

PRODUCTS CATALOGUE

"AT EASE IN YOUR CONSTRUCTION SITE"

www.ritmo.it



Meets all your welding needs on the 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.



About us

Starting from a small workshop in the province of Padua in 1979, with a lathe and a milling machine but with many ideas and passion, Renzo Bortoli shaped and brought to life what, year after year, became RITMO SPA: an internationally recognized company in the field of welding machines for plastic pipes and sheets.

Today, Ritmo continues to produce entirely in Italy, in Teolo, maintaining the spirit of a "Family Company," where professionals and skilled individuals passionately continue to offer their expertise to provide products that make a difference when used on-site.

Mission

A Ritmo product is not bought, it is chosen. Our mission is to transform challenges into solutions with innovation and adaptability, crafting machines that create strong connections and build trust, one weld at a time.



Rossella Contiero - CEO



Renzo Bortoli - Founder

165
COUNTRIES
where RITMO
has been supplying
products

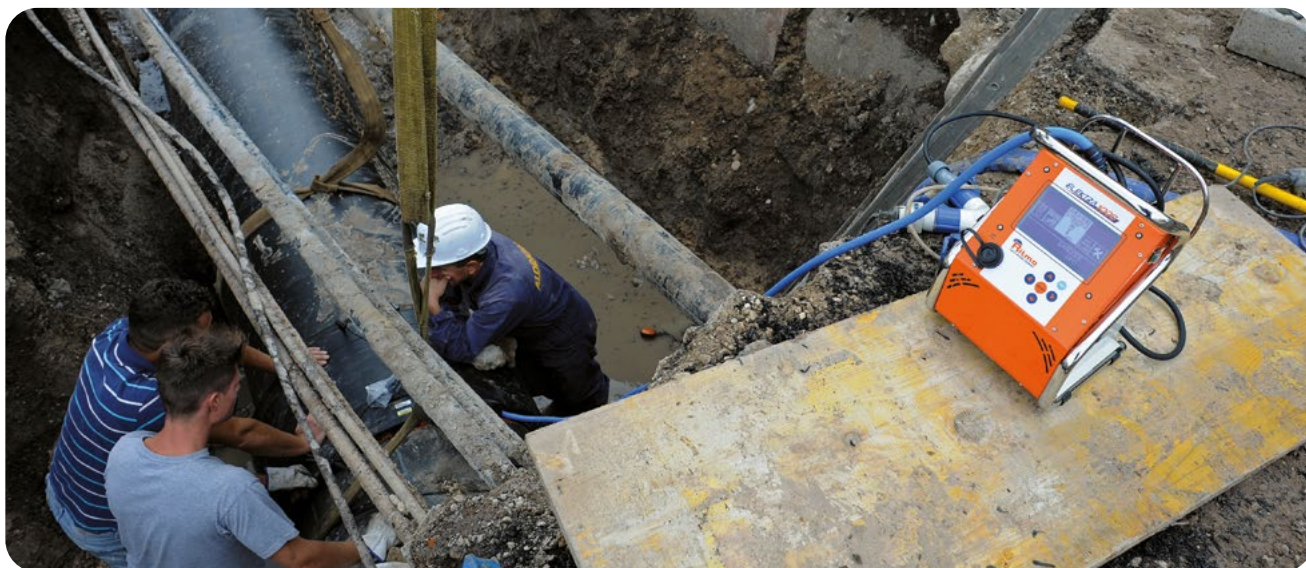
OVER 100
PRODUCTS
ON CATALOG

**MADE
IN ITALY**

**90%
EXPORT**

**+ 80%
GROWTH
2014 - 2023**





ELEKTRA 500

ELEKTRA 1000

ELEKTRA 500 and ELEKTRA 1000 are an high performance universal electrofusion machines, suitable for welding HDPE, PP, PP-R couplings (from 8 to 48 V). They are composed of:

- Machine body surrounded by a tubular steel frame, thus creating a protective structure
- 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
- 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 fitting's numerical code indicated under the bar code.
- 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)

TRACEABILITY

All the models are in compliance with the International Standards:
ISO 12176-3
Operator traceability

ISO 12176-4
Fitting/ Pipe traceability



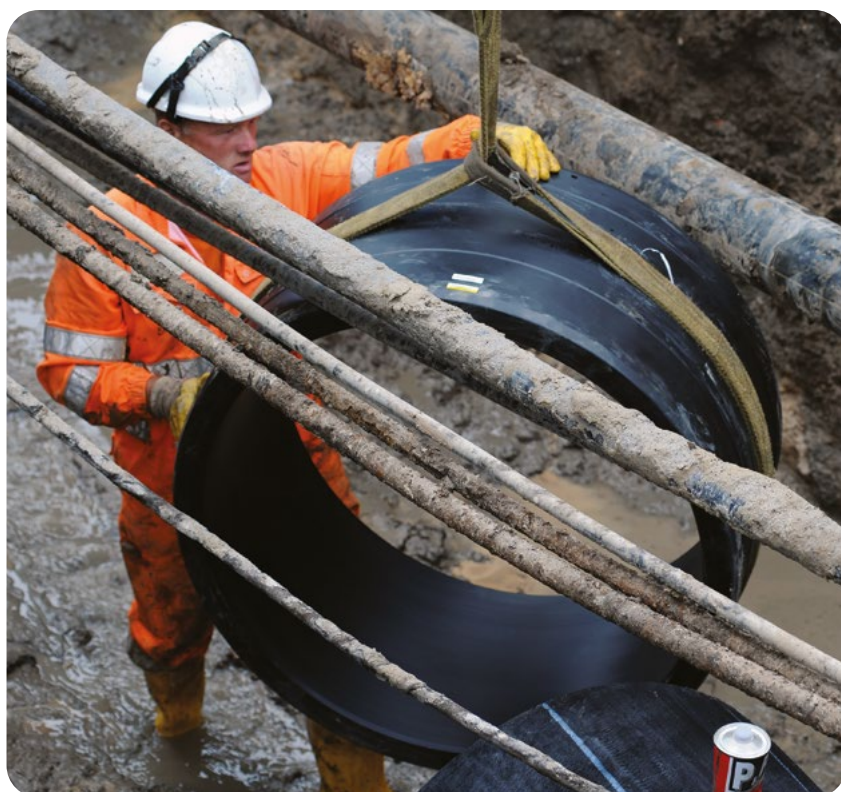
* Working range might vary according to fittings brand. Check with the fitting manufacturer the power and the welding time required.

** Power at 60% Duty Cycle



90° Universal adapters
Ø 4.0 - 4.7mm

TECHNICAL FEATURES	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



ELEKTRA LINE - OVERVIEW

	ELEKTRA S - V1	ELEKTRA M - V1	ELEKTRA XL - V1	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	8000 cycles	8000 cycles	8000 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 T° 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	✓	✓	✓	✓	✓	✓	✓
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"x9.4"x1.8"	255x270x385mm 10"x10.6"x15.1"	255x270x385mm 10"x10.6"x15.1"
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

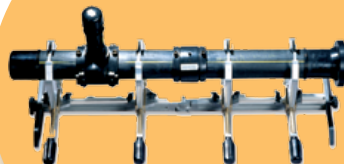
* Working range might vary according to fittings brand. Check with the fitting manufacturer the power and the welding time required.

** Power at 60% Duty Cycle

*** Elektra XL is available in two version: for couplings 8 ÷ 48 V and couplings 8 ÷ 80 V

RITMO ELECTROFUSION, THE COMPLETE SYSTEM AROUND YOUR CONSTRUCTION SITE

ALIGNERS



Up to
Ø 500 mm

BEVELERS



Up to
Ø 315 mm

PIPE SCRAPERS



Up to
Ø 710 mm

PIPE SUPPORT



Up to
Ø 400 mm

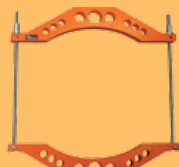


SHEARS



Up to
Ø 75 mm

REROUNDERS



Up to
Ø 800 mm

PIPE CUTTER



Up to
Ø 315 mm

SQUEEZERS



Up to
Ø 200 mm

ADVANTAGE RITMO

RITMO WORLDWIDE

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

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.



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