,37 Kg
TURBO 25	Ø 25 mm	2,3 ÷ 5,3 mm	45 mm	0,47 Kg
TURBO 32	Ø 32 mm	2,3 ÷ 6,8 mm	45 mm	0,64 Kg
TURBO 40	Ø 40 mm	2,3 ÷ 8,3 mm	55 mm	0,82 Kg
TURBO 45	Ø 45 mm	-	55 mm	-
TURBO 50	Ø 50 mm	2,3÷ 10,3 mm	55 mm	1,02 Kg
TURBO 63	Ø 63 mm	2,3÷13,3 mm	55 mm	1,29 Kg

INCH MODEL	Working range	M i n ÷ M a x Thickness	SCRAPING LENGHT
TURBO ½" CTS	Ø ½" CTS	0.06" ÷ 0.09"	1.77"
TURBO ¾" CTS	Ø ¾" CTS	0.064" ÷ 0.146"	1.77"
TURBO 1" CTS	Ø 1" CTS	0.08" ÷ 0.188"	1.77"
TURBO ½" IPS	Ø ½" IPS	0.09" ÷ 0.17"	1.77"
TURBO ¾" IPS	Ø ¾" IPS	0.09" ÷ 0.20"	1.77"
TURBO 1" IPS	Ø 1" IPS	0.09" ÷ 0.26"	1.77"
TURBO 1 ¼" IPS	Ø 1 ¼" IPS	0.09" ÷ 0.33"	2.17"
TURBO 1 ½" IPS	Ø 1 ½" IPS	0.09" ÷ 0.38"	2.17"
TURBO 2" IPS	Ø 2" IPS	0.09" ÷ 0.47"	2.17"

PIPE SCRAPERS - RTC

These professional rotary scrapers, designed and patented by Ritmo, are essential to prepare the plastic pipes and fittings before electrofusion welding. Practical and handy, the pipe scrapers remove the oxidation layer caused by weather and ultraviolet rays. If not removed, the oxidation layer would severely compromise the quality of the joint.
Among the main construction features there is a device that makes it possible to maintain the thickness of the continuous chip constant, even if the pipe is misshaped, and to adjust the length of the surface to scrape according to the depth of the electrical coupler.

The RTC 710 features an extendable arm to scrape the exact length of the electrical coupler, which is an advantage when having to perform maintenance/repair jobs in the building site. The main chuck has four extendable arms that clamps directly the inside diameter of the pipe.

STANDARD COMPOSITION

- Pipe scraper
- Adapters kit (except for RTC 710)
- Spare blade
- Handwheel key (for RTC 315)
- Aluminum transport case
- Screwdriver and small cutter



RTC 160



RTC 315

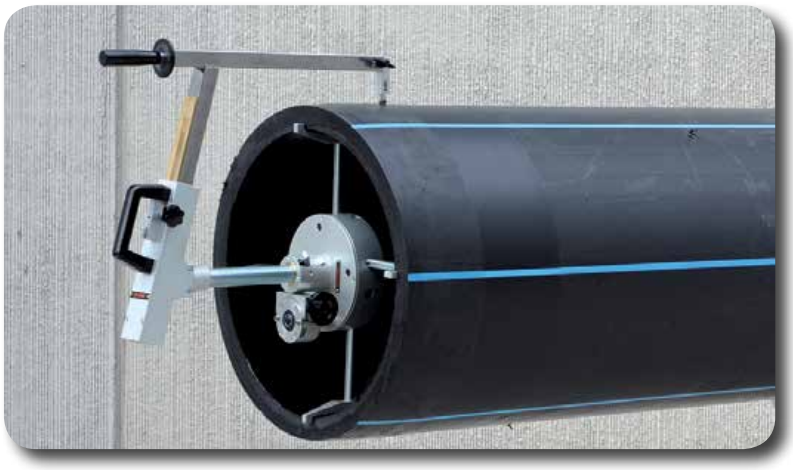
MANUAL SCRAPER

This manual tool is used with the same principle as the RTC pipe scrapers.
The MANUAL SCRAPER features a practical plastic handle and a blade.
Raccomended work range max. Ø 63 mm (2")



Manual scraper

watch the video



RTC 710

TECHNICAL FEATURES

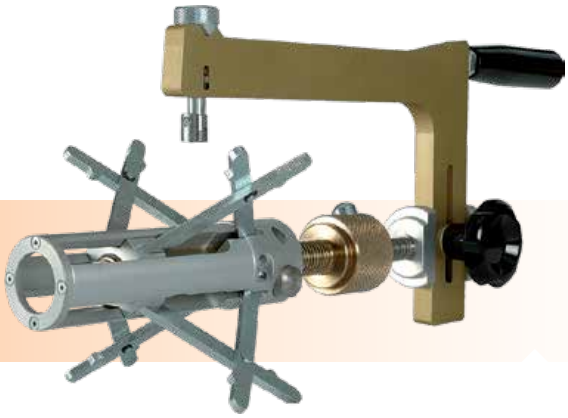
MODEL	RTC 160	RTC 315	RTC 710
Working range External Internal	Ø 50 ÷ 160 mm 2" IPS ÷ 6" IPS Ø 38 ÷ 154 mm (1.5" x 6")	Ø 75 ÷ 315 mm 3" IPS ÷ 12" IPS Ø 58 ÷ 300 mm (2.2" x 11.8")	Ø 355 ÷ 710 mm 14" IPS ÷ 28" IPS Ø 290 ÷ 675 mm (11.4" x 26.5")
Max scraping length	114 mm 4.5"	137 mm; 5.4"	530 mm; 28,7"
Max Dimensions	380 x 120 x 250 mm 14.9" x 4.7" x 9.8"	510 x 310 x 410 mm 20" x 12.2" x 16.1"	825 x 805 x 695 mm 32.5" x 31.7" x 27,3"
Dimensions transport case	390 x 210 x 135 mm 15.3" x 8,3" x 5.3"	230 x 500 x 270 mm 9" x 19.7" x 16.1"	800 x 580 x 350 mm 31.5" x 22.8" x 13.8"
Weight only RTC	2,50 Kg (5.5 lb)	4,50 Kg (9.9 lb)	16 Kg (35.8")
Weight standard composition	5,65 Kg (12,5 lb)	7,5 Kg (16.5 lb)	28 Kg (61.7 lb)

PIPE SCRAPERS - PS

Professional rotary scrapers, essential to prepare the plastic pipes and fittings before electrofusion welding. The tools has an adjustable chuck covering all the Ø of the working range, and a blade holder orbital arm. The PS series guarantees a constant and regular removal of the shaving. The scrapers blade holder permits the scraping of the entire electrical sleeve's lenght, most useful when doing on site repairs.

STANDARD COMPOSITION

- PS 180 supplied with transport bag and spare blade
- PS 400 supplied with transport case and spare blade



PS 180







PS 400

TECHNICAL FEATURES

MODEL	PS 180	PS 400
Working range External Internal	Ø 75 ÷ 200* mm (*200 mm from SDR 6÷26) (Ø 2.95" ÷ 7.87") Ø 61 ÷ 184 mm (Ø 2.40" ÷ 7.24")	 Ø 137 ÷ 426 mm Ø 130 ÷ 391 mm
Max scraping length	129 mm (5.1")	160 mm 6,2"
Max Dimensions	595 x 272 x 190 mm (23.4" × 10.7" × 7.5")	790 x 400 x 400 mm (31.1" x 15.7" x 15.7")
Dimensions transport case	453 x 185 x 63 mm (17.8" x 7.3" × 2.5")	550 x 350 x 90 mm 21.6" x 13.7" x 3.5")
Weight standard composition	2,80 Kg (6.2 lb)	5,50 Kg (12.1lb)

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PLUS

EASY TO USE
VERSATILE

UP TO 400 mm

PIPE SUPPORT

With this practical piece of equipment, the pipe can be locked to let the operator carry out quickly and with precision all operations previous to the welding cycle, like cutting, pickling, scraping, etc.

This support's particular structure helps reach several inclination angles and heights, in order to better adapt to the requirements of the building site.

Locking takes place via a ratchet strap system, allowing safe and fast locking.

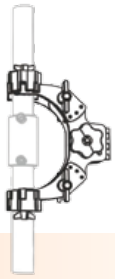
TECHNICAL FEATURES

Working range	Ø 40 ÷ 400 mm 1.5" ÷ 15,7"
While being transported	870 x 365 x 785 mm 34.2" x 14.3" x 30.9"
While being used (highest position)	1100 x 365 x 660 mm 43.3" x 14.3" x 30"
While being used (lowest position)	630 x 365 x 760 mm 24.8" x 14.3" 29.9"
Weight	15 Kg (33 lb)

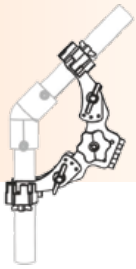
KELA 16-63
UNIVERSAL ALIGNER



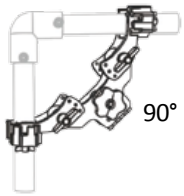
Working combinations



Straight alignement



45°



90°

Kela is a universal and compact aligner suitable for plastic pipes, fittings and electrofusion saddles. Thanks to its particular clamp design, it is possible to aligne pipes and fittings in a straight position or at 45° and 90°.

Kela is equipped with two plates: a wide and a narrow one, to be used according to the application.

The wide plates are used for the straight alignement and give a better grip and positioning, while the narrow plates are designed to make Kela more compact and therefore easier to use in the 45° and 90° application, as well as in narrow working conditions or electrofusion saddles welding.

The working range can be easily adjusted thanks to these interchangeable plates.

Kela is supplied with a transport bag and it is available in metric version with working range: Ø 16 ÷ 63 mm;
in inches CTS: Ø ½" ÷ 2" CTS
in inches IPS: Ø ½" ÷ 2" IPS

TECHNICAL FEATURES

Working range Ø	Metrical: 16 ÷ 63 mm Inches CTS: ½" ÷ 2" Inches IPS: ½" ÷ 2"
Type of alignement	straight, 45°, 90°
Weight	1,4 Kg
Weight including the transport bag	2 Kg
Kela minimum dimensions	206 x 155 x 104 mm
Kela maximum dimensions	298 x 126 x 153 mm
Bag dimensions	400 x 180 x 130 mm





Wide plates for a better grip





UNIVERSAL ALIGNER 63

This professional tool is essential to hold pipes still and aligned during electrofusion. The UNIVERSAL ALIGNER 63 is made almost entirely in a special alloy and features a central joint for the fixed positions at 45° and 90°, four self-centring clamps that require no adapters. The possibility to remove one part of the axis that carries the clamps and one clamp it self, allows the use of tapping tees during the fusion.

STANDARD COMPOSITION

- Aligner complete with four clamps, service spanner and transport bag

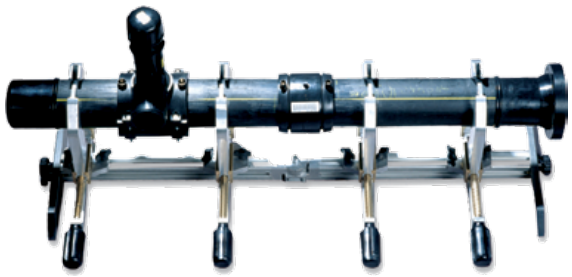


TECHNICAL FEATURES

Working range	Ø 20 ÷ 63 mm (1/2" IPS ÷ 2" IPS)
Max Dimensions	straight 600 x 160 x 116 mm 22.6" x 6.3" x 4.6"
Transport bag	440 x 190 x 140 mm; 17.3" x 7.5" x 5.5"
Weight aligner	3,40 Kg (7,5 lb)
Weight transport bag	0,50 Kg (1.1 lb)
Weight standard composition	3,90 Kg (8.6 lb)

UNIVERSAL ALIGNER 160 LIGHT

This professional tool is essential to hold pipes still and aligned during electrofusion from Ø 63 to Ø 160 mm; (2" IPS ÷ 6" IPS). The UNIVERSAL ALIGNER 160 Light is made almost entirely in a special alloy and features a central joint for the fixed positions at 45° and 90°, four self-centring clamps that require no adapters, and on request an additional axle complete with two clamps for welding the tees. Its special quick release clamps grants a rapid extraction of the pipe once it has been welded.



STANDARD COMPOSITION

- Aligner complete with four clamps, transport bag or wooden transport case

ON REQUEST

- A 3rd axle complete with two clamps (for welding "Tees")

TECHNICAL FEATURES

Working range	Ø 63 ÷ 160 mm; 2" IPS ÷ 6" IPS
Max Dimensions	straight 980 x 430 x 260 mm 38.5" x 16.9" x 10.2"
Weight aligner	9 Kg (19.8 lb)
Weight transport bag	1,50 Kg (3.3 lb)
Weight transport case	14 Kg (30,8 lb)

ALIGNER ECO 20 - 63

ALIGNER ECO 20-63 is an essential and professional tool for the alignment and support of pipes during electrofusion.

ALIGNER ECO 20-63 is composed by two aluminum axes on which are mounted self-centering clamps made of steel. The clamps, can easily slide through the entire length of the axes. A positioning plate allows to perform welds in line, 30 °, 45 °, 90 ° and T-branches in diameters between 20 ÷ 63 mm (½" IPS ÷ 2" IPS).

The fixing of the pipes is done via cable ties (supplied) with fastener and quick release.
The aligner is versatile and easy to use.



ITALY SMALL PATENTED APPLICATION
N° 202015000029036

TECHNICAL FEATURES

Working range	Ø 20 ÷ 63 mm - ½" IPS ÷ 2" IPS
Max Dimensions	640 x 120 x 83 mm; 25.2" x 4.7" x 3.3"
Weight aligner	3 Kg (6.6 lb)

ALIGNER ECO 63 - 180

ALIGNER ECO 63 - 180 is an essential and professional tool for the alignment and support of pipes during electrofusion from Ø 63 mm to 180 mm (2" IPS ÷ 6" DIPS).

The ALIGNER is entirely made of steel, featuring a central adjustable joint and pipe fastening clamps fixed on axes. The adjustable joint can be set on 4 different working positions to allow welding at preset angles such as 30°, 45°, 90°, "in line" and T welding.
Axes have V-shaped clamps positioned on them, which are equipped with pipe fastening belts. The system, along with fixing the pipe to the clamp, serves also as a centering device. Each axis has 2 guides on which the clamps are able to slide.

Practical side handles ensure an easy grip during movement and positioning, both during welding procedures, and preparation.

The aligner is available in two configurations: 2 axes and 3 axes (to weld T fittings).



TECHNICAL FEATURES

Working range	Ø 63 ÷ 180 mm; 2" IPS ÷ 6" DIPS
Max Dimensions 2 axes version 3 axes version	915 x 140 x 130 mm 36" x 5.5" x 5.1" 915 x 575 x 130 mm 36" x 22.6" x 5.1"
Weight 2 axes version Weight 3 axes version	7,5 Kg (16.5 lb) 10 Kg (22 lb)

ALIGNER 125 - 500

ALIGNER 125 – 500 is an essential and professional tool for the alignment and support of pipes during electrofusion from Ø 125 mm to 500 mm (4" IPS ÷ 20" IPS)

The ALIGNER is entirely made of steel, featuring a central adjustable joint and pipe fastening clamps fixed on axes. The adjustable joint can be set on 4 different working positions to allow welding at preset angles such as 45°, 90°, "in line" and T welding. Axes have V-shaped clamps positioned on them, which are equipped with pipe fastening belts. The system, along with fixing the pipe to the clamp, serves also as a centering device. Each axis has 2 guides on which the clamps are able to slide.

Practical side handles ensure an easy grip during movement and positioning, both during welding procedures, and preparation.

The aligner is available in two configurations: 2 axes and 3 axes (to weld T fittings).



TECHNICAL FEATURES

Working range	Ø 125 ÷ 500 mm; 4" IPS ÷ 20" IPS
Max Dimensions 2 axes version 3 axes version	1815 x 610 x 410 mm 71.5" x 24" x 16.1" 1815 x 1230 x 410 mm 71.5" x 48.4" x 16.1"
Weight 2 axes version Weight 3 axes version	38 Kg (83,8 lb) 52 Kg (114.6 lb)

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CHAMFERING

Chamfering tools are designed to make a bevel on the outside edge of a pipe end for socket fusion and electrofusion.

This Chamfer allows heater faces and socket fittings to be easily pushed onto the pipe end.

TECHNICAL FEATURES

MODEL	Working range mm	Working range in	Materials
CHAMFERING 20	Ø 20 mm	-	HDPE, PB, PP, PVC, PVDF
CHAMFERING 25	Ø 25 mm	-	HDPE, PB, PP, PVC, PVDF
CHAMFERING 32	Ø 32 mm	-	HDPE, PB, PP, PVC, PVDF
CHAMFERING 40	Ø 40 mm	-	HDPE, PB, PP, PVC, PVDF
CHAMFERING ½" CTS	-	½" CTS	HDPE, PB, PP, PVC, PVDF
CHAMFERING ¾" IPS	-	¾" IPS	HDPE, PB, PP, PVC, PVDF
CHAMFERING 1" IPS	-	1" IPS	HDPE, PB, PP, PVC, PVDF
CHAMFERING 1 ¼" IPS	-	1 ¼" IPS	HDPE, PB, PP, PVC, PVDF
CHAMFERING 1½" IPS	-	1½" IPS	HDPE, PB, PP, PVC, PVDF
CHAMFERING 2" IPS	-	2" IPS	HDPE, PB, PP, PVC, PVDF

MAYA 20-63

Manual tool for beveling the ends of plastic pipes for electrofusion, socket fusion, pipe connection. Maya 20-63 covers a range from 20 to 63 mm.

Compact and lightweight this chamfering tool proves to be a useful tool to always have in the toolbox.



TECHNICAL FEATURES

Working range	20 ÷ 63 mm
Dimensions	60 x 80 mm 2.6" x 3.1"
Weight	90 gr (0,2 lb)



BEVELERS
SME 1 - SME 2 PLUS

These are professional tools for bevelling the ends of plastic pipes up to Ø 315 mm (10” IPS), that will be inserted into electrical couplers or plug-in joints. The SME 1 is made in plastic; SME 2 PLUS is made in a special Aluminum alloy. The special shape of the blades and the non-stick coating (PTFE) of the walls, allow a quick and easy bevel of the pipe.

SUPPLIED WITH
- Beveler body with blade



SME 2 PLUS

SME 1

TECHNICAL FEATURES

	SME 1	SME 2 PLUS
Working range	Ø 32 ÷ 160 mm; 1” IPS ÷ 5” IPS	Ø 40 ÷ 315 mm; 1 ¼” IPS ÷ 10” IPS
Materials	HDPE, PB, PP, PVC, PVDF	HDPE, PB, PP, PVC, PVDF
Thickness	max 10 mm; 0.4”	max 35 mm; 1.3”
Dimensions	76 x 107 x 240 mm 3” x 4,2” x 9,4”	128 x 235 x 310 mm 5” x 9" x 12”
Weight	0,8 Kg (1.4 lb)	1,50 Kg (3.3 lb)

HOLDER

Socket fitting holder for 2"



COLD RING

Useful tool used to clamp, hold and round at the desidered place the pipe in order to weld it properly.



TECHNICAL FEATURES

Model	Working range
Cold Ring 20	Ø 20 mm
Cold Ring 25	Ø 25 mm
Cold Ring 32	Ø 32 mm
Cold Ring 40	Ø 40 mm
Cold Ring 50	Ø 50 mm
Cold Ring 63	Ø 63 mm
Cold Ring 1/2" CTS	Ø 1/2" CTS
Cold Ring 1" CTS	Ø 1" CTS
Cold Ring 1/2" IPS	Ø 1/2" IPS
Cold Ring 3/4" IPS	Ø 3/4"IPS
Cold Ring 1" IPS	Ø 1" IPS
Cold Ring 1 1/4" IPS	Ø 1 1/4" IPS
Cold Ring 1 1/2" IPS	Ø 1 1/2" IPS
Cold Ring 2" IPS	Ø 2" IPS

REROUNDERS FOR PLASTIC PIPE

Rerounders for plastic pipes: products for the jobsite.
The mechanical thread of these steel-made products help remodel the ends of ovalized pipes that need to welded by electrofusion.

The manual clamping of the tool stems pushes the ovalized end till its reshaping respects the ovalization range required by most standards, therefore allowing its insertion into an electrical coupling - and avoiding the cost of eliminating a good pipe. The 3 rerounders cover the following diameters range: 250-400 model for OD from 250 to 400 mm; 450-560 model for OD from 450 to 560 mm, and 630-800 model for OD from 630 to 800 mm.

Each one of them is sold separately, with a steel transport box. (For model 450 - 560 and 630 - 800 steel case with 2 wheels).

250 - 400

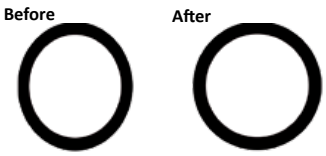


450 - 500



630 - 800







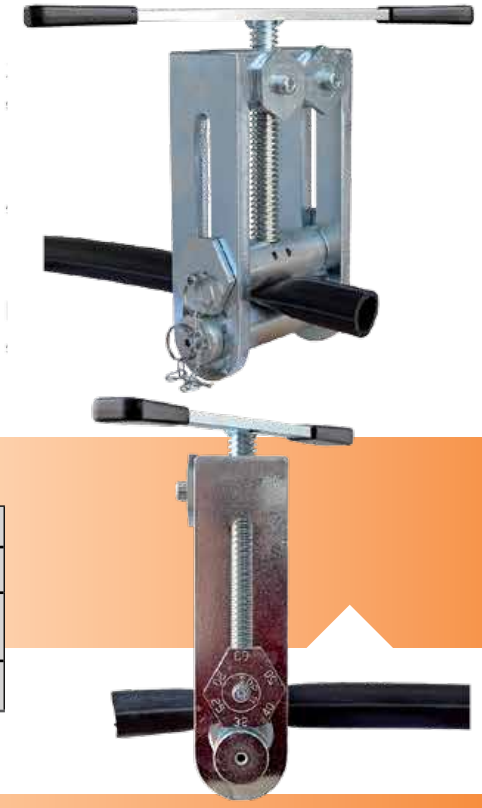




TECHNICAL FEATURES

MODEL	Rerounders 250 - 400 10” IPS ÷ 14” DIPS	Rerounders 450 - 560 18” IPS ÷ 22” IPS	Rerounders 630 - 800 24” DIPS ÷ 30” IPS
Dimensions	610 x 255 x 120 mm 24” x 10” x 4.7”	980 x 495 x 200 mm 38.5” x 19.5” x 7.9”	1240 x 555 x 200 mm 47,2” x 21.8” x 7.9”
Weight	27 Kg (59.5 lb)	41 Kg (90.4 lb)	60 Kg (132.3 lb)

SQUEEZER 63



The SQUEEZER 63 is a manual tool. Easy and fast to apply, the SQUEEZER is useful in the worksite to stop the gas or water flow in the Polyethylene pipelines from Ø 16 to 63 mm / SDR 11 - SDR 17.

The squeezing action runs by a movable cylindric bar and by an opposite one.

The second bar can be removed to permit the pipe insertion. Two special stop templates with 4 positions (on the movable bar sides) assure a safe pipe squeeze on all working range diameters.

TECHNICAL FEATURES

Working range	Ø 16 ÷ 63 mm SDR 11 SDR 17
Operation	Manual
Overall Dimensions	325 x 70 x 330 mm 12.8” x 2.7” x 13”
Weight	5,3 Kg (11.7 lb)

SQUEEZER 63 - 200 HYDRAULIC



SQUEEZER 63-200 is an hydraulic squeezer, very effective and useful in the worksite, to stop the gas or water flow in the HDPE pipelines from Ø 63 to 200 mm - SDR 11, SDR 17.

Thanks to this all the works on the line can be done in the highest safety conditions. The squeezing action on the pipe is possible thanks to a hydraulic cylinder which is manually actuated by the operator with a pressing lever. The resulting strength is transferred to two cylindrical rods which squeeze the pipe till the interruption of the flow.

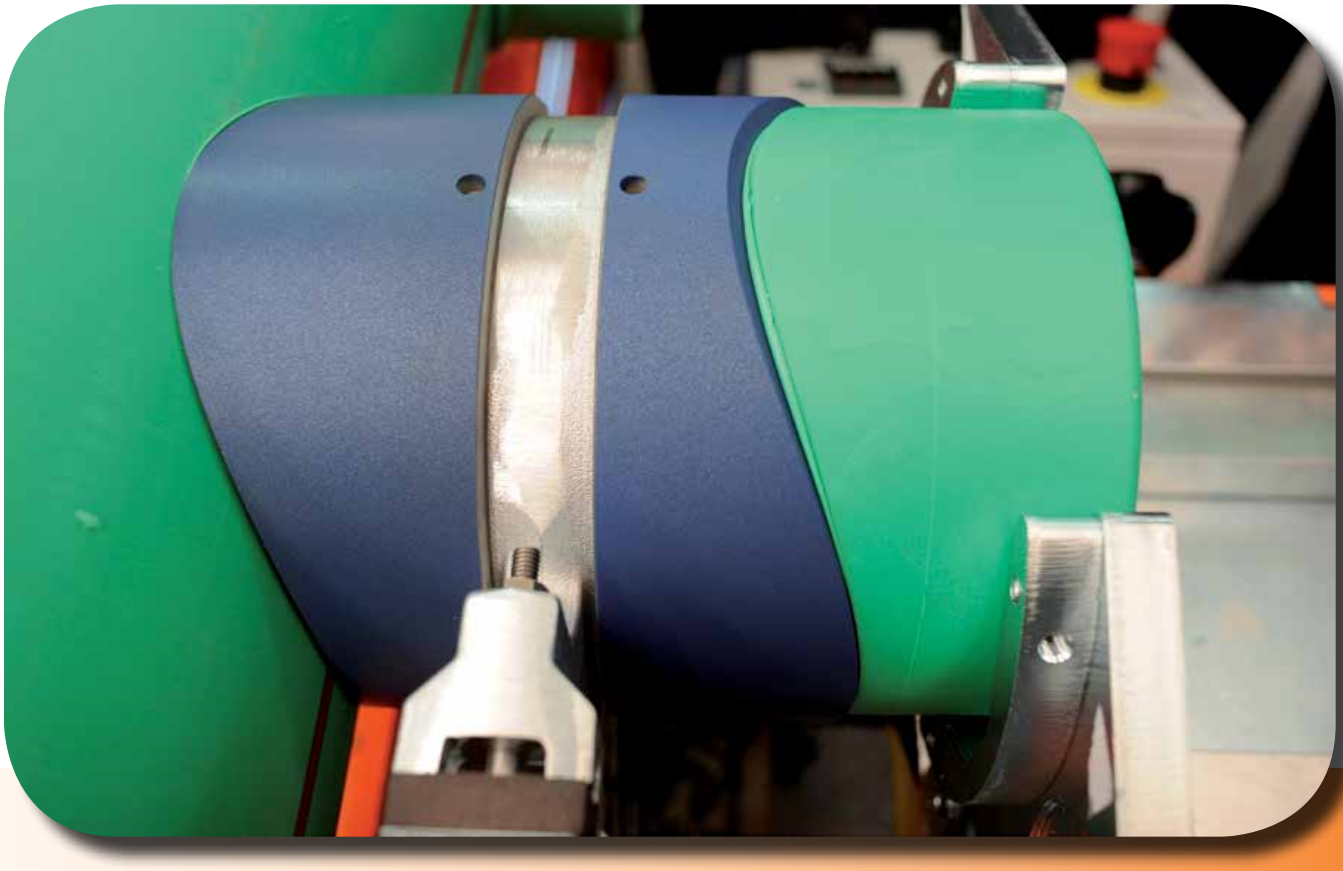
The SQUEEZER 63-200 is easy to transport thanks to two handles and its steel frame. On its sides the SQUEEZER 63-200 is equipped with two metallic rods for safety protection in case of pressure losses or accidental impacts. Moreover the standard configuration of the SQUEEZER 63-200 includes the stoppers for SDR 11 and SDR 17 to set according to the pipes diameter.

TECHNICAL FEATURES

Working range	Ø 63 ÷ 200 mm SDR 11 SDR 17
Operation	Hydraulic
Overall Dimensions	476 x 165 x 722 mm 18.7” x 6.5” x 28,4”
Weight	45 Kg (99 lb)



SOCKET WELDERS



MANUAL EQUIPMENT

WORKING RANGE Ø mm	16	20	25	32	40	50	63	75	90	110	125
R 25	16	20	25								
R 63	16	20	25	32	40	50	63				
R 125 Q	16	20	25	32	40	50	63	75	90	110	125
WORKING RANGE Ø mm	16	20	25	32	40	50	63	75	90	110	125

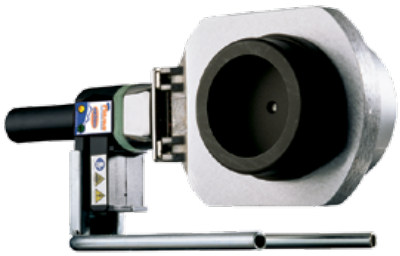
SOCKET FUSION MACHINE

WORKING RANGE Ø mm	20	25	32	40	50	63	75	90	110	125
PRISMA JIG	20	25	32	40	50	63				
						63	75	90	110	125
PRISMA 90	20	25	32	40	50	63	75	90		
PRISMA 125		25	32	40	50	63	75	90	110	125
PRISMA 125 LIGHT	20	25	32	40	50	63				
						63	75	90	110	125
WORKING RANGE Ø mm	20	25	32	40	50	63	75	90	110	125

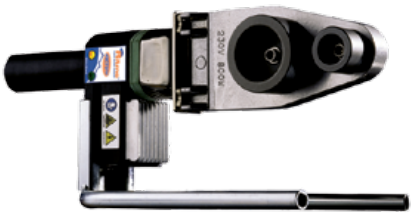
Ø ON REQUEST

SADDLE SOCKET FUSION MACHINE

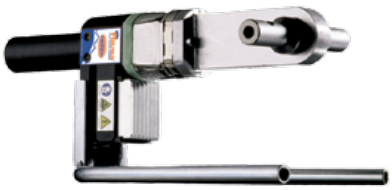
WORKING RANGE Ø mm	
FM 630-125	MAIN PIPE 50 ÷ 630 mm SADDLE FITTING 20 ÷ 125 mm



R 125 Q



R 63



R 25

MANUAL EQUIPMENT

Manual SOCKET welders for joining pipes and fittings, in compliance with the standards in force. They feature an aluminum heating plate and a practical, heat-insulated plastic handle. They can weld HDPE, PP, PP-R, PVDF pipes and fittings, and they're characterized by different shapes and working ranges, suitable for different applications. They're available with an adjustable electronic thermoregulator (TE), or with a fixed electronic thermostat (TFE).
This new TFE control system features a new self-diagnostic device, provided with an alarm, which would alert the operator in case of anomaly; at the same time, the heating element would switch off automatically. Thanks to an algorithm PID microcontroller, combined with a platinum sensor, the temperature control system can react faster to the external temperature fluctuations, and guarantee higher reliability and longer durability.

STANDARD COMPOSITION
- Socket welder
- Fork support
- Bench vice (except R 25)
- Allen wrench
- Pin for sockets & spigots

ON REQUEST
- Bench vice (for R 25)
- Sockets and spigots (male/female)
- Carrying case in electro-painted steel
- R 63 Insulated bag





TECHNICAL FEATURES

TYPE: TE, TFE	R 25	R 63	R 125 Q
Working range	up to Ø 25 mm	up to Ø 63 mm	up to Ø 125 mm
Materials	HDPE, PP, PP-R PB, PVDF	HDPE, PP, PP-R PB, PVDF	HDPE, PP, PP-R PB, PVDF
Power supply **(TE)**	230 V S. Ph. 50/60 Hz	110 V / 230 V S. Ph. 50/60 Hz	110 V / 230 V S. Ph. 50/60 Hz
Power supply **(TFE)**	110 V S. Ph. 50/60 Hz 230 V S. Ph. 50/60 Hz	110 V S. Ph. 50/60 Hz 230 V S. Ph. 50/60 Hz	110 V S. Ph. 50/60 Hz 230 V S. Ph. 50/60 Hz
Max. absorbed power	500 W	800 W	1400 W
Working temperature	260° C (± 10° C) **TFE** 500° F (± 50° F) **TFE** 180° ÷ 290° C **TE** 356° ÷ 554° F **TE**	260° C (± 10° C) **TFE** 500° F (± 50° F) **TFE** 180° ÷ 290° C **TE** 356° ÷ 554° F **TE**	260° C (± 10° C) **TFE** 500° F (± 50° F) **TFE** 180° ÷ 290° C **TE** 356° ÷ 554° F **TE**
Ambient temperature	-5° ÷ 40° C (23° ÷ 104° F)	-5° ÷ 40° C (23° ÷ 104° F)	-5° ÷ 40° C (23° ÷ 104° F)
Weight	1,44 Kg (3.1 lb)	1,82 Kg (4 lb)	3,16 Kg (7 lb)
Dimensions	115 x 50 x 320 mm 4.5" x 2" x 12.6"	175 x 50 x 360 mm 6.9" x 2" x 14.1"	175 x 50 x 395 mm 6.9" x 2" x 15.5"

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PRISMA JIG

The PRISMA JIG is a compact socket welding machine for HDPE, PP and PP-R, PVDF, PB OD 20* ÷ 125 mm (standard composition steel clamps from Ø 63 to 125 mm; on request clamps from Ø 20 to 63 mm). The machine displays a steel frame that can be used as a support to the aligning body; the unit distinguishes itself by being able to work in tight spaces, after a swift releasing manoeuvre of the frame.

The PRISMA JIG has two trolleys, a fixed and a movable one, with practical closing handwheels in order to ensure a perfect grip in between clamp and pipe/fitting. The machine also features steel auto-centering clamps: a special clamp for the fitting, and a couple of paired clamps designed to keep the pipe in position. The trolley closing and opening operations are performed by a “mutual” starter. The special fittings clamp is placed on the fixed trolley. Whenever the type of work requires a different clamping configuration, it is rather easy to unlock and change the machine’s operativeness.

The heating operation is performed by the R 125 Q hand socket welder with TFE fixed temperature control. The main distinctiveness of the TFE device is its security: an acoustic auto-diagnosis alarm indicates when the heating plate has reached the working temperature, but also shuts off the heating plate automatically if any anomaly happens. Thanks to a combined control system, the TFE device responds rather quickly to any temperature fluctuation forced by external causes; on the other hand, it also gives a greater stability, welding precision and reliability in time. A sustaining handle may be placed at the heating plate, in order to simplify the working phases.

The R 125 Q is available in 110 and 230 V. The welding machine is available in two versions, depending on the type of sockets & spigots supplied: Type A and Type B.

STANDARD COMPOSITION

- Machine body complete with clamps and frame
- R 125 Q TFE hand socket welder
- Socket welder fork support
- Clamps for OD 63-75-90-110-125 mm (A or B type) sockets & spigots
- Transport case for socket welder and sockets & spigots
- Transport case for machine body
- Sustaining handle and tool kit



TECHNICAL FEATURES

PLUS

CLAMPS
20 ÷ 63mm
(on request)

WORK
IN TIGHT SPACES



Working range	63 ÷ 125 mm standard *20 ÷ 63 mm clamps on request*
Materials	HDPE, PP, PP-R, PB, PVDF
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Total absorbed power	1400 W
Working temperature	260° (± 10° C) 500° F (± 50° F)
Outside temperature range	-5° ÷ 40° C (23° ÷ 104° F)
Dimensions machine body	400 x 337 x 267 mm 15.7” x 13.3” x 10.5”
Dimensions machine body and frame	400 x 337 x 382 mm 15.7” x 13.3” x 15”
Socket welder	175 x 50 x 395 mm 6.9” x 2” x 15.5”
Transport case Prisma Jig	390 x 350 x 500 mm 15.3” x 13.8” x 19.7”
Transport case Socket welder	490 x 310 x 485 mm
Weight machine body	9,55 Kg (21 lb)
Weight frame Prisma Jig	2,5 Kg (5.5 lb)
Weight Socket welder	3,16 Kg (6,8 lb)









PRISMA 90

This workshop/construction site welding machine is suitable for the socket fusion of pipes and fittings up to an OD of 90 mm, in accordance with the standards in force.

The PRISMA 90 is composed of a machine body featuring a selector for the welding depths of the different diameters, an adjustable clamp for locking the pipes, a self-centring clamp for locking the fittings (different brands), a self-centring socket welder with electronic temperature control, a device for the maximum heating depth, three machine supporting legs, a tripod to support the pipe, a set of sockets and spigots for socket fusion from Ø 20 to Ø 90 mm

The welding machine is available in two versions, depending on the type of sockets & spigots supplied:
PRISMA 90 type A and PRISMA 90 type B.

STANDARD COMPOSITION

- Machine body complete with an electronic socket welder, fittings support and a “V” shaped pipe support;
- Machine support (composed of 3 legs);
- Steel case complete with sockets & spigots from Ø 20 to Ø 90 mm, centering devices from Ø 20 to Ø 90 mm, clamp adapters from Ø 20 to Ø75 mm, and tool kit;
- Pipe support tripod.

ON REQUEST

- Transport wooden case

TECHNICAL FEATURES

Working range	20 ÷ 90 mm
Materials	HDPE, PP, PP-R, PB, PVDF
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Max. absorbed power	1000 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14 ÷ 104° F)
Time to reach welding temperature	~ 10’
Weight Prisma 90	54 Kg (119 lb)
Dimensions machine working	650 x 1040 x 450 mm 25.6” x 40.9” x 17.7”
Transport case wood	710 x 630 x 460 mm 27,9” x 24.8” x 18.1”



PRISMA 125

This workshop/construction site welding machine is suitable for the socket fusion of pipes and fittings up to an OD of 125 mm, in accordance with the standards in force.

The PRISMA 125 is composed of a machine body featuring a selector for the welding depths of the different diameters, four self-centering steel clamps for locking pipes and fittings (different brands), a self-centring socket welder with electronic temperature control, a device for the maximum heating depth, a sliding trolley, a tripod to support the pipe, a set of sockets and spigots for socket fusion from Ø 25 to Ø 125 mm with steel case.

The welding machine is available in two versions, depending on the type of sockets & spigots supplied:
PRISMA 125 type A and PRISMA 125 type B.

STANDARD COMPOSITION

- Machine body complete with an electronic socket welder
- Steel case complete with sockets and spigots from Ø 25 to Ø 125 mm and tool kit
- Pipe support tripod
- Sliding trolley

TECHNICAL FEATURES

Working range	25 ÷ 125 mm
Materials	HDPE, PP, PP-R, PB, PVDF
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Max. absorbed power	1400 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-10° ÷ 40° C (14 ÷ 104° F)
Time to reach welding temperature	~ 10’
Weight Prisma 125 only	100 Kg (200.5 lb)
Dimensions machine working	1080 x 840 x 580 mm 42.5” x 33” x 22.8”
Transport case wood	1500 x 800 x 1300 mm 59” x 31.5” x 51.2”

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PRISMA 125 LIGHT

PRISMA 125 LIGHT is a field machine for socket welding method, for pipe and fittings in HDPE, PP, PP-R, PVDF, PB for diameters included between 20* ÷ 125 mm (standard composition steel clamps from Ø 63 to 125 mm; on request clamps from Ø 20 to 63 mm). Leading particulares are the restricted weight, minimum overall dimensions and versatility.

Featuring: a machine body, a self-centring clamp for locking the pipes, a self-centring clamp for locking the fittings, an extractable socket welder with an automatic electronic temperature, fitting holder and a special bench vice so the machine can be used on a work bench.

STANDARD COMPOSITION

- Welding machine Prisma 125 Light with steel case
- Socket fusion plate R 125 Q TFE
- Socket and spigot Ø 63 ÷ 125 mm
  (on request clamps from Ø 20 to 63 mm)
- Carrying box





TECHNICAL FEATURES

Working range	63 ÷ 125 mm standard *20 ÷ 63 mm clamps on request*
Materials	HDPE, PP, PP-R, PB, PVDF
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Max. absorbed power	1400 W
Working temperature	260° (± 10° C); 500° F (± 50° F)
Outside temperature range	-5° ÷ 40° C; (23° ÷ 104° F)
Weight standard composition	27 Kg (59.5 lb)
Dimensions machine body	620 x 670 x 610 mm 24.4” x 26.4” x 24”





FM 630 - 125

Workshop Machine for the fabrication of PP-R manifolds
Materials: PP; PP-R
The machine is composed by a support frame with two self-centering clamps that are free to slide independently along the whole length.
An off-set work station also free to move along the frame where are positioned: the welding machine, the driller, two control panels and the power supplier.

The drilling machine always guarantees a centered hole in the middle of the pipe.
The trolley system of the work station, with an electric motion regulated by a potentiometer, always allows easy operations during the movement, drilling and welding phases. The machine is equipped with two anti-tilt systems at the sides.

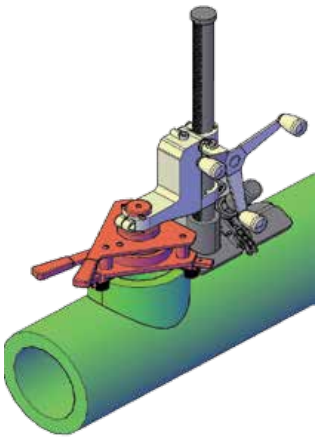
Hole saws

Dimensions of hole saws and connection shafts depend on physical characteristics of the PP-R fittings.

Welding sockets:

Saddle sockets available for different brands.





PREVIEW

UP 125 new welding machine for the fabrication of PP-R manifolds on site.
More details: info@ritmo.it

TECHNICAL FEATURES

Working range **Main Pipe** OD range	50 ÷ 630 mm
Working range **Reduced Pipe** OD range	20 ÷ 125 mm
Inserts	from 50 to 560 mm
Material	PP-R
Power supply	230 V single phase 50/60 HZ
Total absorbed power	3100 W
Dimensions machine	3967 x 1895 x 1571 mm 156.1” x 74.6” x 61.8”
Weight machine	1100 Kg (2.425 lb)



SOCKET & SPIGOT

These accessories are necessary for the socket fusion of pipes and fittings.
They were designed in accordance to the German standards, for which there are two version, "A" and "B", different in size and welding coupling depths.

Type A

Ø16 SOCKET & SPIGOT (A)
Ø 20 SOCKET & SPIGOT (A)
Ø 25 SOCKET & SPIGOT (A)
Ø 32 SOCKET & SPIGOT (A)
Ø 40 SOCKET & SPIGOT (A)
Ø 50 SOCKET & SPIGOT (A)
Ø 63 SOCKET & SPIGOT (A)
Ø 75 SOCKET & SPIGOT (A)
Ø 90 SOCKET & SPIGOT (A)
Ø 110 SOCKET & SPIGOT (A)
Ø 125 SOCKET & SPIGOT (A)

Type B

Ø16 SOCKET & SPIGOT (B)
Ø 20 SOCKET & SPIGOT (B)
Ø 25 SOCKET & SPIGOT (B)
Ø 32 SOCKET & SPIGOT (B)
Ø 40 SOCKET & SPIGOT (B)
Ø 50 SOCKET & SPIGOT (B)
Ø 63 SOCKET & SPIGOT (B)
Ø 75 SOCKET & SPIGOT (B)
Ø 90 SOCKET & SPIGOT (B)
Ø 110 SOCKET & SPIGOT (B)
Ø 125 SOCKET & SPIGOT (B)

Type "AQ"

Ø 20 SOCKET & SPIGOT TYPE-AQ
Ø 25 SOCKET & SPIGOT TYPE-AQ
Ø 32 SOCKET & SPIGOT TYPE-AQ
Ø 40 SOCKET & SPIGOT TYPE-AQ
Ø 50 SOCKET & SPIGOT TYPE-AQ
Ø 63 SOCKET & SPIGOT TYPE-AQ
Ø 75 SOCKET & SPIGOT TYPE-AQ
Ø 90 SOCKET & SPIGOT TYPE-AQ
Ø 110 SOCKET & SPIGOT TYPE-AQ
Ø 125 SOCKET & SPIGOT TYPE-AQ

Saddles socket CTS

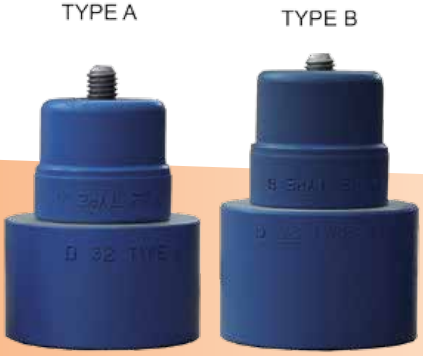
Ø ½" CTS SOCKET & SPIGOT
Ø ¾" CTS SOCKET & SPIGOT
Ø 1" CTS SOCKET & SPIGOT
Ø 1¼" CTS SOCKET & SPIGOT

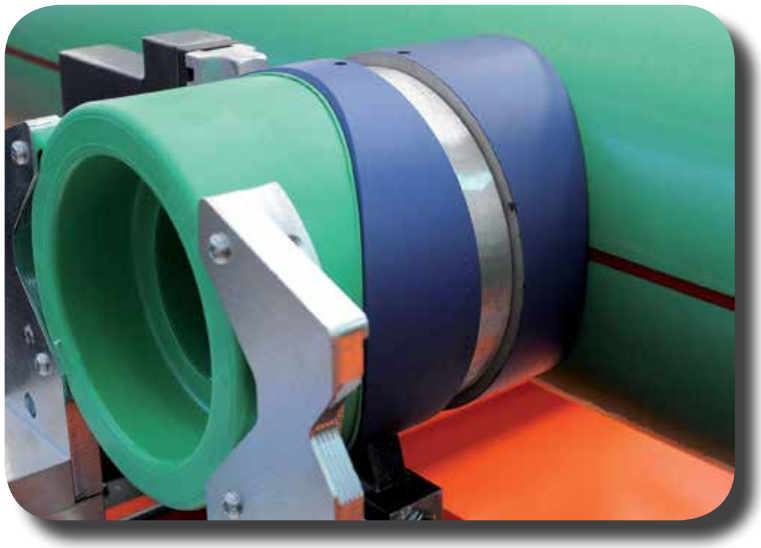
Saddles socket IPS

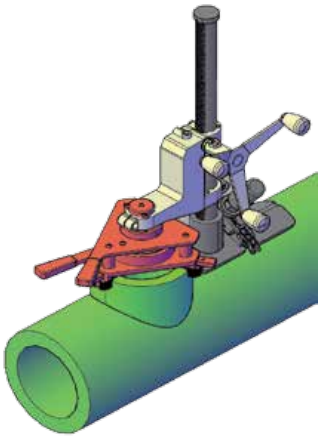
Ø ½" IPS SOCKET & SPIGOT
Ø ¾" IPS SOCKET & SPIGOT
Ø 1" IPS SOCKET & SPIGOT
Ø 1¼" IPS SOCKET & SPIGOT
Ø 1 ½" IPS SOCKET & SPIGOT
Ø 2" IPS SOCKET & SPIGOT
Ø 3" IPS SOCKET & SPIGOT
Ø 4" IPS SOCKET & SPIGOT

Hole repairing Sockets and accessories

Ø 7 mm HOLE REPAIRING SOCKET & SPIGOT
Ø 8 mm HOLE REPAIRING SOCKET & SPIGOT
Ø 11 mm HOLE REPAIRING SOCKET & SPIGOT
CLOSING TAPS SET - PE (20 PCS)
CLOSING TAPS SET - ORANGE PP (20 PCS)







PREVIEW

UP 125 new welding machine for the fabrication of PP-R manifolds on site.
More details: info@ritmo.it

* Saddle sockets metric "AQ"

Ø 40-20/25 AQ SADDLE SOCKET
Ø 50-20/25 AQ SADDLE SOCKET
Ø 63-20/25 AQ SADDLE SOCKET
Ø 63-32 AQ SADDLE SOCKET
Ø 75-20/25 AQ SADDLE SOCKET
Ø 75-32 AQ SADDLE SOCKET
Ø 75-40 AQ SADDLE SOCKET
Ø 90-20/25 AQ SADDLE SOCKET
Ø 90-32 AQ SADDLE SOCKET
Ø 90-40 AQ SADDLE SOCKET
Ø 110-20/25 AQ SADDLE SOCKET
Ø 110-32 AQ SADDLE SOCKET
Ø 110-40 AQ SADDLE SOCKET
Ø 110-50 AQ SADDLE SOCKET
Ø 125-20/25 AQ SADDLE SOCKET
Ø 125-32 AQ SADDLE SOCKET
Ø 125-40 AQ SADDLE SOCKET
Ø 125-50 AQ SADDLE SOCKET
Ø 125-63 AQ SADDLE SOCKET
Ø 160-20/25 AQ SADDLE SOCKET
Ø 160-32 AQ SADDLE SOCKET
Ø 160-40 AQ SADDLE SOCKET
Ø 160-50 AQ SADDLE SOCKET
Ø 160-63 AQ SADDLE SOCKET
Ø 160-75 AQ SADDLE SOCKET
Ø 160-90 AQ SADDLE SOCKET
Ø 200-20/25 AQ SADDLE SOCKET
Ø 200-50 AQ SADDLE SOCKET
Ø 200-63 AQ SADDLE SOCKET
Ø 200-75 AQ SADDLE SOCKET
Ø 200-90 AQ SADDLE SOCKET
Ø 200-110 AQ SADDLE SOCKET
Ø 200-125 AQ SADDLE SOCKET
Ø 250-50 AQ SADDLE SOCKET
Ø 250-63 AQ SADDLE SOCKET
Ø 250-75 AQ SADDLE SOCKET
Ø 250-90 AQ SADDLE SOCKET
Ø 250-110 AQ SADDLE SOCKET
Ø 250-125 AQ SADDLE SOCKET

* Saddle sockets metric "N"

Ø 40-20/25 N SADDLE SOCKET
Ø 50-20/25 N SADDLE SOCKET
Ø 63-20/25 N SADDLE SOCKET
Ø 63-32 N SADDLE SOCKET
Ø 75-20/25 N SADDLE SOCKET
Ø 75-32 N SADDLE SOCKET
Ø 90-20/25 N SADDLE SOCKET
Ø 90-32 N SADDLE SOCKET
Ø 90-40 N SADDLE SOCKET
Ø 90-50 N SADDLE SOCKET
Ø 110-20/25 N SADDLE SOCKET
Ø 110-32 N SADDLE SOCKET
Ø 110-40 N SADDLE SOCKET
Ø 110-50 N SADDLE SOCKET
Ø 110-63 N SADDLE SOCKET
Ø 125-20/25 N SADDLE SOCKET
Ø 125-32 N SADDLE SOCKET
Ø 125-40 N SADDLE SOCKET
Ø 125-50 N SADDLE SOCKET
Ø 125-63 N SADDLE SOCKET
Ø 160-20/25 N SADDLE SOCKET
Ø 160-32 N SADDLE SOCKET
Ø 160-40 N SADDLE SOCKET
Ø 160-50 N SADDLE SOCKET
Ø 160-63 N SADDLE SOCKET
Ø 200-20/25 N SADDLE SOCKET
Ø 200-32 N SADDLE SOCKET
Ø 200-40 N SADDLE SOCKET
Ø 200-50 N SADDLE SOCKET
Ø 200-63 N SADDLE SOCKET
Ø 250-20/25 N SADDLE SOCKET
Ø 250-32 N SADDLE SOCKET
Ø 250-40 N SADDLE SOCKET
Ø 250-50 N SADDLE SOCKET
Ø 250-63 N SADDLE SOCKET
Ø 315-32 N SADDLE SOCKET
Ø 315-40 N SADDLE SOCKET
Ø 315-50 N SADDLE SOCKET
Ø 315-63 N SADDLE SOCKET

* Contact RITMO S.P.A. for more details



S02 - CROSS-OVER FITTINGS

Pneumatic workshop machine suitable for the construction of cross over special fittings by means of thermo-forming segments of Polypropylene Random (PP-R) pipe.

The S02 features:
- A bench with pneumatic cutter for cutting segments of pipe to size with a box for collecting the pieces, and a heating unit able to prepare up to 10 pipe segments, ranging from Ø 20 to 32 mm;
- A dual-station pressing bench with built-in cooling unit.

SUPPLIED WITH
- Bench complete with cutter, box for collecting the pieces, and heater;
- Dual station pressing bench with cooler and one one mould for each diameter previewed (from Ø 20 to Ø 32 mm).



watch the video



TECHNICAL FEATURES

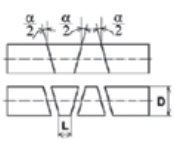
Working range	Ø 20 ÷ 32 mm
Materials	PP-R For other materials contact RITMO S.P.A.
Power supply	400 V Three Phase 50/60 Hz
Total absorbed power	4500 W
Hourly output max	~ 140 pieces
Dimensions station one	1500 x 1030 x 1100 mm 59” x 40.5” x 43.3”
Dimensions station Two	1400 x 500 x 1250 mm 55.1” x 19.7” x 49.2”

HOW TO FABRICATE A SPECIAL FITTING

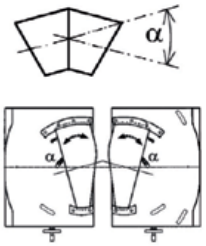
ELBOWS

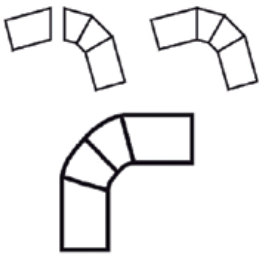


Cut



Welding

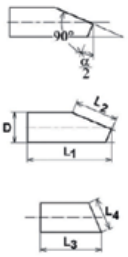




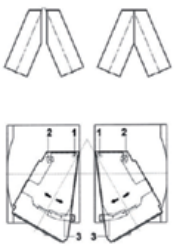
WYES (Y)



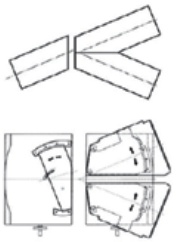
Cut



Welding 1st stage



Welding 2nd stage

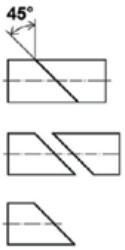




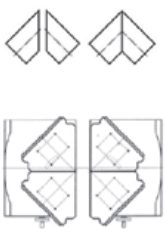
TEES



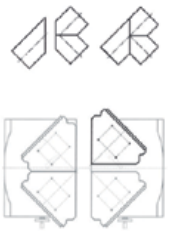
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Welding 1st stage



Welding 2nd stage

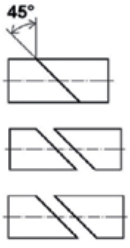




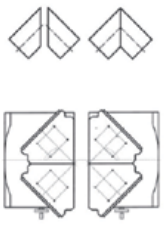
CROSSES



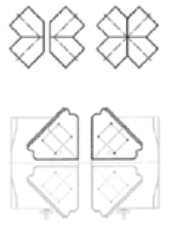
Cut



Welding 1st stage

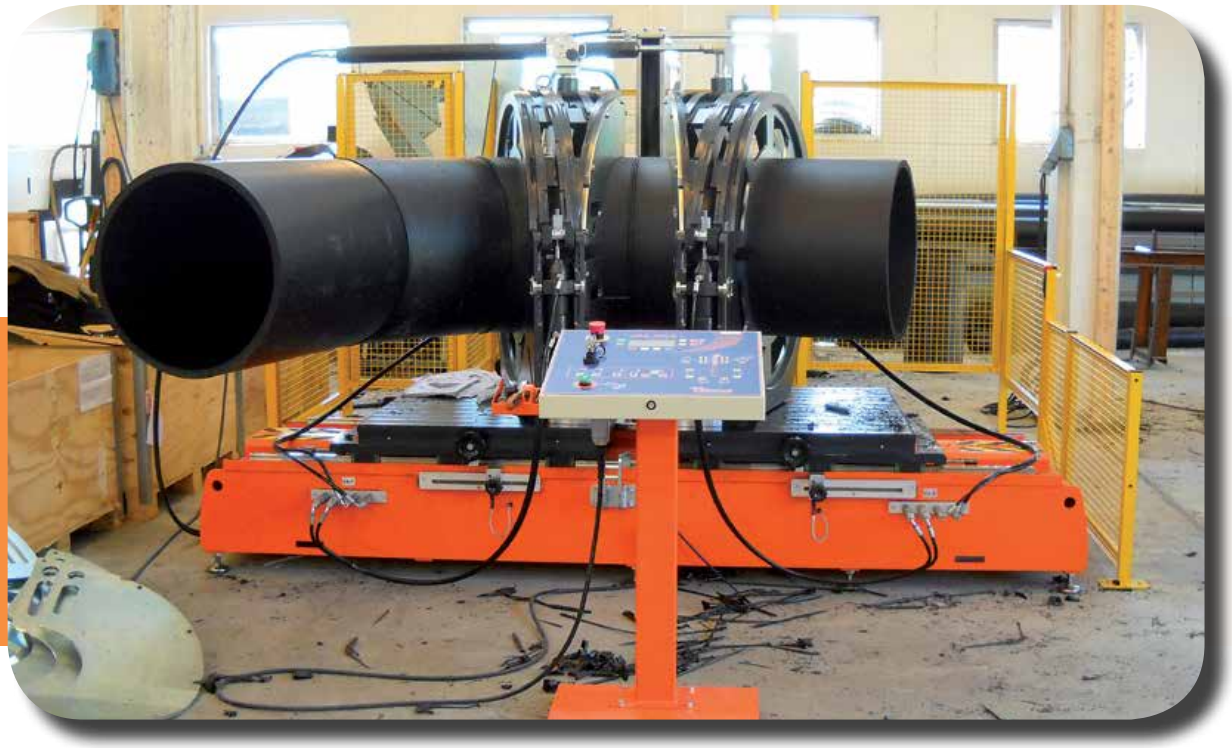


Welding 2nd stage

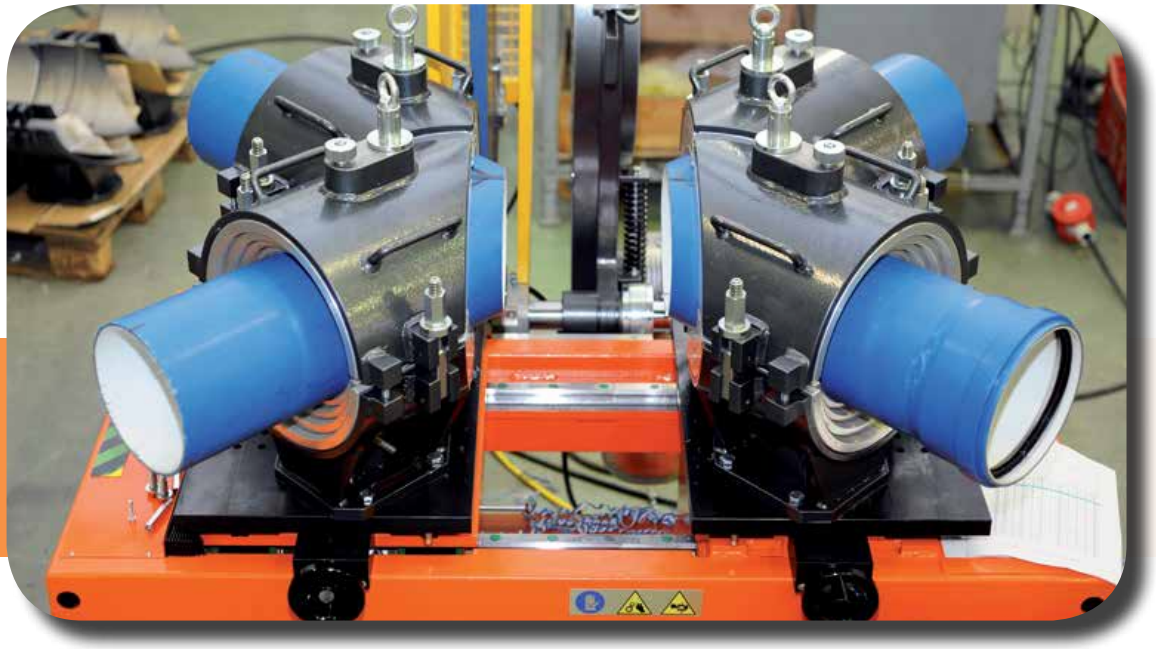




FITTINGS FABRICATION MACHINES



WORKING RANGE Ø mm	90	110	125	140	160	180	200	225	250	280	315	355	400	450	500	560	630	710	800	900	1000	1200	1400	1600
ALFA 400 MANUAL																								
ELBOWS	90	110	125	140	160	180	200	225	250	280	315	355	400											
Y - T - X	90	110	125	140	160	180	200	225	250	280	315													
ALFA 400 EASY LIFE																								
ELBOWS	90	110	125	140	160	180	200	225	250	280	315	355	400											
Y - T - X	90	110	125	140	160	180	200	225	250	280	315													
ALFA 400 CTB																								
ELBOWS		110	125	140	160	180	200	225	250	280	315	355	400											
Y - T - X		110	125	140	160	180	200	225	250	280	315	355												
ALFA 630 T																								
ELBOWS								225	250	280	315	355	400	450	500	560	630							
Y - T - X								225	250	280	315	355	400	450	500	560	630							
ALFA 1000																								
ELBOWS												355	400	450	500	560	630	710	800	900	1000			
Y - T - X												355	400	450	500	560	630	710	800					
ALFA 1200																								
ELBOWS																	630	710	800	900	1000	1200		
Y - T - X																	630	710	800	900	1000			
ALFA 1600																								
ELBOWS																		710	800	900	1000	1200	1400	1600
Y - T - X																		710	800	900	1000	1200		
WORKING RANGE Ø mm	90	110	125	140	160	180	200	225	250	280	315	355	400	450	500	560	630	710	800	900	1000	1200	1400	1600



WORKING RANGE Ø IPS	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	34"	36"	42"	48"	54"	63"
ALFA 400 MANUAL																						
ELBOWS	4"	5"	6"	8"	10"	12"	14"	16"														
Y - T - X	4"	5"	6"	8"	10"	12"																
ALFA 400 EASY LIFE																						
ELBOWS	4"	5"	6"	8"	10"	12"	14"	16"														
Y - T - X	4"	5"	6"	8"	10"	12"																
ALFA 400 CTB																						
ELBOWS	4"	5"	6"	8"	10"	12"	14"	16"														
Y - T - X	4"	5"	6"	8"	10"	12"																
ALFA 630 T																						
ELBOWS				8"	10"	12"	14"	16"	18"	20"	22"	24"										
Y - T - X				8"	10"	12"	14"	16"	18"	20"	22"	24"										
ALFA 48"																						
ELBOWS												24"	26"	28"	30"	32"	34"	36"	42"	48"		
Y - T - X												24"	26"	28"	30"	32"	34"	36"				
ALFA 63"																						
ELBOWS													26"	28"	30"	32"	34"	36"	42"	48"	54"	63"
Y - T - X													26"	28"	30"	32"	34"	36"	42"	48"		
WORKING RANGE Ø IPS	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	34"	36"	42"	48"	54"	63"

WORKING RANGE Ø DIPS	2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
ALFA 400 MANUAL														
ELBOWS			4"	5"	6"	8"	10"	12"	14"					
Y - T - X			4"	5"	6"	8"	10"							
ALFA 400 EASY LIFE														
ELBOWS			4"	5"	6"	8"	10"	12"	14"					
Y - T - X			4"	5"	6"	8"	10"							
ALFA 400 CTB														
ELBOWS			4"	5"	6"	8"	10"	12"	14"					
Y - T - X			4"	5"	6"	8"	10"	12"						
ALFA 630 T														
ELBOWS						8"	10"	12"	14"	16"	18"	20"	22"	24"
Y - T - X						8"	10"	12"	14"	16"	18"	20"	22"	24"
WORKING RANGE Ø DIPS	2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"

www.ritmo.it





ALFA 400 MANUAL

Workshop welding machine designed to fabricate fittings like elbows, tees, crosses and wyes up to Ø 400 mm, by joining pipe segments, with the help of special jaws.

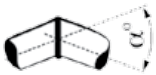
STANDARD COMPOSITION:

- A machine body with two carriages, one of which driven by a hydraulic system, upper cylinder and tools kit
- A manual hydraulic control panel for the welding cycle
- A milling cutter for levelling the ends of the pipes and/or fittings with built-in overload cutout and safety microswitch
- A Teflon-coated heating plate, power supply 230 V or 400 V 50/60 Hz
- Right and left elbows clamps Ø 400 mm with steel inserts from Ø 90 mm to 355 mm

ON REQUEST

- **Elbows clamps Ø 16" IPS;**
  inserts Ø 4" ÷ 14" IPS; Ø 4" ÷ 14" DIPS
- **Tees/crosses clamps Ø 315 mm;** inserts Ø 90 ÷ Ø 280 mm
- **Tees/crosses clamps clamps Ø 12" IPS;**
  inserts Ø 4" ÷ 10" IPS; Ø 4" ÷ 10" DIPS
- **Wyes clamps Ø 315 mm**; inserts Ø 90 ÷ Ø 280 mm
- **Wyes clamps Ø 12" IPS;**
  inserts Ø 4" ÷ 10" IPS; Ø 4" ÷ 10" DIPS
- Right or left special clamps Ø 400; inserts Ø 90 ÷ Ø 355 mm
- Tool for flange necks
- Facer disk for PVC
- THE INSPECTOR Data-logging and cables





Elbows 90 ÷ 400 mm
4" ÷ 16" IPS; 4" ÷ 14" DIPS
0° ÷ 45°



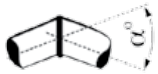
Wyes 90 ÷ 315 mm
4" ÷ 12" IPS; 4" ÷ 10" DIPS
45° ÷ 60°



Tees/Crosses
90 ÷ 315 mm
4" ÷ 12" IPS; 4" ÷ 10" DIPS

TECHNICAL FEATURES

Materials	HDPE, PP For other materials contact RITMO S.P.A.
Power supply	230 V Single Phase 50/60 Hz 400 V Three Phase 50/60 Hz
Total absorbed power	7400 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-5° ÷ 40° C (23° ÷ 104° F)
Weight standard composition	647 Kg (1426 lb)
Dimensions	1490 x 2020 x 1700 mm 58.6" x 79.5" x 67"



Elbows 90 ÷ 400 mm
4" ÷ 16" IPS; 4" ÷ 14" DIPS
0° ÷ 45°



Wyes 90 ÷ 315 mm
4" ÷ 12" IPS; 4" ÷ 10" DIPS
45° ÷ 60°



Tees/Crosses
90 ÷ 315 mm
4" ÷ 12" IPS; 4" ÷ 10" DIPS





ALFA 400 EASY LIFE

This is a workshop welding machine designed to fabricate fittings like elbows (up to Ø 400 mm; 16" IPS), wyes (Y), tees and crosses (up to Ø 315 mm; 12" IPS) by joining pipe segments, with the help of special jaws.
The ALFA 400 EASY LIFE can also weld special and moulded fittings such as elbows, tees and flange necks, thanks to a different type of special jaws. Composed of:

A machine body with two carriages, one of which driven by a hydraulic system. A control panel that features the CNC system, thanks to this would eliminate any risk of error due to the operator. The CNC incorporates a data-logging that can store up to 4000 cycles; possibility to pre-set 50 customized. It is possible to download the PDF report via USB slot.
A printer can be connected to the serial port, to get a welding report at the end of each welding cycle. A heating plate featuring a new horizontal sliding system, automatically operated, which enables a fast side-sliding of the plate during the exchange period. The whole process is carried out with no need of disconnecting the upper cylinder, whenever it is in use. A milling cutter for levelling the ends of pipes and/or fittings that slides on recirculating ball slideways, with an electronic device for a soft start. An upper cylinder, to be positioned on the jaws, for welding extra thick pipes and/or whenever it's necessary to use high pressures. Available in 230 V and 400 V.

STANDARD COMPOSITION

Welding machine complete with:
- control panel
- heating plate
- milling cutter
- upper cylinder and tools kit
- elbows clamps Ø 400 mm;
  inserts Ø 90 ÷ 355 mm

ON REQUEST

- **Elbows clamps Ø 16" IPS;**
  inserts Ø 4" ÷ 14" IPS; Ø 4" ÷ 14" DIPS
- **Tees/crosses clamps Ø 315 mm;**
  inserts Ø 90 ÷ 280 mm
- **Tees/crosses clamps Ø 12" IPS;**
  inserts Ø 4" ÷ 10" IPS; Ø 4" ÷ 10" DIPS
- **Wyes clamps Ø 315 mm;**
  inserts Ø 90 ÷ 280 mm
- **Wyes clamps Ø 12" IPS;**
  inserts Ø 4" ÷ 10" IPS; Ø 4" ÷ 10" DIPS
- Right or left special clamps Ø 400;
  inserts from Ø 90 to Ø 355 mm
- Tool for flange necks
- Facer disk for PVC

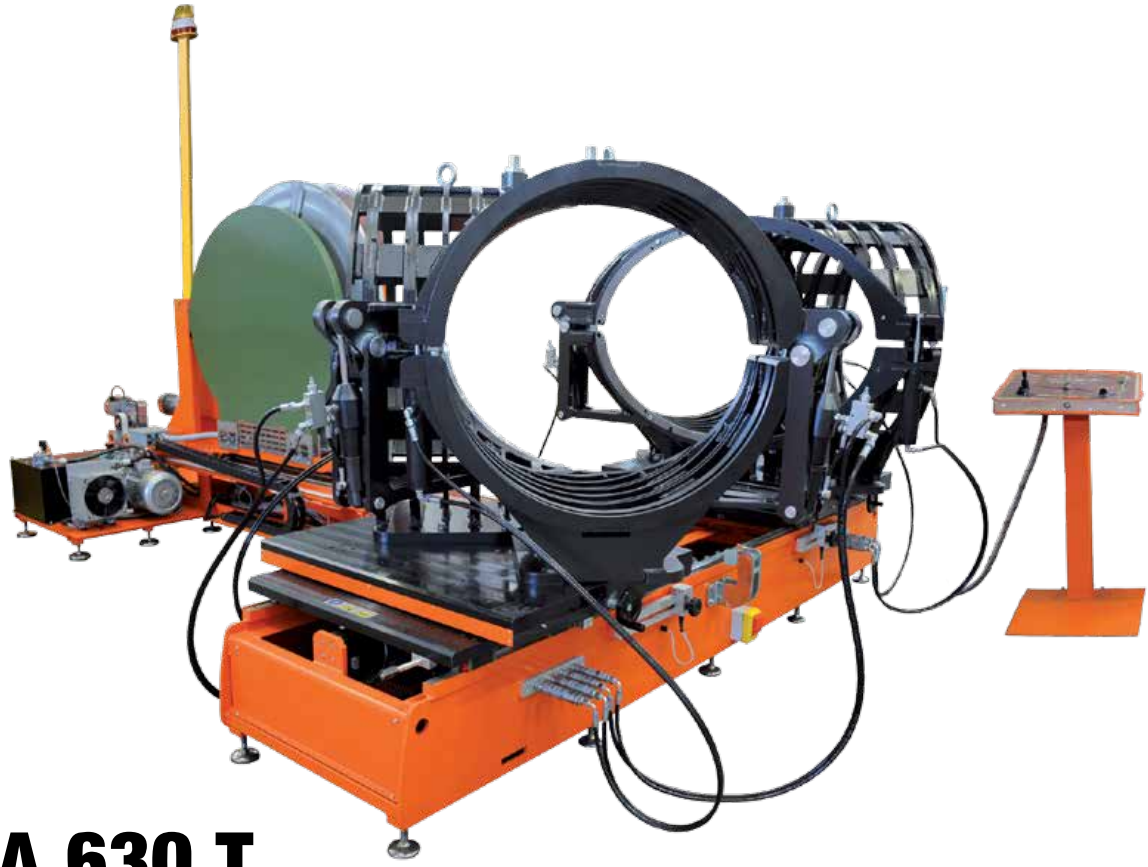
TECHNICAL FEATURES

Materials	HDPE, PP For other materials contact RITMO S.P.A.
Power supply	230 V Single Phase 50/60 Hz 400 V Three Phase 50/60 Hz
Total absorbed power	7360 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-5° ÷ 40° C (23° ÷ 104° F)
Weight machine body	647 Kg (1426 lb)
Dimensions	1490 x 2020 x 1700 mm 58.6" x 79.5" x 67"



Special clamps
Ø 400 mm

www.ritmo.it



ALFA 630 T

Workshop welding machine designed to fabricate fittings like elbows, wyes, tees and crosses (up to Ø 630 mm or 24" DIPS). All jaws movements are electro-hydraulically operated, both the open/close movement and the blocking mechanism.

Composed of:
- A machine body with two hydraulically controlled carriages.
- A control panel that features the CNC system, thanks to this would eliminate any risk of error due to the operator. The CNC incorporates a data-logging that can store up to 4000 cycles. It is possible to download the PDF report via USB slot; possibility to pre-set 20 customized
- A Teflon-coated heating plate with electrical movement (in/out) on spherical bearings guides.
- A milling cutter with electrical movement (in/out) on spherical bearings guides, operated by an electrical engine.
- An upper cylinder, to be positioned on the jaws, for welding extra thick pipes and/or whenever it is necessary to apply high pressures.



STANDARD COMPOSITION

- Welding machine complete with control panel
- Heating plate, milling cutter
- Elbows jaws Ø 24" DIPS with inserts Ø 315 ÷ 630 mm
- Upper cylinder and tool kit

ON REQUEST

- **Elbows jaws Ø 24" DIPS** inserts Ø 225 ÷ 280 mm
  inserts Ø 8" ÷ 24" IPS; Ø 8" ÷ 24" DIPS
- **Wyes jaws Ø 24" DIPS** inserts Ø 225 ÷ 630 mm
  inserts Ø 8" ÷ 24" IPS; Ø 8" ÷ 20" DIPS
- **Tees/crosses jaws Ø 24" DIPS** inserts Ø 225 ÷ 630 mm
  inserts Ø 8" ÷ 24" IPS; Ø 8" ÷ 20" DIPS
- Special milling cutter plates and blades for PVC

PLUS

CNC WELDING SYSTEM

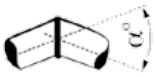
HYDRAULIC CLAMPS

DATA-LOGGING

USB PORT

TECHNICAL FEATURES

Materials	HDPE, PP For other materials contact RITMO S.P.A.
Power supply	400 V 3F+N+PE 50/60 HZ
Total absorbed power	30000 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	up to 40° C (104° F)
Angle reading sensivity	± 1°
Dimensions	2940 x 4000 x 2000 mm 115.7" x 157.5" x 78.7"
Weight	3325 Kg (7330 lb)



Elbows 225* ÷ 630 mm
8" ÷ 24" IPS; 8" ÷ 24" DIPS
0° ÷ 60°



Wyes 225* ÷ 630 mm
8" ÷ 24" IPS; 8" ÷ 24" DIPS
45° ÷ 60°



Tees/Crosses
225* ÷ 630 mm
8" ÷ 24" IPS; 8" ÷ 24" DIPS







*** 225 ÷ 280 mm on requesty**
standard composition 315 ÷ 630 mm

Norway



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watch the video

ALFA 1000

CNC workshop welding machine designed to fabricate fittings like elbows, wyes, tees and crosses. The jaws movements are electro-hydraulically operated, both the open/close movement and the blocking mechanism.

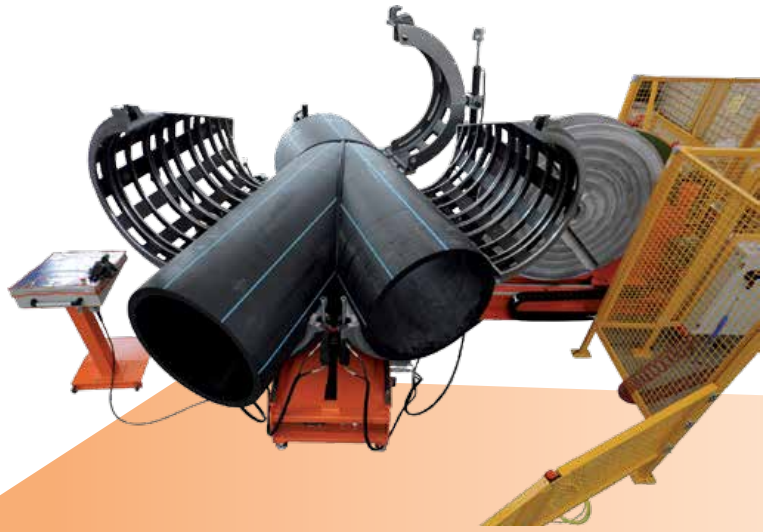
Composed of:
- A machine body with two hydraulically controlled carriages.
- A control panel that features the CNC system, thanks to this would eliminate any risk of error due to the operator. The CNC incorporates a datalogging that can store up to 4000 cycles. It is possible to download the PDF report via USB slot; possibility to pre-set 20 customized.
- A Teflon-coated heating plate with electrical movement (in/out) on spherical bearings guides.
- A milling cutter with electrical movement (in/out) on spherical bearings guides, operated by an electrical engine.
- An upper cylinder, to be positioned on the jaws, for welding extra thick pipes and/or whenever it is necessary to apply high pressures.

STANDARD COMPOSITION

- Welding machine complete with control panel
- Heating plate, milling cutter
- Upper cylinder and tool kit
- Elbows jaws complete with inserts from Ø 355 to Ø 900 mm

ON REQUEST

- Wyes jaws Ø 800 complete with inserts from Ø 355 to Ø 710 mm
- Tees/crosses jaws Ø 800 complete with inserts from Ø 355 to 710 mm



PLUS

CNC WELDING SYSTEM

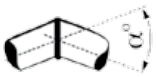
HYDRAULIC CLAMPS

DATA-LOGGING

USB PORT

TECHNICAL FEATURES

Materials	HDPE, PP For other materials contact RITMO S.P.A.
Power supply	400 V 3F+N+PE 50/60 HZ
Total absorbed power	38000 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	up to 40° C (104° F)
Angle reading sensivity	± 1°
Dimensions	2980 x 4560 x 3060 mm 117.3" x 179.5" x 120.4"
Weight	3130 Kg (6900 lb)



Elbows 355 ÷ 1000 mm
0° ÷ 60°



Wyes 355 ÷ 800 mm
45° ÷ 60°



Tees/Crosses
355 ÷ 800 mm



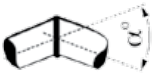


Egypt



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ALFA 1200



Elbows 630 ÷ 1200 mm
0° ÷ 60°



Wyes 630 ÷ 1000 mm
45° ÷ 60°



Tees/Crosses
630 ÷ 1000 mm

Workshop welding machine designed to fabricate fittings like elbows, wyes, tees and crosses up to Ø 1200 mm. The ALFA 1200 welding plastic materials such as: HDPE, PP.

STANDARD COMPOSITION

- A machine body with two hydraulically controlled carriages and hydraulic clamps.
- A control panel that features the CNC system, thanks to this would eliminate any risk of error due to the operator. The CNC incorporates a data-logging that can store up to 4000 cycles. It is possible to download the PDF report via USB slot; possibility to pre-set 20 customized.
- A milling cutter with electrical movement (in/out)
- A Teflon-coated heating plate with electrical movement (in/out)



TECHNICAL FEATURES

Materials	HDPE, PP For other materials contact RITMO S.P.A.
Power supply	400 V Three Phase 50/60 Hz
Total absorbed power	46000 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-5° ÷ 40° C (23° ÷ 104° F)
Weight machine body	6120 Kg (13500 lb)
Dimensions	4100 x 6000 x 3060 mm 161.4" x 236" x 120.5"

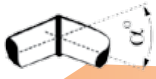
ALFA 48" IPS

Workshop welding machine designed to fabricate fittings like elbows, wyes, tees and crosses up to Ø 48" IPS mm. The ALFA 48" IPS welding plastic materials such as: HDPE, PP.

STANDARD COMPOSITION

- A machine body with two hydraulically controlled carriages and hydraulic clamps.
- A control panel that features the CNC system, thanks to this would eliminate any risk of error due to the operator. The CNC incorporates a data-logging that can store up to 4000 cycles. It is possible to download the PDF report via USB slot; possibility to pre-set 20 customized.
- A milling cutter with electrical movement (in/out)
- A Teflon-coated heating plate with electrical movement (in/out)





Elbows 24" IPS ÷ 48" IPS
0° ÷ 60°

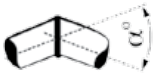


Wyes 24" IPS ÷ 36" IPS
45° ÷ 60°



Tees/Crosses
24" IPS ÷ 36" IPS

watch the video



Elbows 710 ÷ 1600 mm
0° ÷ 60°



Wyes 710 ÷ 1200 mm
45° ÷ 60°



Tees/Crosses
710 ÷ 1200 mm



ALFA 1600

Workshop welding machine designed to fabricate fittings like elbows, wyes, tees and crosses up to Ø 1600 mm. The ALFA 1600 welding plastic materials such as: HDPE, PP.*

STANDARD COMPOSITION

Composed of:
- A machine body with two hydraulically controlled carriages and hydraulic clamps.
- A control panel that features the CNC system, thanks to this would eliminate any risk of error due to the operator. The CNC incorporates a data-logging that can store up to 4000 cycles. It is possible to download the PDF report via USB slot; possibility to pre-set 20 customized.
- A milling cutter with electrical movement (in/out)
- A Teflon-coated heating plate with electrical movement (in/out)
- Elbows jaws Ø 1600 mm complete with inserts from Ø 710 to Ø 1400 mm

ON REQUEST

- **Tees/crosses clamps Ø 1200 mm;**
  inserts Ø 710 ÷ 1000 mm

- **Wyes clamps Ø 1200 mm;**
  inserts Ø 710 ÷ 1000 mm



TECHNICAL FEATURES

Materials	HDPE, PP For other materials contact RITMO S.P.A.
Power supply	400 V Three Phase 50/60 Hz
Total absorbed power	92300 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Outside temperature range	-5° ÷ 40° C (23° ÷ 104° F)
Weight machine body	8800 Kg (19400 lb)
Dimensions	7369 x 4487 x 2844 mm 290" x 177" x 112"





OMEGA 400 - 315

OMEGA 400 - 315 is a fusion welding machine for in shop use for the manufacturing of special parts, such as reducing branches (Tees, Crosses) .

STANDARD COMPOSITION

- Machine body with manual carriage for socket centring
- Hydraulic jaws for locking pipe & branches
- Side support for branches
- Quick release inserts
- EASY LIFE control panel: allows a simple-easy-repeatable welding cycle, reducing the necessity of operator's intervention.
- A built-in memory records 4000 welding cycles; the data will be available through PDF reports, downloadable in a USB pen drive. Possibility to pre-set 20 customized.
- Hydraulic movement of heating plate that can host male/female sockets with heating plate detaching device
- Reduced Tee Driller (on request)

INTEGRATIVE SYSTEMS
RADIUS 40-315 machine for radial cutting

Reduced Tee Driller





FEASIBLE BRANCHES
Ø mm BRANCH PIPE

Ø mm MAINE PIPE	50	63	75	90	110	125	140	160	180	200	225	250	280	315
90	•	•												
110	•	•	•											
125	•	•	•	•										
140		•	•	•	•									
160		•	•	•	•	•								
180		•	•	•	•	•	•							
200		•	•	•	•	•	•	•						
225		•	•	•	•	•	•	•	•					
250		•	•	•	•	•	•	•	•	•				
280		•	•	•	•	•	•	•	•	•				
315		•	•	•	•	•	•	•	•	•	•			
355		•	•	•	•	•	•	•	•	•	•			
400		•	•	•	•	•	•	•	•	•	•	•	•	•

TECHNICAL FEATURES

Materials	HDPE, PP
Power supply	230 Vac 50/60 Hz
Total absorbed power	6500 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Weight: machine	735 Kg (1620 lb)
Weight: control panel	55 Kg (1740 lb)
Dimensions: machine	1680 x 1600 x 1690 mm; 66.1" x 63" x 66.5"
Dimensions: control panel	600 x 600 x 1150 mm; 23.6" x 23.6" x 45.2"



OMEGA 630 - 315

OMEGA 630 - 315 is a fusion welding machine for in shop use for the manufacturing of special parts, such as reducing branches (Tees, Crosses). Available a model 24” IPS - 12” IPS

STANDARD COMPOSITION

- Machine body with manual carriage for socket centring
- Hydraulic jaws for locking pipe & branches
- Side support for branches
- Quick release inserts
- EASY LIFE control panel: allows a simple-easy-repeatable welding cycle, reducing the necessity of operator’s intervention
- A built-in memory records 4000 welding cycles; The data will be available through PDF reports, downloadable in a USB pen drive. Possibility to pre-set 20 customized.
- Hydraulic movement of heating plate that can host male/female sockets with heating plate detaching device
- Reduced Tee Driller (on request)

INTEGRATIVE SYSTEMS
RADIUS 40-315 machine for radial cutting

FEASIBLE BRANCHES
Ø mm BRANCH PIPE

Ø mm MAINE PIPE	50	63	75	90	110	125	140	160	180	200	225	250	280	315
90	•	•												
110	•	•	•											
125	•	•	•	•										
140		•	•	•	•									
160		•	•	•	•	•								
180		•	•	•	•	•	•							
200		•	•	•	•	•	•	•						
225		•	•	•	•	•	•	•	•					
250		•	•	•	•	•	•	•	•	•				
280		•	•	•	•	•	•	•	•	•				
315		•	•	•	•	•	•	•	•	•	•			
355		•	•	•	•	•	•	•	•	•	•			
400		•	•	•	•	•	•	•	•	•	•	•	•	•
450		•	•	•	•	•	•	•	•	•	•	•	•	•
500		•	•	•	•	•	•	•	•	•	•	•	•	•
560		•	•	•	•	•	•	•	•	•	•	•	•	•
630		•	•	•	•	•	•	•	•	•	•	•	•	•

FEASIBLE BRANCHES
Ø IPS BRANCH PIPE

Ø IPS MAINE PIPE	1 ½	2	2½	3	4	5	6	8	10	12
3	•	•								
4	•	•	•							
5	•	•	•	•	•					
6	•	•	•	•	•					
8	•	•	•	•	•	•	•			
10	•	•	•	•	•	•	•			
12	•	•	•	•	•	•	•	•		
14	•	•	•	•	•	•	•	•		
16	•	•	•	•	•	•	•	•	•	
18	•	•	•	•	•	•	•	•	•	
20	•	•	•	•	•	•	•	•	•	•
22	•	•	•	•	•	•	•	•	•	•
24	•	•	•	•	•	•	•	•	•	•

Reduced
Tee Driller





TECHNICAL FEATURES

Materials	HDPE, PP
Power supply	230 Vac 50/60 Hz
Total absorbed power	6500 W
Working temperature	180° ÷ 280° C (356° ÷ 536° F)
Weight: machine	758 Kg (1671 lb)
Weight: control panel	55 Kg (1740 lb)
Dimensions: machine	1680 x 1600 x 1690 mm; 66.1" x 63" x 66.5"
Dimensions: control panel	600 x 600 x 1150 mm; 23.6" x 23.6" x 45.2"



RADIUS 40 - 315

RADIUS 40-315 is designed to perform saddle cuts on plastic pipes made of HDPE, PP, PVC.

The saw performs precise radial cuts, and thanks to a trolley that slide gradually on a scaled instrument, allows a fast configuration of the cutting radius. Even the pipe support can slide and block small pieces of pipes down to 15 cm length (6"). The saw rotation during cutting is executed manually and in complete safe conditions since the control panel and its handles are located behind the machine away from the cutting area.

This machine is not suitable to cut different materials from those specified above, including composite pipes that may contain other substances (polymers, metals, alloys, etc.).

STANDARD COMPOSITION
- Machine body with control panel and saw

INTEGRATIVE SYSTEMS for
OMEGA 630-315 and OMEGA 400-315



TECHNICAL FEATURES

Materials	HDPE, PP, PVC
Branch pipe OD	40 ÷ 323 (1.6" x 12.7")
Main pipe OD	Up to 630 mm (24.8")
Shortest branch length	15 cm (6")
Power supply	110 Vac Single Phase 60 Hz 230 Vac Single Phase 50 Hz
Total absorbed power	1100 W
Weight	425 Kg (937 lb)
Dimensions	1000 x 1566 x 1642 mm 39.4" x 61.5" x 64.6"

BAND SAW

FAST AND EXACT CUTTING





SIGMA 400 PRO

SIGMA 400 PRO is electric workshop band saw machine for plastic pipes HDPE, PP, PVDF, PVC.
The SIGMA PRO were specially designed to make angular cut, featuring a wide range of angles (from - 30° to 67,5°). They're the ideal equipment to match Alfa fittings fabrication machines. Both the preparation and cutting phases are extremely simple and safe to perform.

The machines is provided with special spherical bearings guides where the machine body can easily move sideward. The equipment includes a control panel, located at a safety distance from the cutting area, where the operator can control the manual movement of the arch saw (IN/OUT) and also adjust and regulate the cutting speed.

Special auxiliary devices can relieve the stress on the blade and help reducing the ordinary technical maintenance.

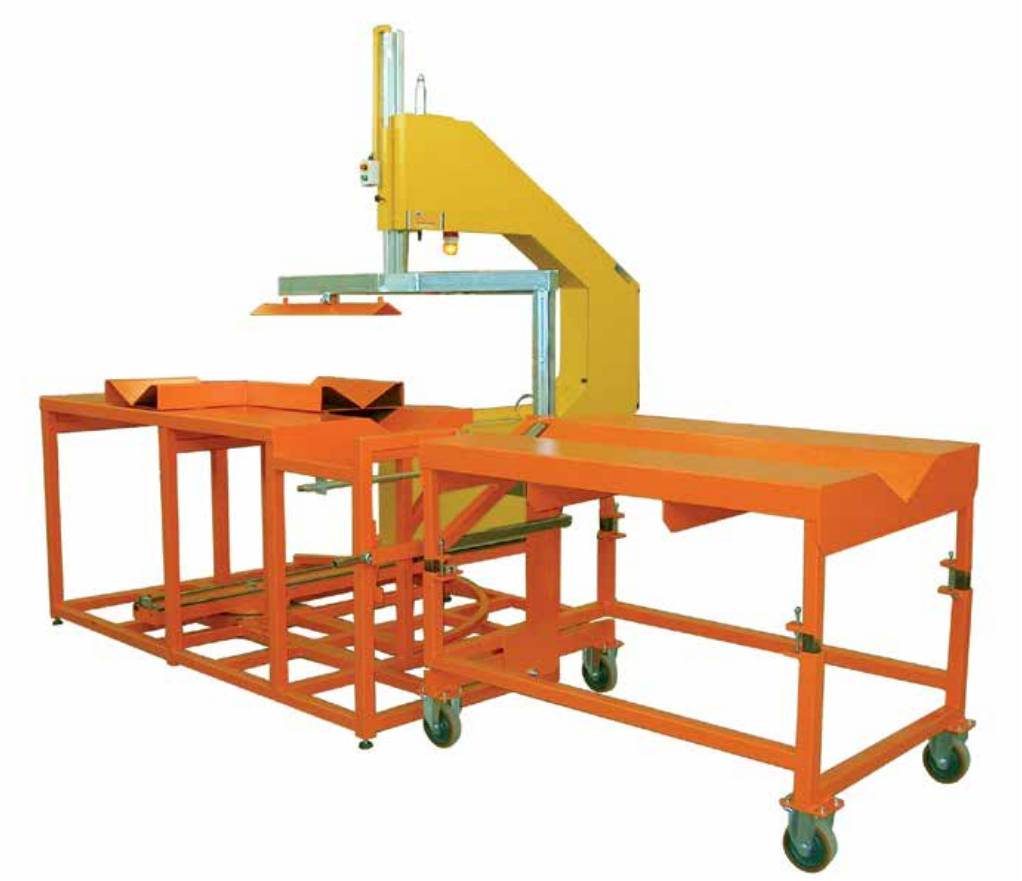
STANDARD COMPOSITION
- Auxiliary bench for cutting tees

ON REQUEST
- Pipe supporting table
- Kit for PP pipes with glass fiber



TECHNICAL FEATURES

Working range	60 ÷ 450 mm; 2" IPS ÷ 18" IPS
Working range angles	from - 30° to 67,5°
Materials	HDPE, PP, PVDF, PVC For other materials contact RITMO S.P.A.
Power supply	400 V 3F+N+PE 50/60 HZ
Total absorbed power	860 W
Weight	330 Kg (727.5 lb)
Dimensions	2980 x 2650 x 2290 mm 117.3" x 104.3" x 90.2"



SIGMA 630 PRO

SIGMA 630 PRO is electric workshop band saw machine for plastic pipes HDPE, PP, PVDF, PVC.
The SIGMA PRO were specially designed to make angular cut, featuring a wide range of angles (from - 30° to 67,5°). They're the ideal equipment to match Alfa fittings fabrication machines. Both the preparation and cutting phases are extremely simple and safe to perform.

The machines is provided with special spherical bearings guides where the machine body can easily move sideward. The equipment includes a control panel, located at a safety distance from the cutting area, where the operator can control the automatic movement of the arch saw (IN/OUT) and also adjust and regulate the cutting speed.

Special auxiliary devices can relieve the stress on the blade and help reducing the ordinary technical maintenance.

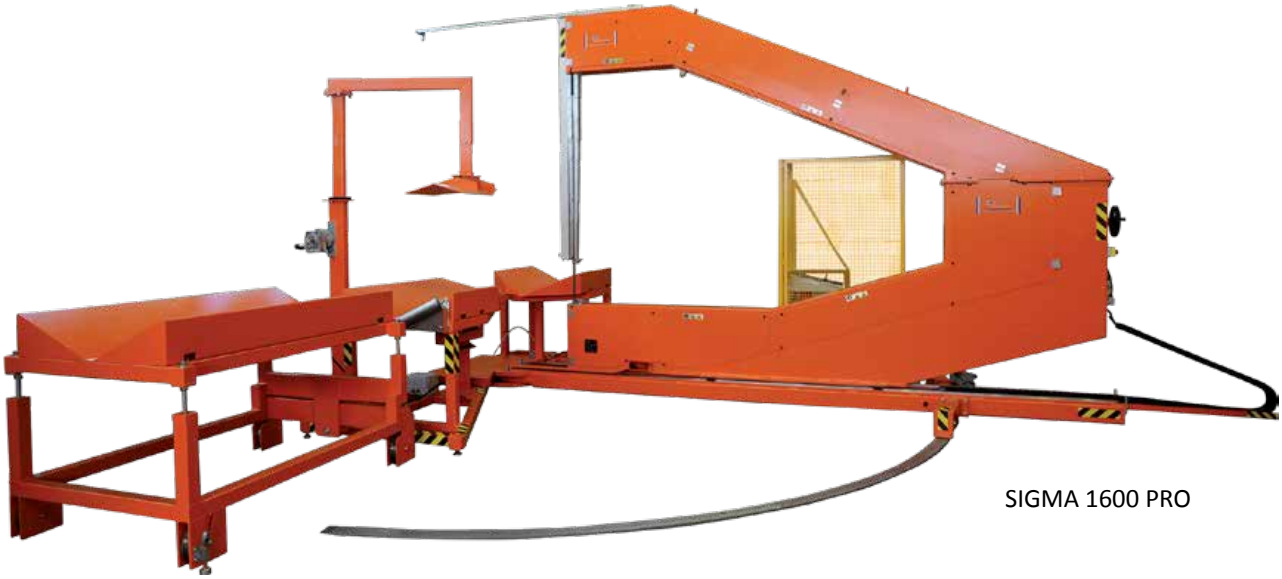
STANDARD COMPOSITION
- Auxiliary bench for cutting tees

ON REQUEST
- Pipe supporting table
- Scraps suction device
- Kit for PP pipes with glass fibe



TECHNICAL FEATURES

Working range	90 ÷ 655 mm; 3" IPS ÷ 24" DIPS
Working range angles	from -30° to 67,5°
Materials	HDPE, PP, PVDF, PVC For other materials contact RITMO S.P.A.
Power supply	400 V 3F+N+PE 50/60 HZ
Total absorbed power	2200 W
Weight	925 Kg (2040 lb)
Dimensions	4340 x 3460 x 2650 mm 170.9" x 136.2" x 104.3"



SIGMA 1600 PRO

SIGMA 1200 PRO - SIGMA 1600 PRO

SIGMA 1200 PRO and SIGMA 1600 PRO are electric workshop band saw machines, for plastic pipes up to OD 1290 mm (48 " DIPS) and OD 1702 mm (67"). They're the ideal equipment to match Alfa fittings fabrication machines. Both the preparation and cutting phases are extremely simple and safe to perform.

SIGMA 1200 and 1600 were specially designed to perform easy cuts with a wide range of angles (from - 45° to 67,5°). Thanks to a PLC system, the operator can input the exact cutting angles with the highest precision. Composed of:

- Pipe housing bench, a blade-housing arm (belt type), moving on a spherical bearings guide, performing settable advancing speed. It can rotate on an arc system, and perform a wide range of share angles.
- A continuous control blade guide telescopic system, to reduce to the minimum the blade vibration, regardless of the diameter and/or thickness of the pipe being cut. Provided with a laser-beam pointing system to localize the cutting area.
- A safety pilot cabin, where the control panel is located. It is protected by guards for greater operator's safety.
- An easy-to-use control panel, featuring a simplified graphics display, where the inclination degree of the cutting arc is displayed.

STANDARD COMPOSITION

- Band saw machine complete of an auxiliary bench to cut welded pipe sector (for Tees), and support kit for the pipe sectors (to prevent them from being damaged)

ON REQUEST

- Scraps suction device



TECHNICAL FEATURES

watch the video

	SIGMA 1200 PRO	SIGMA 1600 PRO
Working range OD	200 ÷ 1290 mm; 8” IPS ÷ 48” DIPS OD contact RITMO S.P.A.	200 ÷ 1702 mm; 8” IPS ÷ 67” OD contact RITMO S.P.A.
Working range angles	from -45° to 67,5°	from -45° to 67,5°
Materials	HDPE, PP, PVDF, PVC For other materials contact RITMO S.P.A.	HDPE, PP, PVDF, PVC For other materials contact RITMO S.P.A.
Power supply	400 V 3F+N+PE 50/60 HZ	400 V 3F+N+PE 50/60 HZ
Total absorbed power	4600 W	4600 W
Weight	4380 Kg (9656 lb)	4690 Kg (10340 lb)
Dimensions	7100 x 9200 x 4500 mm 279,5” x 362” x 177.2”	8600 x 11800 x 5500 mm 338,5” x 464,6” x 216.5”

SIGMA 1200 PRO





Ritmo
PLASTIC WELDING TECHNOLOGY

PLASTIC FABRICATION

THE RESULT ALWAYS DEPENDS ON YOUR CHOICES



TECHNOLOGY AND QUALITY FOR PROFESSIONALS

WELDABLE MATERIALS:

HDPE
PP
PVDF*
* check specifications on each model

STARGUN IS A COMPLETE EXTRUDER LINE ABLE TO OFFER THE BEST TECHNOLOGICAL SOLUTIONS FOR EXTRUSION WELDING

Stargun LINK models 20/30/40

Quality, manageability, design. Three compact and user-friendly products.
The right choice for those who put quality in first place.



DOUBLE TEMPERATURE CONTROL: AIR / PLASTIFICATION WELDING ACCORDING D.V.S. 2207-4

Stargun K-SB models 50/60

Power and lightness. The strength of these models is their output.
The weight-power ratio combined with the high output make those extruders unique.



DOUBLE TEMPERATURE CONTROL: AIR / PLASTIFICATION WELDING ACCORDING D.V.S. 2207-4

Stargun SOLO models 20/30/40

Reliability and tradition. Three products that are not just a restyling, but a new concept: Simplification.
A reference for those who look for practicality at a fair price.



SINGLE TEMPERATURE CONTROL: HOT AIR



Product code
* LINK 20 CE plug 97800100
* LINK 20 Schuko plug 97800102
  LINK 20 Germany edition Schuko plug 97800103

* Not available for the German market

LINK 20

Stargun LINK 20 is the most compact and light extruder of the product range. Its geometry combined with the reduced weight make this extruder the ideal solution to work in narrow places. The welding quality is guaranteed by the motor speed adjustment and the thermoregulator with double temperature control: air and plastification.

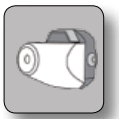
- Backlight display
- Triple LEDs for the lightening of the welding area
- Potentiometer; *security system "motor block/cold start"
- Independent blower
- Double T° thermoregulator: air/platification
- Rotating handle
- External fuse with simple access
- 360° rotating welding shoes. Easily replaceable.

Standard equipment:
LINK 20 with transport case and
- Rotating welding shoe mod. 90° - a 7 mm cod. 86777821
- Rotating welding shoe mod. V Flat 10/12 mm cod. 86777830

On request
Wide range of welding shoes

Materials	HDPE, PP, PVDF
Rods	Ø 3 - 4 mm; 1/8" - 5/32"
Sheets	1,5 ÷ 20 mm 1/16" ÷ 0.8"
** Output up to	2,2 Kg/h HDPE rod Ø 4 mm 5/32"
Dimensions	510 x 260 x 110 mm 20" x 10.2" x 4,3"
Power supply	230 Vac 50/60 Hz
Total absorbed power	3100 W
Weight	6,5 Kg (14.3 lb)

**** the output varies depending on the material**

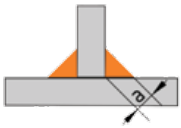

Conical 20
86777817


Conical 14
86777818

WELDING SHOES LINK 20

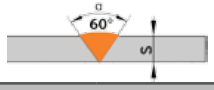


90° - Welding

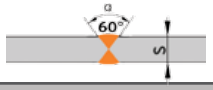


ACCORDING DVS STANDARD		
Model	**Sheet thickness**	**Article**
90° - a 4.2 mm	**6 mm**	**86777819**
90° - a 5.6 mm	**8 mm**	**86777820**
90° - a 7 mm	**10 mm**	**86777821**
90° - a 8,4 mm	**12 mm**	**86777822**
90° - a 10,5 mm	**15 mm**	**86777823**
90° - a 14 mm	**20 mm**	**86777824**

V - Welding "S"

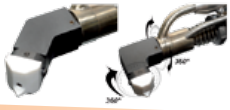


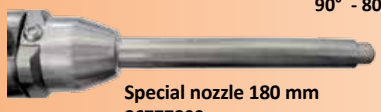
X - Welding "S"



ACCORDING DVS STANDARD			
Model	**V welding "S"**	**X welding "S"**	**Article**
V Flat - 8	**8 mm**	**16 mm**	**86777829**
V Flat - 10/12	**10 - 12 mm**	**20 - 25 mm**	**86777830**
V Flat - 15	**15 mm**	**30 mm**	**86777831**
V Flat - 20	**20 mm**	**40 mm**	**86777832**


Nozzle for corrugated pipes
76777840


Special welding shoe support
45° - 80047830 (only support)
90° - 80047820 (only support)


Special nozzle 180 mm
86777800



Product code
* LINK 30 CE plug 97800110
* LINK 30 Schuko plug 97800112
  LINK 30 Germany edition Schuko plug 97800113

* Not available for the German market

LINK 30

Stargun LINK 30 is able to weld wire of Ø 3-4-5 mm. Its output (up to 3,2 kg/h) together with its manageability make the LINK 30 the most versatile of the product range. The welding quality is guaranteed by the motor speed adjustment and the thermoregulator with double temperature control: air and plastification.

- Backlight display
- Triple LEDs for the lightening of the welding area
- Potentiometer; *security system "motor block/cold start"
- Independent blower
- Double T° thermoregulator: air/platification
- Rotating handle
- External fuse with simple access
- 360° rotating welding shoes. Easily replaceable.

Standard equipment:
LINK 30 with transport case and
- Rotating welding shoe mod. 90° - a 10,5 mm cod. 86777823
- Rotating welding shoe mod. V Flat - 15 mm cod. 86777831

On request
Wide range of welding shoes and Geotextile kit.

Materials	HDPE, PP, PVDF
Rods	Ø 3 - 4 - 5 mm 1/8" - 5/32" - 3/16"
Sheets	1,5 ÷ 30 mm 1/16" ÷ 1.1"
** Output up to	3,2 Kg/h HDPE rod Ø 5 mm 3/16"
Dimensions	540 x 260 x 110 mm 21.2" x 10.2" x 4,3"
Power supply	230 Vac 50/60 Hz
Total absorbed power	3500 W
Weight	6,8 Kg (15 lb)

**** the output varies depending on the material**


Conical 20
86777817

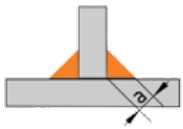

Conical 14
86777818


Geotextile
86777814

WELDING SHOES LINK 30

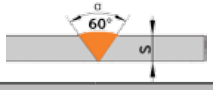


90° - Welding

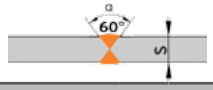


ACCORDING DVS STANDARD		
Model	**Sheet thickness**	**Article**
90° - a 5.6 mm	**8 mm**	**86777820**
90° - a 7 mm	**10 mm**	**86777821**
90° - a 8,4 mm	**12 mm**	**86777822**
90° - a 10,5 mm	**15 mm**	**86777823**
90° - a 14 mm	**20 mm**	**86777824**
90° - a 17,5 mm	**25 mm**	**86777825**
90° - a 21 mm	**30 mm**	**86777826**

V - Welding

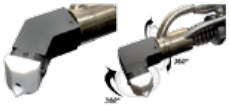


X - Welding



ACCORDING DVS STANDARD			
Model	**V welding "S"**	**X welding "S"**	**Article**
V Flat - 8	**8 mm**	**16 mm**	**86777829**
V Flat - 10/12	**10 - 12 mm**	**20 - 25 mm**	**86777830**
V Flat - 15	**15 mm**	**30 mm**	**86777831**
V Flat - 20	**20 mm**	**40 mm**	**86777832**


Nozzle for corrugated pipes
76777840


Special welding shoe support
45° - 80047830 (only support)
90° - 80047820 (only support)


Special nozzle 180 mm
86777800

www.ritmo.it



Product code
* LINK 40 CE plug 97800120
* LINK 40 Schuko plug 97800122
  LINK 40 Germany edition Schuko plug 97800123

* Not available for the German market

LINK 40

Stargun LINK 40 is an extruder with high output able to extrude up to 4 kg/h. Its power combined with the manageability make it a high productive extruder. The welding quality is guaranteed by the motor speed adjustment and the thermoregulator with double temperature control: air and plastification.

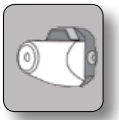
- Backlight display
- Triple LEDs for the lightening of the welding area
- Potentiometer; *security system "motor block/cold start"
- Independent blower
- Double T° thermoregulator: air/plastification
- Rotating handle
- External fuse with simple access
- 360° rotating welding shoes. Easily replaceable.

Standard equipment:
Link 40 with transport box and
- Rotating welding shoe mod. 90° - a 10,5 mm cod. 86777823
- Rotating welding shoe mod. V Flat - 15 mm cod. 86777831

On request
Wide range of welding shoes and Geotextile kit

Materials	HDPE, PP
Rods	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 mm 3/16"
Dimensions	640 x 200 x 100 mm 25.2" x 7.8" x 3.9"
Power supply	230 Vac 50/60 Hz
Total absorbed power	3500 W
Weight	7,6 Kg (16.7 lb)

**** the output varies depending on the material**


Conical 20
86777817

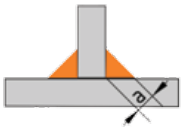

Conical 14
86777818


Geotextile
86777814

WELDING SHOES LINK 40

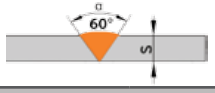


90° - Welding

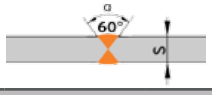


ACCORDING DVS STANDARD		
Model	**Sheet thickness**	**Article**
90° - a 5.6 mm	**8 mm**	**86777820**
90° - a 7 mm	**10 mm**	**86777821**
90° - a 8,4 mm	**12 mm**	**86777822**
90° - a 10,5 mm	**15 mm**	**86777823**
90° - a 14 mm	**20 mm**	**86777824**
90° - a 17,5 mm	**25 mm**	**86777825**
90° - a 21 mm	**30 mm**	**86777826**

V - Welding

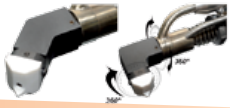


X - Welding



ACCORDING DVS STANDARD			
Model	**V welding "S"**	**X welding "S"**	**Article**
V Flat - 8	**8 mm**	**16 mm**	**86777829**
V Flat - 10/12	**10 - 12 mm**	**20 - 25 mm**	**86777830**
V Flat - 15	**15 mm**	**30 mm**	**86777831**
V Flat - 20	**20 mm**	**40 mm**	**86777832**


Nozzle for corrugated pipes
76777840


Special welding shoe support
45° - 80047830 (only support)
90° - 80047820 (only support)




LINK 40

K-SB 50



K-SB 50 Back handle

The powerful Stargun K-SB 50 is essential for all those jobs that require a hight quantity of extruded material. K-SB 50 is suitable for welding linings, geo-textiles, sheets and thick pipes and for all kind off applications that need to resist against continuous stress. Output up to 5 kg/h.

- Potentiometer; security system “motor block/cold start”
- Independent blower
- Backlight display
- Double LEDs for the lightening of the welding area
- Double T° thermoregulator: air/plastification
- Rotating handle

Standard equipment with two different handles:
- K-SB 50 back handle, fixed lateral preheating with nozzle 32 mm (78947864C)
- K-SB 50 Pistol Grip, fixed lateral preheating with nozzle 32 mm (78947864C)
- Transport case with extruder support
- Welding shoe 90° fixed air - a 17,5 mm cod. 86777843
- Welding shoe V Flat fixed air - 25 mm cod. 86777851

On request
Welding shoes, KIT rotating welding shoes

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: (a) Back Handle (B) Pistol Grip	(a) 720 x 260 x 100 mm 28.3" x 10.2" x 3.9" (b) 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)

*** The maximum extruded capacity varies depending on the material**



K-SB 50 Pistol Grip

K-SB 60



The powerful Stargun K-SB 60 is essential for all those jobs that require a hight quantity of extruded material. K-SB 60 is suitable for welding linings, geo-textiles, sheets and thick pipes and for all kind off applications that need to resist against continuous stress. Output up to 6,2 kg/h.

- Potentiometer; security system “motor block/cold start”
- independent blower
- Backlight display
- Double LEDs for the lightening of the welding area
- Double T° thermoregulator: air/plastification
- Rotating handle

Standard equipment:
- K-SB 60 back handle, fixed lateral preheating with nozzle 32 mm (78947864C)
- Transport case with extruder support
- Welding shoe 90° fixed air - a 21 mm cod. 86777844
- Welding shoe V Flat fixed air - 30 mm cod. 86777852

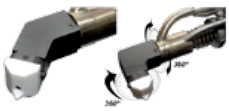
On request
Welding shoes, KIT rotating welding shoes 360°,
KIT Geotextile

Materials	HDPE, PP
Rod	Ø 4 - 5 mm; 5/32” - 3/16”
Sheets	1,5 ÷ 40 mm; 1/16” ÷ 1.5”
*Output up to	6.2 Kg/h HDPE rod Ø 5; 3/16”
Dimension	730 x 260 x 100 mm 28.7" x 10.2" x 3.9"
Power supply	230 Vac 50/60 Hz
Total absorbed power	4200 W
Weight	9,3 Kg (20.5 lb)

*** The maximum extruded capacity varies depending on the material**



Special corrugate shoe
76777840



Special shoe support
45° - 80047830
90° - 80047820



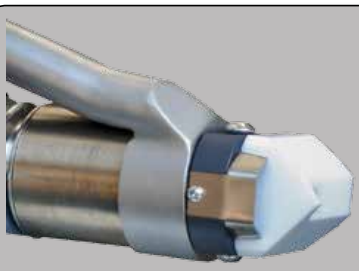
Special corrugate shoe 180 mm
86777800



K-SB 50 / K-SB 60
Geo-textiles configuration



Fixed Lateral
Pre-Heating
Standard composition
K-SB 50 / K-SB 60



360° Pre-Heating
On request
K-SB 50 / K-SB 60

WELDING SHOES
K-SB 50 / K-SB 60

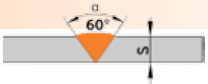


Kit 360° Pre-Heating adapter 81567801 to use with 360° Rotating Shoes

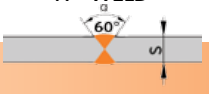


360° Rotating Shoes

V - WELD



X - WELD





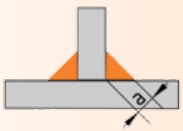
Shoes Fixed Lateral Pre-Heating

ACCORDING TO DVS STANDARD			
360° Rotating Shoes to use with 81567801	V weld "S"	X weld "S"	Article
V Flat - 8	8 mm	16 mm	86777829
V Flat - 10/12	10 - 12 mm	20 - 25 mm	86777830
V Flat - 15	15 mm	30 mm	86777831
V Flat - 20	20 mm	40 mm	86777832
Shoes Fixed Lateral Pre-Heating to use with 81567800	V weld "S"	X weld "S"	Article
V Flat - 8	8 mm	16 mm	86777847
V Flat - 10/12	10 - 12 mm	20 - 25 mm	86777848
V Flat - 15	15 mm	30 mm	86777849
V Flat - 20	20 mm	35 - 40 mm	86777850
V Flat - 25	25 mm	-	86777851
V Flat - 30	30 mm	-	86777852
V Flat - 35	35 mm	-	86777853
V Flat - 40	40 mm	-	86777854



Shoes Fixed Lateral Pre-Heating

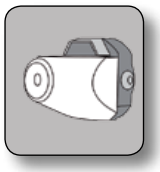
90° - WELD



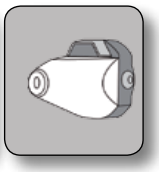


360° Rotating Shoes

ACCORDING TO DVS STANDARD		
Shoes Fixed Lateral Pre-Heating to use with 81567800	sheets thickness	Article
90° - a 7 mm	10 mm	86777839
90° - a 8,4 mm	12 mm	86777840
90° - a 10,5 mm	15 mm	86777841
90° - a 14 mm	20 mm	86777842
90° - a 17,5 mm	25 mm	86777843
90° - a 21 mm	30 mm	86777844
90° - a 24,5 mm	35 mm	86777845
90° - a 28 mm	40 mm	86777846
360° Rotating Shoes to use with 81567801	sheets thickness	Article
90° - a 7 mm	10 mm	86777821
90° - a 8,4 mm	12 mm	86777822
90° - a 10,5 mm	15 mm	86777823
90° - a 14 mm	20 mm	86777824
90° - a 17,5 mm	25 mm	86777825
90° - a 21 mm	30 mm	86777826
90° - a 24,5 mm	35 mm	86777827
90° - a 28 mm	40 mm	86777828



Conical 20
86777817

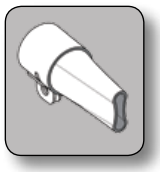


Conical 14
86777818

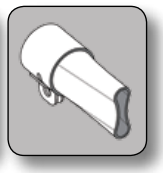


Geotextile
86777814

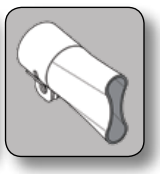
LATERAL PRE-HEATING NOZZLE



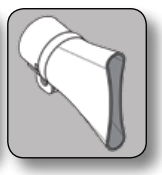
Nozzle 18 mm
78947844C



Nozzle 25 mm
78947854C



Nozzle 32 mm
78947864C



Nozzle 48 mm
78947874C

www.ritmo.it



Product code
SOLO 20 CE plug 97800130
SOLO 20 Schuko plug 97800132

SOLO 20

Stargun SOLO 20 is an essential extruder able to perform quality weldings. Solid, compact, reliable, the extruder is equipped with a motor potentiometer for the speed adjustment and a security system "motor block" to prevent cold starts. The temperature control is on the blower and can be set on the control panel.

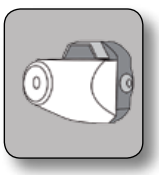
- Backlight Display
- Double LEDs for the lightening of the welding area
- Potentiometer; security system "motor block/cold start"
- Single T° thermoregulator: air
- Rotating handle
- 360° rotating welding shoes. Easily replaceable.

Standard equipment
SOLO 20, transport case and extruder support;
- Rotating welding shoe mod. 90° - a 7 mm cod. 86777821
- Rotating welding shoe mod. V Flat 10/12 mm cod. 86777830

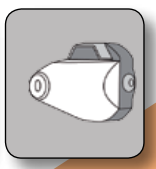
On request
Wide range of welding shoes

Materials	HDPE, PP
Rods	Ø 3 - 4 mm; 1/8" - 5/32"
Sheets	1,5 ÷ 20 mm; 1/16" ÷ 0.8"
* Output up to	2,2 Kg/h HDPE rod Ø 4 mm; 5/32"
Dimensions	450 x 310 x 100 mm; 17.7" x 12.1" x 3.9"
Power supply	230 Vac 50/60 Hz
Total absorbed power	2700 W
Weight	6,85 Kg (15.1 lb)

** the output varies depending on the material



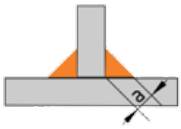
Conical 20
86777817



Conical 14
86777818

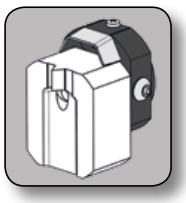
WELDING SHOES SOLO 20

90° - Welding°

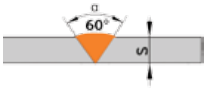




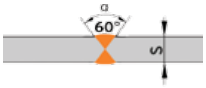
360° ROTATING SHOES		
Model	Sheet thickness	Article
90° - a 4.2 mm	6 mm	86777819
90° - a 5.6 mm	8 mm	86777820
90° - a 7 mm	10 mm	86777821
90° - a 8,4 mm	12 mm	86777822
90° - a 10,5 mm	15 mm	86777823
90° - a 14 mm	20 mm	86777824



V - Welding



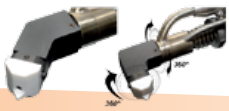
X - Welding



360° ROTATING SHOES			
Model	V welding "S"	X welding "S"	Article
V Flat - 8	8 mm	16 mm	86777829
V Flat - 10/12	10 - 12 mm	20 - 25 mm	86777830
V Flat - 15	15 mm	30 mm	86777831
V Flat - 20	20 mm	40 mm	86777832



Nozzle for corrugated pipes
76777840



Special welding shoe support
45° - 80047830 (only support)
90° - 80047820 (only support)



Special nozzle 180 mm
86777800



Product code
SOLO 30 CE plug 97800140
SOLO 30 Schuko plug 97800142

SOLO 30

Stargun SOLO 30 is essential, versatile, solid combined with qualities such as compactness, quality and reliability. The extruder welds with Ø 3-4-5 mm wire; it is equipped with a motor potentiometer for the speed adjustment and a security system "motor block" to prevent cold starts. The temperature control is on the blower and can be set on the control panel.

- Backlight Display
- Double LEDs for the lightening of the welding area
- Potentiometer; security system "motor block/cold start"
- Single T° thermoregulator: air
- Rotating handle
- 360° rotating welding shoes. Easily replaceable.

Standard equipment:
SOLO 30, transport case and extruder support;
- Rotating welding shoe mod. 90° - a 105, mm cod. 86777823
- Rotating welding shoe mod. V Flat - 15 mm cod. 86777831

On request
Welding shoes, KIT Geotextiles

Materials	HDPE, PP
Rods	Ø 3 - 4 - 5 mm; 1/8"- 5/32" - 1/16"
Sheets	1,5 ÷ 30 mm; 1/16 ÷ 1.1"
* Output up to	3,2 Kg/h HDPE rod Ø 5 mm 3/16"
Dimensions	500 x 310 x 100 mm 19.6" x 12.2" x 3.9"
Power supply	230 Vac 50/60 Hz
Total absorbed power	3100 W
Weight	7,1 Kg (15.6 lb)

** the output varies depending on the material

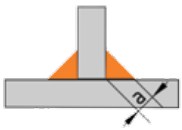

Conical 20
86777817


Conical 14
86777818


Geotextile
86777814

WELDING SHOES SOLO 30

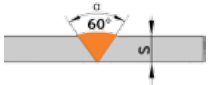
90° - Welding



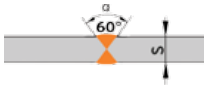


360° ROTATING SHOES		
Model	Sheet thickness	Article
90° - a 5.6 mm	8 mm	86777820
90° - a 7 mm	10 mm	86777821
90° - a 8,4 mm	12 mm	86777822
90° - a 10,5 mm	15 mm	86777823
90° - a 14 mm	20 mm	86777824
90° - a 17,5 mm	25 mm	86777825
90° - a 21 mm	30 mm	86777826

V - Welding

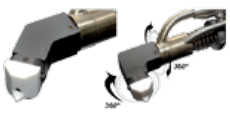


X - Welding



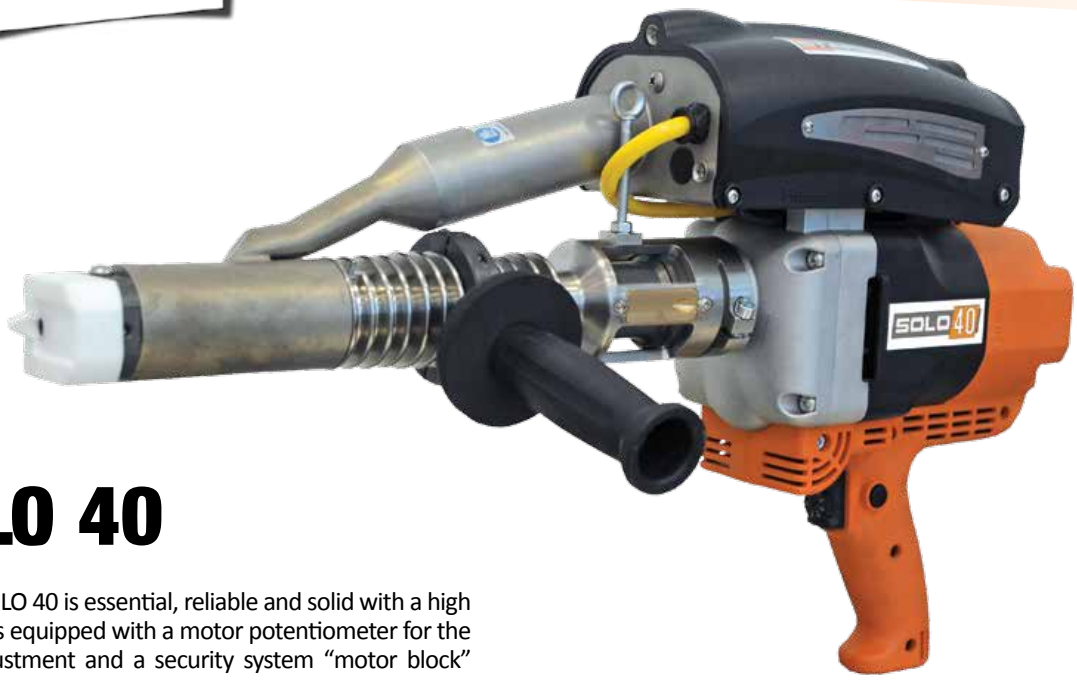
360° ROTATING SHOES			
Model	V welding "S"	X welding "S"	Article
V Flat - 8	8 mm	16 mm	86777829
V Flat - 10/12	10 - 12 mm	20 - 25 mm	86777830
V Flat - 15	15 mm	30 mm	86777831
V Flat - 20	20 mm	40 mm	86777832


Nozzle for corrugated pipes
76777840


Special welding shoe support
45° - 80047830 (only support)
90° - 80047820 (only support)


Special nozzle 180 mm
86777800

www.ritmo.it



SOLO 40

Stargun SOLO 40 is essential, reliable and solid with a high output; it is equipped with a motor potentiometer for the speed adjustment and a security system “motor block” to prevent cold starts. The temperature control is on the blower and can be set on the control panel.

- Backlight Display
- Double LEDs for the lightening of the welding area
- Potentiometer; security system “motor block/cold start”
- Single T° thermoregulator: air
- Rotating handle
- 360° rotating welding shoes. Easily replaceable.

Standard equipment:
SOLO 40, transport case and extruder support;
- Rotating welding shoe mod. 90° - a 10,5 mm cod. 86777823
- Rotating welding shoe mod. V Flat - 15 mm 86777831

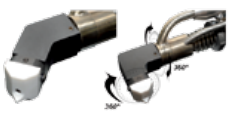
On request
Welding shoes, KIT geotextiles

Materials	HDPE, PP
Rods	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 mm 3/16"
Dimensions	550 x 310 x 100 mm 21.6" x 12.2" x 3.9
Power supply	230 Vac 50/60 Hz
Total absorbed power	3300 W
Weight	7,6 Kg (16,7 lb)

* The output varies depending on the material



Nozzle for corrugated pipes
76777840



Special welding shoe support
45° - 80047830 (only support)
90° - 80047820 (only support)



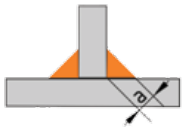
Special nozzle 180 mm
86777800

Product code
SOLO 40 CE plug 97800150
SOLO 40 Schuko plug 97800152

WELDING SHOES 40

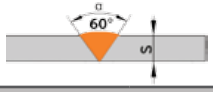


90° - Welding

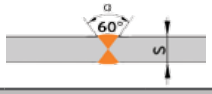


360° ROTATING SHOES		
Model	**Sheet thickness**	**Article**
90° - a 5.6 mm	**8 mm**	**86777820**
90° - a 7 mm	**10 mm**	**86777821**
90° - a 8,4 mm	**12 mm**	**86777822**
90° - a 10,5 mm	**15 mm**	**86777823**
90° - a 14 mm	**20 mm**	**86777824**
90° - a 17,5 mm	**25 mm**	**86777825**
90° - a 21 mm	**30 mm**	**86777826**

V - Welding



X - Welding



360° ROTATING SHOES			
Model	**V welding "S"**	**X welding "S"**	**Article**
V Flat - 8	**8 mm**	**16 mm**	**86777829**
V Flat - 10/12	**10 - 12 mm**	**20 - 25 mm**	**86777830**
V Flat - 15	**15 mm**	**30 mm**	**86777831**
V Flat - 20	**20 mm**	**40 mm**	**86777832**



Conical 20
86777817



Conical 14
86777818



Geotextile
86777814

PRODUCTS OVERVIEW



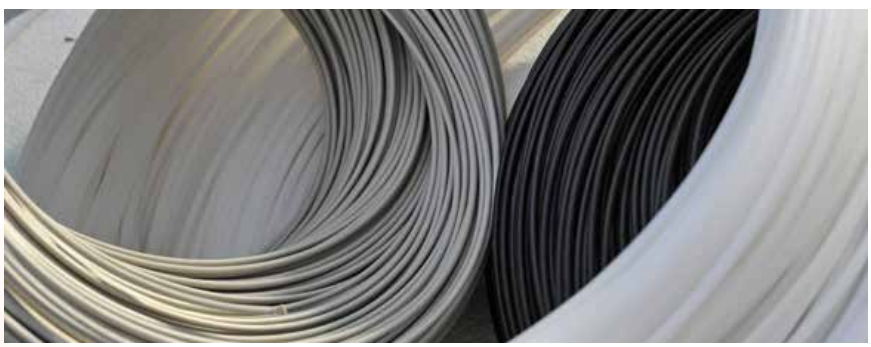
	LINK 20	LINK 30	LINK 40	K-SB 50	K-SB 60	SOLO 20	SOLO 30	SOLO 40
Materials	HDPE; PP, PVDF	HDPE; PP, PVDF	HDPE; PP	HDPE; PP	HDPE; PP	HDPE; PP	HDPE; PP	HDPE; PP
Max. Output HDPE the output varies according to the material)	2,2 Kg/h rod Ø 4 mm (5/32")	3,2 Kg/h rod Ø 5 mm (3/16")	4 Kg/h rod Ø 5 mm (3/16")	5 Kg/h rod Ø 5 mm (3/16")	6,2 Kg/h rod Ø 5 mm (3/16")	2,2 Kg/h rod Ø 4 mm (5/32")	3,2 Kg/h rod Ø 5 mm (3/16")	4 Kg/h rod Ø 5 mm (3/16")
Usable rod Ø	3-4 mm 1/8" - 5/32"	3-4-5 mm 1/8" 5/32" 1/16"	4-5 mm 5/32" 3/16"	4-5 mm 5/32" 3/16"	4-5 mm 5/32" 3/16"	3-4 mm 1/8" - 5/32"	3-4-5- mm 1/8" 5/32" 1/16"	4-5 mm 5/32" 3/16"
Weldable sheet/foil (thickness)	1,5 ÷ 20 mm 1/16" ÷ 0.8"	1,5 ÷ 30 mm 1/16" ÷ 1.1"	1,5 ÷ 30 mm 1/16" ÷ 1.1"	1,5 ÷ 40 mm 1/16" ÷ 1.5"	1,5 ÷ 40 mm 1/16" ÷ 1.5"	1,5 ÷ 20 mm 1/16" ÷ 0.8"	1,5 ÷ 30 mm 1/16" ÷ 1.1"	1,5 ÷ 30 mm 1/16" ÷ 1.1
Temperature control	Double	Double	Double	Double	Double	Single	Single	Single
Lateral fix air flow	-	-	-	√	√	-	-	-
360° rotating air flow and welding shoe	√	√	√	On request	On request	√	√	√
Graphic display	√	√	√	√	√	√	√	√
Potentiometer	√	√	√	√	√	√	√	√
* Security sistem motor block / cold start	√	√	√	√	√	√	√	√
Optional handle	-	-	-	√	-	-	-	-
Dimensions cm / in	51 x 26 x 10 20" x 10.2" x 4,3"	54 x 26 x 10 21.2" x 10.2" x 4,3"	64 x 26 x 10 25.2" x 10.2" x 4,3"	Back Handle 72 x 26 x 10 28.3" x 10.2" x 4,3" Pistol Grip Handle 60 x 33 x 10 23.6" x 12.9" x 4,3"	73 x 26 x 10 28.3" x 10.2" x 4,3"	45 x 31 x 10 17.7" x 12.2" x 4,3"	50 x 31 x 10 16.9" x 12.2" x 4,3"	55 x 31 x 10 21.6" x 12.2" x 4,3"
Power supply	230 V 50/60 Hz	230 V 50/60 Hz	230 V 50/60 Hz	230 V 50/60 Hz	230 V 50/60 Hz	230 V 50/60 Hz	230 V 50/60 Hz	230 V 50/60 Hz
Absorbed power	3100 W	3500 W	3500 W	4000 W	4200 W	2700 W	3100 W	3300 W
Weight Kg / lb	6,5 Kg (14.3 lb)	6,8 Kg (15 lb)	7,6 Kg (16.7 lb)	9 Kg (19.8 lb)	9,3 Kg (20.5 lb)	6,85 Kg (15.1 lb)	7,1 Kg (15.6 lb)	7,6 Kg (16.7 lb)

*Not available for the German market

Related Service

In addition to the extruders RITMO also offers welding rod

Rods:
HDPE Ø 3 - 4 - 5 mm
PP Ø 3 - 4 - 5 mm



FLOW LINE

FLOW Line is used for a limitless applications and sectors: plastic works, construction, material recycling, bumpers fixing, signage and so on.

Through a precise hot airflow (maximum temperature at 700° C) is possible to weld a plastic rod, performing repairs, bending materials, shaping, creating joints, overlapping sheaths and sheets, drying non-flammable paints and varnishes, defrosting etc.

The HD-PRO and SPHERA models integrate powerful fan to guarantee a precise hot airflow that is necessary to use the tool at its best.

The STYLO model is equipped with a temperature power regulator but it is very light and versatile as well, in fact it uses an external compressed air supply. These characteristics make STYLO compact and handy. STYLO is supplied with round nozzle 5 mm cod 67204000

A large number of tips and accessories are available! Providing new solutions to always welding at best.

All models are available in 120V or 230V.



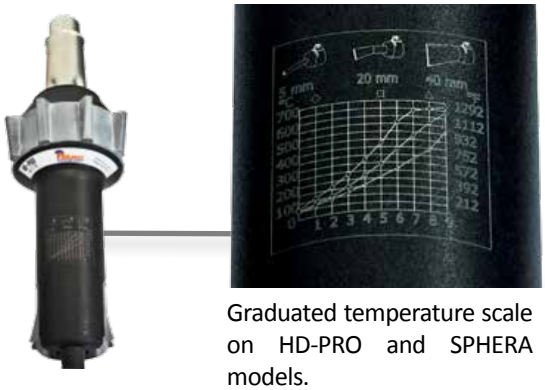
HD-PRO



SPHERA



STYLO



Graduated temperature scale on HD-PRO and SPHERA models.

	HD-PRO	SPHERA	STYLO
Power supply	1650 W 120 V 50/60 Hz 1500 W 230 V 50/60 Hz	1650 W 120 V 50/60 Hz 1500 W 230 V 50/60 Hz	1300 W 120 V 50/60 Hz 1500 W 230 V 50/60 Hz
Output Temperature	**MAX** 700° C	**MAX** 700° C	20 ÷ 700° C
Air demand/ Air quantity	-	-	80 ÷ 250 l/min
Noise level	< 70 dB	< 70 dB	-
Weight	1,4 Kg with connection cable	1,2 Kg with connection cable	0,4 Kg
Protection class	II (double insulated)	II (double insulated)	II (double insulated)



Round nozzle 5 mm
cod 67204000

Standard composition
with STYLO model

NOZZLES FOR ALL MODELS



Speed welding
round nozzle 3 mm
cod 67205010



Speed welding
round nozzle 4mm
cod 67205011



Speed welding
round nozzle 5mm
cod 67205012



Tacking tip
cod 67205015



Speed welding
triangular 5 mm
cod 67205013



Speed welding
triangular 5,7 mm
cod 67205000



Speed welding
triangular 7 mm
cod 67205001



Speed welding
triangular 7,5 mm
cod 67205014



Adapter with
female thread M 10
cod 67204007

NOZZLES FOR ALL MODELS



Tacking tip with
thread M 10
cod 67205004



Triangular nozzle
5 mm with
thread M 10
cod 67205008



Triangular nozzle
5,7 mm with
thread M 10
cod 67205002



Triangular nozzle
7 mm with
thread M 10
cod 67205003



Triangular nozzle
7,5 mm with
thread M 10
cod 67205009



Tacking tip
hooked with
thread M 10
cod 67205017



Round nozzle
3 mm with
thread M 10
cod 67205005



Round nozzle
4 mm with
thread M 10
cod 67205006



Round nozzle
5 mm with
thread M 10
cod 67205007

ACCESSORIES AND SPARE PARTS



Flat nozzle
20 mm
cod 67204002



Flat nozzle
20 mm 15°
cod 67204215



Flat nozzle
40 mm
cod 67204003



Flat perforated
nozzle 40 mm
cod 67204004



Shrink round
nozzle 15 mm
cod 67204005



Shrink reflector
cod 67205016



Weld seam slide
cod 67205021



Pressure roller
1-armed 28 mm
bearing mounted
cod 67206994



Pressure roller
2-armed 45 mm
cod 67207000
bearing mounted
cod 67206998



Pressure roller
1-armed 45 mm
cod 67207001
bearing mounted
cod 67206997



Pressure roller
80 mm
cod 67207002
bearing mounted
cod 67206996



Pressure roller
5 mm for round
wire
cod 67207005



Pressure roller
1-armed 45 mm
and 45°
cod 67207006
bearing mounted
cod 67206995



Grooving toolcod
67207011



Quarter moon
knife
cod 67207010



Seam tester
cod 67207014



Insulating tube
cod 57214011



Heating element
230 V - 1500 W
cod 57102007

www.ritmo.it

Ritmo
PLASTIC WELDING TECHNOLOGY

PLASTIC FABRICATION SHEET WELDING





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" ÷ 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 DVS 2207-1 and DVS 2207-11.

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°
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"





POLYFUSION 2-25
POLYFUSION 2-50

- **COMPACT AND EASY TO USE**
- **MAX WORKING WIDTH: 2 M**
- **MIN THICKNESS 3 mm**
- **SHEETS: HDPE, PP, TWIN WALL SHEETS**
- **MANUAL WELDERS**
- **TYPE OF WELDING: STRAIGHT BUTT FUSION, 90° (on request)**

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÷25 mm or 1/8”÷1” thickness (mod. POLYFUSION 2-25); and 3÷50 mm or 1/8”÷2” thickness (mod. POLYFUSION 2-50). The machines can also weld twin-wall sheets. The machine can operate in compliance with the DVS 2207-1 and DVS 2207-11.

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

TECHNICAL FEATURES

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	Straight 90° (on request)	Straight 90° (on request)
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” For details contact RITMO S.P.A.	50 mm; 2” For details contact RITMO S.P.A.
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**



Manual control panel

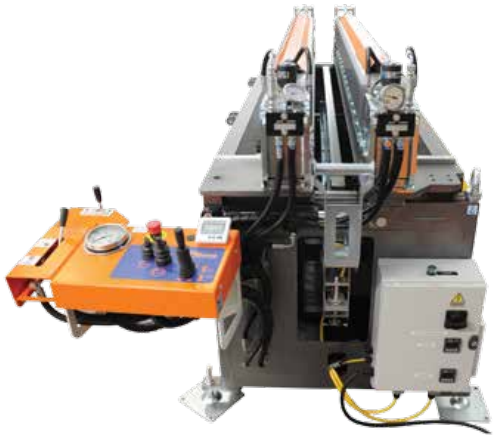
POLYFUSION 2-100 is compact and easy to use manual welders for HDPE and PP sheets from two meters wide and 3 mm to 100 mm thickness. The welding cycle is handled by a control panel which commands the hydraulic gearcase. The control panel can be adjusted horizontally to assist the operator. The machine can operate in compliance with the DVS 2207-1 and DVS 2207-11.

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.





TECHNICAL FEATURES

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	Straight
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”

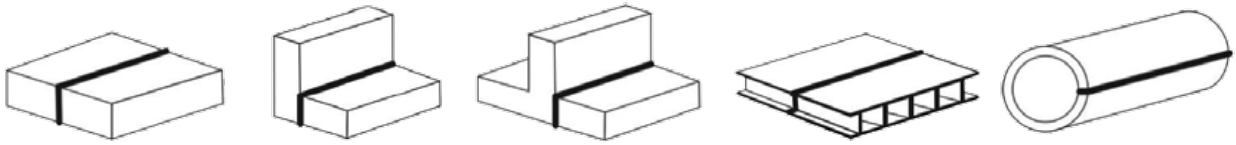


POLYFUSION 3

Pneumatic sheet welding machine
CNC welding cycle
Compliant with welding standards DVS 2207

PE (DVS 2207-1 : 2015); PP (DVS 2207-11 : 2017); PVC-U (DVS 2207-12 . 2016); PVC-C (DVS2207-13 . 2012); PVDF (DVS 2207-15 . 2008)

Weldable materials: sheet in PVC, PE, PP, PVDF; twin walls in PE e PP.
Welding range 3 ÷ 50 mm solid wall; max 60 mm twin walls



- Folding lateral supports with bearing balls for the easy sheet movements
- High density locking clamps: they provide an homogeneous pressure distribution capable of stopping both large and thin thicknesses sheets, and working with long or short sheets
- Led lights through the entire welding area
- New Ritmo “AirPlus” system allows to complete a welding cycle even in the event of a unexpected fault of the air supply in your building
- The “Adjusty” system automatically adjusts the distance between heating plate and machine edge according to the thickness of the sheets. With thin sheets the system permits a welding without overlapping while for thick shits enough space for the bead is guaranteed
- A PLC control panel allows the operator to program the working cycle quickly with the help of an intuitive touch screen
- Internal memory for unlimited number of jwelds.
- Download report in PDF format
- USB port
- Unlimited welding pre-setting (customized or preferred) easy to be recalled.
- Wide range of optionals and accessories to expand its functionality

TECHNICAL FEATURES





Materials*	PE; PP; PVC-C; PVC-U ; PVDF Twin Wall sheets
Welding cycle	CNC
Power supply	400 V Three Phase 50/60 Hz
Total absorbed power	11500 W
Types of welding	Straight 90° (on request) **Circular (on request) **min Ø 500 mm - 19.6" For details contact RITMO S.P.A.
Max. working width ***	3050 mm - 10 ft
Min. weldable thickness	3 mm - 1/8”
Max. weldable thickness ***	solid 50 mm - 2” twin wall 60 mm - 2.3"
Minimum requirements pneumatic supply	7 Bar capacity = 300 l/min
Memory	limitless cycles
Report	PDF
Machine sizes (standard configuration with opened supports)	4307 x 2673 x 1508 mm 14,1 x 8.7 x 4.9 ft

* Contact RITMO

*** The minimum diameter is calculated based on the geometric characteristics of the machine. The range of diameters that can be produced and their thickness are bound to the use of external systems such as overhead cranes, forklifts etc. and the permissible strain of the outer fibers of the material. Refer to the material datasheet of the manufacturer for further information in this regard.*

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



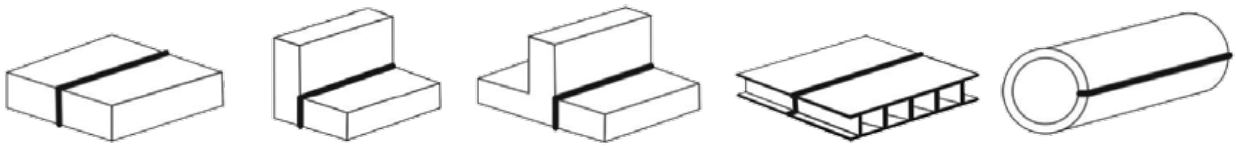


POLYFUSION 4

Pneumatic sheet welding machine
CNC welding cycle
Compliant with welding standards DVS 2207

PE (DVS 2207-1 : 2015); PP (DVS 2207-11 : 2017); PVC-U (DVS 2207-12 . 2016); PVC-C (DVS2207-13 . 2012); PVDF (DVS 2207-15 . 2008)

Weldable materials: sheet in PVC, PE, PP, PVDF; twin walls in PE e PP.
Welding range 3 ÷ 50 mm solid wall; max 60 mm twin walls



- Folding lateral supports with bearing balls for the easy sheet movements
- High density locking clamps: they provide an homogeneous pressure distribution capable of stopping both large and thin thicknesses sheets, and working with long or short sheets
- Led lights through the entire welding area
- New Ritmo “AirPlus” system allows to complete a welding cycle even in the event of a unexpected fault of the air supply in your building
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- A PLC control panel allows the operator to program the working cycle quickly with the help of an intuitive touch screen
- Internal memory for unlimited number of jwelds
- Download report in PDF format
- USB port
- Unlimited welding pre-setting (customized or preferred) easy to be recalled.
- Wide range of optionals and accessories to expand its functionality

TECHNICAL FEATURES





Materials*	PE; PP; PVC-C; PVC-U; PVDF Twin Wall sheets
Welding cycle	CNC
Power supply	400 V Three Phase 50/60 Hz
Total absorbed power	13600 W
Types of welding	Straight 90° (on request) ** Circular (on request) ** min Ø 500 mm - 19.6" For details contact RITMO S.P.A.
Max. working width ***	4050 mm - 13.2 ft
Min. weldable thickness	3 mm - 1/8”
Max. weldable thickness ***	solid 50 mm - 2” twin wall 60 mm - 2.3"
Minimum requirements pneumatic supply	7 Bar capacity = 300 l/min
Memory	limitless cycles
Report	PDF
Machine sizes (standard configuration with opened supports)	5320 x 2673 x 1508 mm 17.4 x 8.7 x 4.9 ft

* Contact RITMO

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







POLYFUSION 3-30

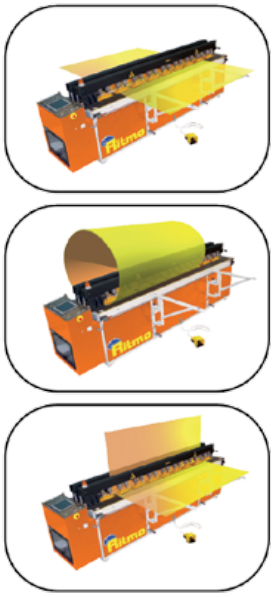
POLYFUSION 3-30 is CNC automatic butt fusion machine, suitable for welding thermoplastic sheets made of HDPE, PP, PVC*. The butt fusion machine is also able to weld twin-wall HDPE and PP sheets. The machine can operate in compliance with the DVS 2207-1 and DVS 2207-11.

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.

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.

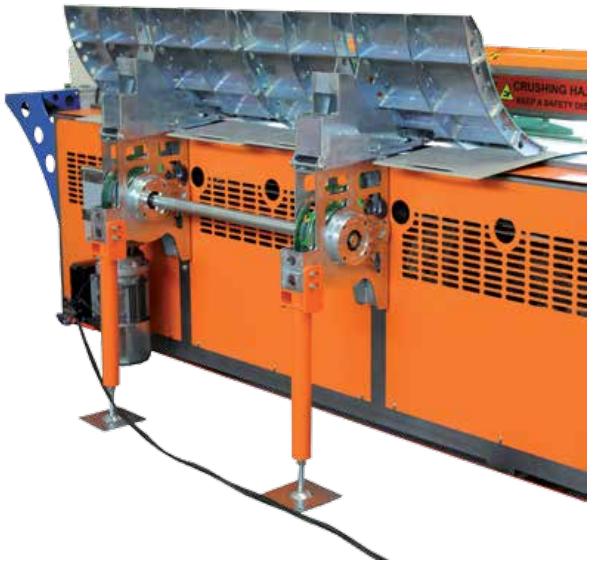
POLYFUSION 3-30 performs different types of weld horizontal, circular and 90° joints.

Types of welding





TECHNICAL FEATURES



Materials*	PP, PVC*, HDPE, Twin Wall sheets
Power supply	400 V Three Phase 50/60 Hz
Total absorbed power	12500 W
Types of welding	Straight 90° (on request) **Circular (on request) min Ø 500 mm For details contact RITMO S.P.A.
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 minimum diameter is calculated based on the geometric characteristics of the machine. The range of diameters that can be produced and their thickness are bound to the use of external systems such as overhead cranes, forklifts etc. and the permissible strain of the outer fibers of the material. Refer to the material datasheet of the manufacturer for further information in this regard.*

*** 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 machine, 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 DVS 2207-1 and DVS 2207-11.

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).



TECHNICAL FEATURES

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	Straight 90° (on request) **Circular (on request) min Ø 700 mm For details contact RITMO S.P.A.
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
Memory	4000
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 minimum diameter is calculated based on the geometric characteristics of the machine. The range of diameters that can be produced and their thickness are bound to the use of external systems such as overhead cranes, forklifts etc. and the permissible strain of the outer fibers of the material. Refer to the material datasheet of the manufacturer for further information in this regard.*

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







POLYFUSION 4-30

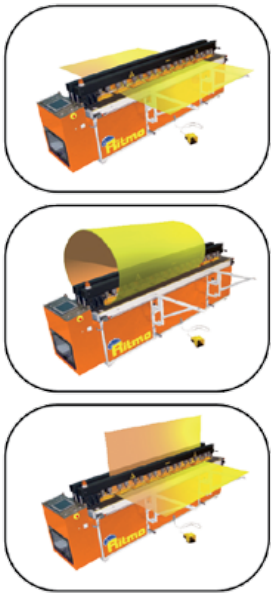
POLYFUSION 4-30 is CNC automatic butt fusion machine, suitable for welding thermoplastic sheets made of HDPE, PP, PVC*. The butt fusion machine is also able to weld twin-wall HDPE and PP sheets. The machine can operate in compliance with the DVS 2207-1 and DVS 2207-11.

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.

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.

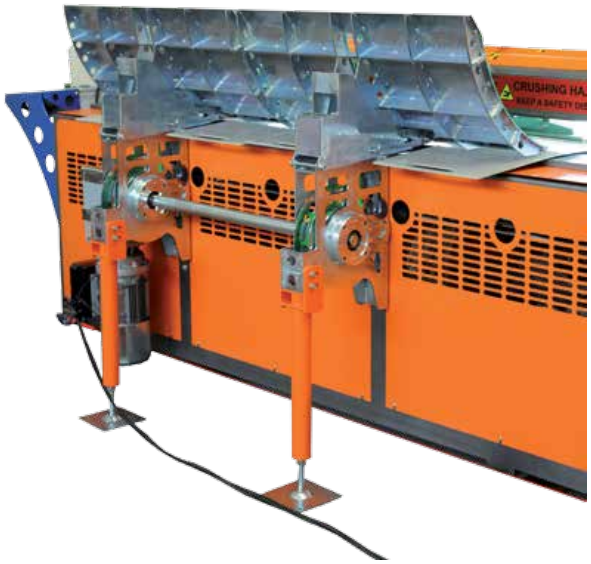
POLYFUSION 4-30 performs different types of weld horizontal, circular and 90° joints.

Types of welding





TECHNICAL FEATURES



Materials*	PP, PVC*, HDPE, Twin Wall sheets
Power supply	400 V Three Phase 50/60 Hz
Total absorbed power	14500 W
Types of welding	Straight 90° (on request) **Circular (on request) min Ø 500 mm For details contact RITMO S.P.A.
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 minimum diameter is calculated based on the geometric characteristics of the machine. The range of diameters that can be produced and their thickness are bound to the use of external systems such as overhead cranes, forklifts etc. and the permissible strain of the outer fibers of the material. Refer to the material datasheet of the manufacturer for further information in this regard.*

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







POLYFUSION 4-50

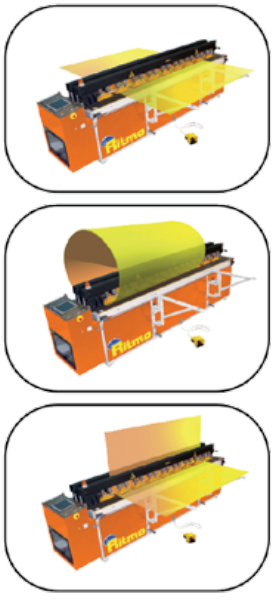
POLYFUSION 4-50 is CNC automatic butt fusion machine, suitable for welding thermoplastic sheets made of HDPE, PP, PVC*. The butt fusion machine is also able to weld twin-wall HDPE and PP sheets. The machine can operate in compliance with the DVS 2207-1 and DVS 2207-11.

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





TECHNICAL FEATURES



Materials*	PP, PVC*, HDPE, Twin Wall sheets
Power supply	400 V Three Phase 50/60 Hz
Total absorbed power	14500 W
Types of welding	Straight 90° (on request) **Circular (on request) min Ø 700 mm For details contact RITMO S.P.A.
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
Memory	4000 cycles
Report	PDF
Pre-set customized	15
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 minimum diameter is calculated based on the geometric characteristics of the machine. The range of diameters that can be produced and their thickness are bound to the use of external systems such as overhead cranes, forklifts etc. and the permissible strain of the outer fibers of the material. Refer to the material datasheet of the manufacturer for further information in this regard.*

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



PRODUCTS OVERVIEW

	MANUAL				PNEUMATIC		HYDRAULIC			
MODELS	POLYFUSION 1 - 25	POLYFUSION 2 - 25	POLYFUSION 2 - 50	POLYFUSION 2 - 100	POLYFUSION 3	POLYFUSION 4	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"	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"	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	3050 mm 10 ft	4050 mm 13.2 ft	3 m 9.84 ft	3 m 9.84 ft	4 m 13.12 ft	4 m 13.12 ft
Materials**	HDPE; PP,	HDPE; PP,	HDPE; PP,	HDPE; PP,	HDPE; PP, PVC-C, PVC-U ** PVDF	HDPE; PP, PVC-C PVC-U ** PVDF	HDPE; PP, PVC **	HDPE; PP, PVC **	HDPE; PP, PVC **	HDPE; PP, PVC **
Twin wall sheets	√	√	√	√	√ up to 60 mm	√ up to 60 mm	√	√	√	√
Welding line	√	√	√	√	√	√	√	√	√	√
Welding 90° (A)	√	√	√	-	√	√	√	√	√	√
Welding circular (A) *** Contact RITMO S.P.A.		-	-	-	min Ø 500 mm needs optional kit	min Ø 500 mm needs optional kit	min Ø 500 mm needs optional kit	min Ø 700 mm needs optional kit	min Ø 500 mm needs optional kit	min Ø 700 mm needs optional kit
Sheet locking clamps	mechanical manual	mechanical manual	mechanical manual	hydraulic	pneumatic	pneumatic	hydraulic	hydraulic	hydraulic	hydraulic
Locking 90° sheets	mechanical	mechanical	mechanical	mechanical	pneumatic	pneumatic	pneumatic	pneumatic	pneumatic	pneumatic
Adjusted control panel	√	√	√	√	-	-	-	-	-	-
Heating plate lift	mechanical manual	mechanical manual	mechanical manual	mechanical manual	automatic	automatic	automatic	automatic	automatic	automatic
Welding System	manual hydraulic	manual hydraulic	manual hydraulic	manual hydraulic	CNC	CNC	CNC	CNC	CNC	CNC
PRE-SET customized welding cycles	-	-	-	-	√	√	√	√	√	√
PDF file	-	-	-	-	√	√	√	√	√	√
Memory	-	-	-	-	limitless reports	limitless reports	4000 reports	4000 reports	4000 reports	4000 reports
Display	-	-	-	-	LCD 12"	LCD 12"	LCD	LCD	LCD	LCD

(A) On request
** Contact RITMO
****The minimum diameter is calculated based on the geometric characteristics of the machine. The range of diameters that can be produced and their thickness are bound to the use of external systems such as overhead cranes, forklifts etc. and the permissible strain of the outer fibers of the material. Refer to the material datasheet of the manufacturer for further information in this regard.*
**** The welding dimensions refer to PP / HDPE with welding pressure of 0.17 N / mm2



MAIN APPLICATIONS

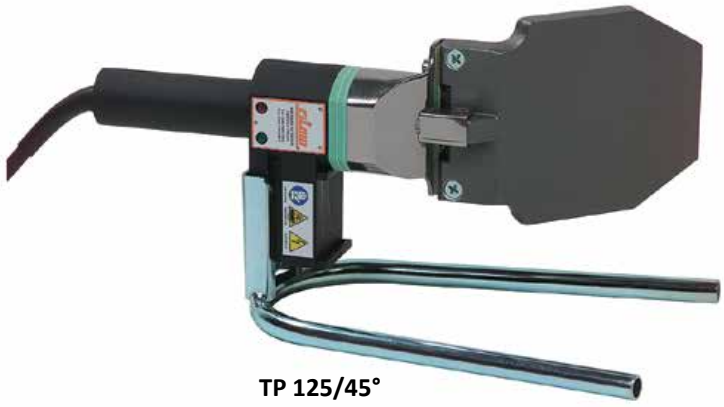
- Mining technology
- Building industry
- Mechanical engineering
- Livestock breeding
- Aquaculture and swimming pools
- Chemical engineering and tank building
- Surface treatment metals
- Buffer tanks
- Beverage and food industry
- Pump manufacturing
- Ventilation system and ventilator manufacture
-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

BUTT FUSION MACHINES *LIQUID DRAINAGE*

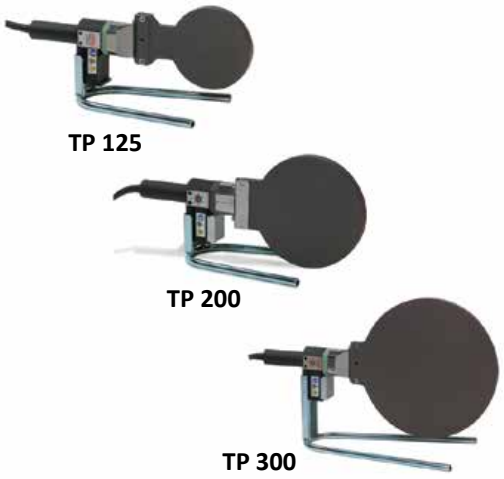


WORKING RANGE Ø mm	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315
MINI 160 JOYT	40	50	63	75	90	110	125	140	160						
MINI 160 JOYT ELBOWS	40	50	63	75	90	110	125	140	160						
DM 160	40	50	63	75	90	110	125	140	160						
VR 160 JOYT	40	50	63	75	90	110	125	140	160						
VR 250				75	90	110	125	140	160	180	200	225	250		
MAXI 315					90	110	125	140	160	180	200	225	250	280	315
WORKING RANGE Ø mm	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315

WORKING RANGE Ø mm / in	110 mm / 3" DIPS	125 mm / 4" DIPS	180 mm / 6" DIPS	280 mm / 10" DIPS
TP 125 /45°	•			
TP 125	•	•		
TP 200	•	•	•	
TP 300	•	•	•	•



TP 125/45°



TP 125

TP 200

TP 300

HEATING PLATES SERIES FOR BUTT WELDING

Series of manual instruments equipped with an aluminum heating plate Teflon-coated (PTFE) and a practical heat-insulated plastic handle. Available in two versions: one with a fixed mechanical thermostat (TF) and one with an adjustable electronic thermoregulator (TE). The heating plates are available in different shapes and working ranges according to the operator's requirements.

STANDARD COMPOSITION

All the models are supplied with:
- A basic heating plate
- A fork support

ON REQUEST

- Bench vice support (the same for all models except TP 300)
- Transportation box in electro-painted steel

TECHNICAL FEATURES

TYPE: TE, TF	TP 125	TP 125/45°	TP 200	TP 300
Working range	up to Ø 125 mm; 4" DIPS	up to Ø 110 mm; 3" DIPS	up to Ø 180 mm; 6" DIPS	up to Ø 280 mm; 10" DIPS
Materials TE	HDPE, PP, PVC, PVDF	HDPE, PP, PVC, PVDF	HDPE, PP, PVC, PVDF	HDPE, PP, PVC, PVDF
Materials TF	HDPE	HDPE	HDPE	HDPE
Power supply	230 V S. Ph. 50/60 Hz	230 V S. Ph. 50/60 Hz	110 V S. Ph. 50/60 Hz **(TE)** 230 V S. Ph. 50/60 Hz	230 V S. Ph. 50/60 Hz
Max. absorbed power	700 W	500 W	850 W **(TE 110 V)** 1200 W	1300 W
Working temperature	180° ÷ 280° C ± 1% **TE** (356° ÷ 536° F ± 1% **TE**) 210° C ± 5% **TF** (410° F ± 5% **TF**)	180° ÷ 280° C ± 1% **TE** (356° ÷ 536° F ± 1% **TE**) 210° C ± 5% **TF** (410° F ± 5% **TF**)	180° ÷ 280° C ± 1% **TE** (356° ÷ 536° F ± 1% **TE**) 210° C ± 5% **TF** (410° F ± 5% **TF**)	180° ÷ 280° C ± 1% **TE** (356° ÷ 536° F ± 1% **TE**) 210° C ± 5% **TF** (410° F ± 5% **TF**)
Ambient temperature	-5° ÷ 40° C	5° ÷ 40° C	5° ÷ 40° C	5° ÷ 40° C
Time to reach welding temperature **(TE)**	~ 10'	~ 10'	~ 10'	~ 10'
Weight	2,16 Kg (4.7 lb)	1,95 Kg (4.3 lb)	3,21 Kg (7 lb)	5,09 Kg (11.2 lb)
Dimensions	140 x 50 x 410 mm 5.5" x 2" x 16.1"	140 x 130 x 370 mm 5.5" x 5.1" x 14.6"	200 x 50 x 440 mm 7.9" x 2" x 17.3"	300 x 50 x 550 mm 11.8" x 2" x 21.6"

www.ritmo.it



MINI 160 JOYT - MINI 160 JOYT ELBOWS

MINI 160 JOYT and MINI 160 JOYT ELBOWS are portable butt fusion welders for drainage pipes up to Ø 160 mm. These machines is characterized by the extractable heating plate, the safety microswitches on the milling cutter to avoid accidental starting, the articulated lateral supports. The Mini 160 Joyt has a frame, most useful during working and transportation. MINI 160 JOYT ELBOWS features special jaws for manufacturing elbows.

Available in two versions: one with a fixed mechanical thermostat (TF) and one with an adjustable electronic thermoregulator (TE). Power supply 110 V or 230 V versions.

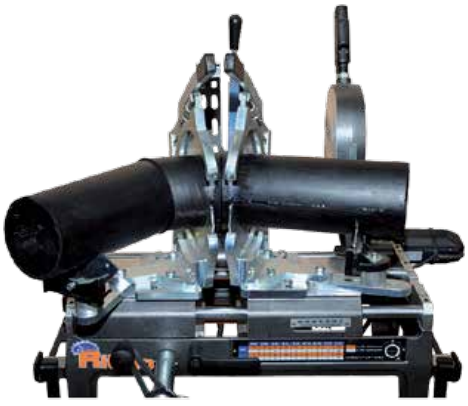
- The machine body includes a spring-loaded pressure-regulating device and the rack-feed movement of the carriage provided by a handwheel.
- The rapid-lock clamps, in order to be able to lock elbows (also with a very short neck), tees and Y-branches without the need of any additional device.
- The protection housing around the heating element.

STANDARD COMPOSITION

- Machine body (with milling cutter, lateral supports and keys)
- Heating plate TP 200 TE or TP 200 TF
- Right clamp group Ø 160 JOYT
- Left clamp group Ø 160 JOYT
- Frame MINI 160 JOYT
- Case with set of clamps and lateral supports' adapters Ø 40, 50, 63, 75, 90, 110, 125 mm

ON REQUEST

- Clamps and lateral supports' adapters Ø 56, 135, 140 mm
- Milling cutter blade SILENT (for Geberit)



TECHNICAL FEATURES

Working range	40 ÷ 160 mm
Materials	HDPE, PP, PVDF
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Max. absorbed power	1950 w (110 V) 2250 W (230 V)
Working temperature	180° ÷ 280° C (TE) 210° C (TF)
Outside temperature range	-5° ÷ 40° C
Time to reach welding temperature	~ 10' (TE)
Weight	50 Kg
Dimensions machine working	664 x 580 x 1235 mm



DM 160

DM 160 is portable butt fusion welder for drainage pipes up to Ø 160 mm. This machine is characterized by the extractable heating plate, the safety microswitches on the milling cutter to avoid accidental starting, the articulated lateral supports. The DM 160 has a frame upper a trolley , most useful during working and transportation.

Available in two versions: one with a fixed mechanical thermostat (TF) and one with an adjustable electronic thermoregulator (TE).

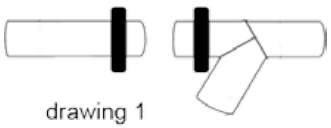
- The machine body includes a spring-loaded pressure-regulating device and the rack-feed movement of the carriage provided by a handwheel.
- The rapid-lock clamps, in order to be able to lock elbows (also with a very short neck), tees and Y-branches without the need of any additional device.
- The protection housing around the heating element.

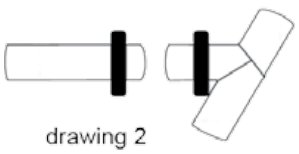
STANDARD COMPOSITION

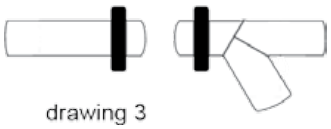
- Machine body (with milling cutter, lateral supports and keys)
- Heating plate TP 200 TE or TP 200 TF
- Right clamp group Ø 160 JOYT
- Left clamp group Ø 160 JOYT
- Frame VR 160 JOYT
- Case with set of clamps and lateral supports' adapters Ø 40, 50, 63, 75, 90, 110, 125 mm

ON REQUEST

- Clamps and lateral supports' adapters Ø 56, 135, 140 mm
- Milling cutter blade SILENT (for Geberit)


drawing 1


drawing 2


drawing 3

The meaning of JOYT

This word identifies the type of clamps adopted on this machine. They have been specifically designed to be able to lock Y-branches in all the possible positions (drawings 1,2,3).

TECHNICAL FEATURES

Working range	40 ÷ 160 mm
Materials	HDPE, PP, PVDF
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Max. absorbed power	1950 W (110 V) 2250 W (230 V)
Working temperature	180° ÷ 280° C (TE) 210° C (TF)
Outside temperature range	-5° ÷ 40° C
Time to reach welding temperature	~ 10' (TE)

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VR 160 JOYT

VR 160 JOYT is portable butt fusion welder for drainage pipes up to Ø 160 mm. This machine is characterized by the extractable heating plate, the safety microswitches on the milling cutter to avoid accidental starting, the articulated lateral supports. The VR 160 JOYT has steel box that can used either as a work bench or as a protection for transportation.

Available in two versions: one with a fixed mechanical thermostat (TF) and one with an adjustable electronic thermoregulator (TE). Power supply 110 V or 230 V versions

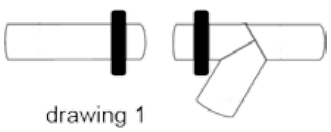
- The machine body includes a spring-loaded pressure-regulating device and the rack-feed movement of the carriage provided by a handwheel.
- The rapid-lock clamps, in order to be able to lock elbows (also with a very short neck), tees and Y-branches without the need of any additional device.
- The protection housing around the heating element.

STANDARD COMPOSITION

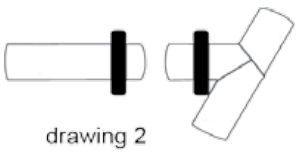
- Machine body (with milling cutter, lateral supports and keys)
- Heating plate TP 200 TE or TP 200 TF
- Right clamp group Ø 160 JOYT
- Left clamp group Ø 160 JOYT
- Frame VR 160 JOYT
- Case with set of clamps and lateral supports' adapters Ø 40, 50, 63, 75, 90, 110, 125 mm

ON REQUEST

- Clamps and lateral supports' adapters Ø 56, 135, 140 mm
- Milling cutter blade SILENT (for Geberit)



drawing 1



drawing 2



The meaning of JOYT
This word identifies the type of clamps adopted on this machine. They have been specifically designed to be able to lock Y-branches in all the possible positions (drawings 1,2,3).

TECHNICAL FEATURES

Working range	40 ÷ 160 mm
Materials	HDPE, PP, PB, PVDF
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Max. absorbed power	1950 W (110 V) 2250 W (230 V)
Working temperature	180° ÷ 280° C (TE) 210° C (TF)
Outside temperature range	-5° ÷ 40° C
Time to reach welding temperature	~ 10' (TE)
Weight	95 Kg
Dimensions machine working	1055 x 925 x 1235 mm



VR 250

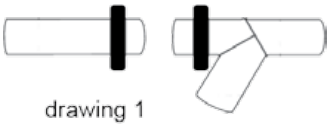
A professional welding machine ideal for medium sized pipes and sewers up to Ø 250 mm. It consists of a machine body with a pressure regulating device, a pair of clamps, two lateral supports, an electrically controlled milling cutter for levelling the ends of the pipe and/or fitting with a safety microswitch, an extractable heating plate with automatic device to control the temperature, a sliding support and a steel case that acts as a work bench and cover when transporting the machine. The VR 250 can weld fittings such as bends and tees. Branches can also be welded thanks to the upper extractable jaws (on request) called SUPRA.

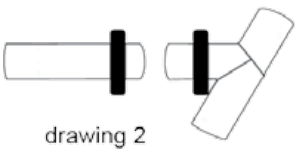
STANDARD COMPOSITION

- Machine body with a milling cutter, lateral supports, clamps adapters and lateral supports adapters from Ø 75 to Ø 250 mm (Ø 140 and 180 mm on request), working/transport case steel, service spanners
- TP VR 250 TE plate
- Right and left clamp Ø 250 mm

ON REQUEST

- Clamps adapters Ø 140 and 180 mm
- Lateral supports adapters Ø 140 and 180 mm
- Sets of extractable upper jaws SUPRA from Ø 75 to 225 mm
- Wooden case for SUPRA extractable upper jaws


drawing 1


drawing 2


drawing 3

The meaning of SUPRA
This word identifies the different type of clamps mounted on this welding machine. They have been specifically designed to be able to lock "branch" fittings: with extractable and interchangeable jaws, shaped according to the diameter to weld, it is possible to lock all branch points (drawings 1, 2, 3).

TECHNICAL FEATURES

Working range	75 ÷ 250 mm
Materials	HDPE, PP, PB, PVDF
Power supply	230 V Single Phase 50/60 Hz
Max. absorbed power	2200 W
Working temperature	180° ÷ 280° C
Outside temperature range	-5° ÷ 40° C
Time to reach welding temperature	~ 20'
Weight	123 Kg
Dimensions machine working	835 x 1240 x 1530 mm



MAXI 315

A professional welding machine ideal for medium sized pipes and sewers up to Ø 315 mm. It consists of a machine body with pressure regulating device, a pair of clamps, two lateral supports, an electrically controlled milling cutter for levelling the ends of the pipe and/or fitting with a safety microswitch, an extractable heating plate with automatic electronic device to control the temperature, a sliding support, a tip-up metal frame on wheels that acts as a work bench and protection when transporting the machine. The MAXI 315 can weld fittings such as bends and tees. Branches can also be welded thanks to the single clamps (available on request) indicated for all diameters in the working range. Available in the 110 V and 230 V versions.

STANDARD COMPOSITION
- Machine body with a milling cutter and lateral supports
- TP 315 TE plate
- Right and Left clamp Ø 315
- Steel frame on wheels (for transporting and for use as a work bench)
- Metal case with clamps and lateral supports adapters Ø 200 and 250 mm

ON REQUEST
- Clamp adapters Ø 90, 110, 125, 140, 160, 180, 225, 280 mm
- Lateral supports adapters Ø 90, 110, 125, 140, 160, 180, 225, 280 mm



TECHNICAL FEATURES

Working range	90 ÷ 315 mm
Materials	HDPE, PP, PB, PVDF
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz
Max. absorbed power	3750 W (110 V) 3900 W (230 V)
Working temperature	180° ÷ 280° C
Outside temperature range	-5° ÷ 40° C
Time to reach welding temperature	~ 20’
Weight	183 Kg
Dimensions machine working	1420 x 1300 x 1570 mm

The information and photos in this publication are not binding and RITMO S.P.A. is free to make any alterations without prior notice.



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