

PRODUCTS CATALOGUE

"AT EASE IN YOUR CONSTRUCTION SITE"

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Ritmo meets all your welding needs in your jobsite



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A DVANTAGE

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.

ELECTROFUSION BY RITMO:



- High performance
- Barcode reading system
- Easy to use
- 90° universal adapter Ø 4,0 - 4,7 mm
- Laser scanner
- Usb port
- PDF report
- Large memory
- Graphic display multilingual
- Intuitive control panel
- Traceability

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 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 TOP | 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 V1 | | | 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 |



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 tension/time, or by entering the fitting'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 tension/time) | Barcode Manual (Numerical code or tension/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 genera- tor for full welding range | 5,5 ÷ 6 kVA | 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



watch the video

Italy



ELEKTRA LINE - OVERVIEW

| | ELEKTRA LIGHT | ELEKTRA 315 | ELEKTRA 500 | ELEKTRA 1000 | ELEKTRA TOP |
|---|---|---|---|---|---|
| Working range* | 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* | 20 ÷ 1600* ½" IPS - 63" IPS* 20 ÷ 500 (110 V)* ½" IPS ÷ 20" IPS* |
| GPS | - | - | on request | on request | on request |
| Automatic Temperature compensation | √ | √ | √ | √ | √ |
| Constantly welding cycle monitored | √ | √ | √ | √ | √ |
| Barcode scanner (ISO 13950) | √ | √ | √ | √ | √ |
| Manual fusion input | √ | √ | √ | √ | √ |
| Welding report | √ | √ | √ | √ | √ |
| Connections | Adapter DB9M-USB | Adapter DB9M-USB | USB port Type A | USB port Type A | USB port Type A |
| Report file format | PDF - BIN | PDF - BIN | PDF - BIN - CSV | PDF - BIN - CSV | PDF - BIN - CSV |
| Memory | 325 cycles | 500 cycles | 4000 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 |
| Outside Temperature range | -10° ÷ 50° C (-14° ÷ 122° F) | -10° ÷ 50° C (-14° ÷ 122° F) | -20° ÷ 50° C (-4° ÷ 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 | 110 V or 230 V | 230 V | 110 V or 230 V |
| Frequency | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz |
| Max output current | 60 A | 100 A | 100 A (110 V) 120 A (230 V) | 120 A | 100 A (110 V) 120 A (230 V) |
| Welding output voltage | 8 ÷ 48 V | 8 ÷ 48 V | 8 ÷ 48 V | 8 ÷ 48 V | 8 ÷ 48 V *** 8 ÷ 80 V *** |
| Absorbed power ** | 1300 W** | 2600 W (110 V) ** 2600 W (230 V)** | 3100 W (110 V) ** 3100 W (230 V) ** | 3500 W ** | 3100 W (110 V) ** 3500 W (230 V) ** |
| Suggested power generator for full welding range | 3,5 ÷ 4 kVA | 5,5 ÷ 6 kVA | 5,5 ÷ 6 kVA | 6,5 ÷ 7 kVA | 7 kVA |
| Protection degree | IP 54 | IP 54 | IP 54 | IP 54 | IP 54 |
| Electrical fuse protection | √ | √ | √ | √ | √ |
| Display | Single line LCD | Graphic LCD 2,4" | Graphic LCD 6,5" | Graphic LCD 6,5" | Graphic LCD 6,5" |
| Machine body dimensions | 200x250x210mm 7.9"x9.8"x8.3" | 263 x 240 x 300 mm 10.3" x 9.4" x 1.8" | 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" | 259 x 342 x 428 mm 10.3" x 13.5" x 16.8" |
| Carrying case dimensions | - | 405 x 285 x 340 mm 16" x 11.2" x 13.4" | 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" | 390 x 350 x 500 mm 15.3" x 13.8" x 19.7" |
| Weight machine + cables | ~ 7 Kg | ~ 16 Kg (35.3 lb) | ~ 18 Kg (39.6 lb) | ~ 20 Kg (44 lb) | ~ 13,9 Kg (30.6 lb) |
| Weight carrying case | - | 3.9 Kg (8.6 lb) | 4.8 Kg (10.5 lb) | 4.8 Kg (10.5 lb) | 6,6 Kg (14.55 lb) |
| Traceability | - | Fitting | Pipe/Fitting/Pipe | Pipe/Fitting/Pipe | Pipe/Fitting/Pipe |

* 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 TOP (230 V) is available in two version: for couplings 8 ÷ 48 V and couplings 8 ÷ 80 V



**Ritmo**
PLASTIC WELDING TECHNOLOGY



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