

# PRODUCTS CATALOGUE

"AT EASE IN YOUR CONSTRUCTION SITE"

[www.ritmo.it](http://www.ritmo.it)





# 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.

# 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**

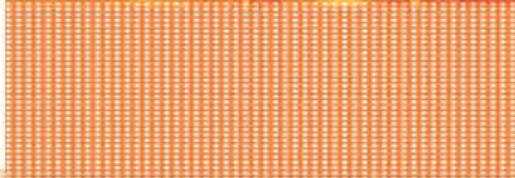
Ritmo's Service Centre can solve all kind of technical issues, as well as overhaul our machines. Ritmo has other Service Centres abroad, linked to its official distributors.

### **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.



**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



## - **ALL TERRAIN** *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



# **ALL TERRAIN LINE - TRAILER LINE**

## ***HIGH LEVEL PERFORMANCE***



## DIFFERENCES BETWEEN ALL TERRAIN LINE AND TRAILER LINE

**PLUS**

**HIGH  
PERFORMANCE**

**ENHANCES  
PRODUCTIVITY**

	ALL TERRAIN LINE	TRAILER LINE
Working standards mm	√	√
Working standards "IPS /"DIPS	√	√
International standards ISO 21307 HIGH PRESSURE	√	√
Welds fittings	√	√
Easy Life Welding System	√	√
Data-logging	√	√
Wi-Fi Ready	√	√
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	√	-
Remotely wire-controlled up to 12 m (39 ft)	√	√
Carriage can be removed for in-ditch use	√	√
Lateral rollers	√	√





## 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  $\varnothing$  1000 mm.

Machine can fuse pipes according to the ISO 21307 High Pressure standard (pressure range is three times and a half higher than the ISO Low Pressure ones). This greatly enhances productivity allowing 60% time saving.

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 hydraulic electric facer that is equipped with a safety microswitch to prevent from accidental starts, a thermal circuit breaker to protect motor.
- 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. **Easy Life system is "Wi-Fi" ready and works together with the App "SET & GO - PRO".**
- 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



Hydraulic Milling cutter



Hydraulic 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 630



App  
"Set & Go Pro"



watch the video

and:

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

Israel





## 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 holds 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 electronics 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 and iOS) 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.



**PLUS**

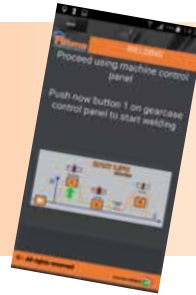
**EASY SETTING  
WI-FI READY**

**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!

**WELDING REPORT**  
Welding = N° 46 - NO ERROR

Date (dd/mm/yy) = 16/02/18  
Time (hh:mm) = 09:46

**Standard**  
ISO 21307 (06/11) SINGLE LP

Diameter = 250 mm  
SDR = 17  
Thickness = 14.8mm  
Material = PE

p1 = 0.17MPa  
T min = 200°C  
T nom = 223°C  
T max = 245°C  
p1 = 20 bar  
A = 20mm  
p2 = 0 bar, t2 = 163 s  
t3 = 5 s  
t4 = 8 s  
p3 = 20 bar, t5 = 1080 s

Model = BASIC 315 (V0,V1)  
Piston area = 6.68 cm<sup>2</sup>  
Serial = 99000006  
Firmware version = 216  
Next overhaul (mm/yy) = 10/18  
Operator = Test operator  
Job site = Ritmo  
Remark = test welding

Diameter = 250 mm  
SDR = 17  
Thickness = 14.8mm  
Material = PE  
T heater = 223°C

Drag pressure p1 = 3 bar  
p1 + pt = 31 bar, t1 = 30 s  
p2 = 0 bar, t2 = 163 s  
t3 = 4 s  
t4 = 8 s  
p3 + pt = 21 bar, t5 = 1080 s  
t total = 1269 s

OPERATOR'S BADGE  
300000941424312017564038002030

JOINT TRACEABILITY 1  
313701110081452040602025320078232530012

JOINT TRACEABILITY 2  
313701110081452040602025320078232530012

GPS 45:23,39647 11:43,0569

PICTURES  
BEFORE  
AFTER

\*\*\*\*\* REPORT n.9 Easy Life v1.09 \*\*\*\*\*

Date: 02/02/16  
Hour: 12:58  
Set temperature HP: 200 C  
Revision: 11/15  
Serial number: 111200000  
Diameter: 75 mm  
Material: PP  
SDR: 7.4  
Operator: GIA  
Job site: RIT

Remark: \*\*\*\*\*  
\*\*\* WELDING DATA \*\*\*  
Welding number: 9  
Drag Pressure: 5 bar  
P1: 40 bar  
P2: 2 bar  
P5: 40 bar  
T1: 2s  
T2: 30s  
T3: 6s  
T4: 4s  
T5: 180s  
Total joint time: 3'42"

Report by EASY LIFE

Report by  
EASY LIFE + "SET & GO! PRO"



# 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																								800	900	1000	1200	1400	1600	
DELTA 250 TRAILER					75	90	110	125	140	160	180	200	225	250																
DELTA 355 TRAILER								125	140	160	180	200	225	250	280	315	355													
DELTA 355 ALL TERRAIN								125	140	160	180	200	225	250	280	315	355													
DELTA 500 TRAILER												200	225	250	280	315	355	400	450	500										
DELTA 500 ALL TERRAIN												200	225	250	280	315	355	400	450	500										
DELTA 630 TRAILER													225	250	280	315	355	400	450	500	560	630								
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				
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	

CTS	IPS																																					
	1"	1¼"	1½"	2"	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																																						
DELTA 160 M	•	•	•	•	•	•	•	•	•	•	•	•																										
DELTA 200 M																																						
BASIC 160																																						
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DELTA 500																																						
DELTA 630																																						
DELTA 800																																						
DELTA 1000																																						
DELTA 48"																																						
DELTA 1600																																						
DELTA TRAILER 250																																						
DELTA 355 TRAILER																																						
DELTA 355 ALL TERRAIN																																						
DELTA 500 TRAILER																																						
DELTA 500 ALL TERRAIN																																						
DELTA 630 TRAILER																																						
DELTA 630 ALL TERRAIN																																						
DELTA 1000 TRAILER																																						
IPS																																						

DIPS																	
	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	42"	48"	54"	60"
GAMMA 160																	
DELTA 160 M	•	•															
DELTA 200 M	•	•	•														
BASIC 160	•	•															
BASIC 200	•	•	•														
BASIC 250	•	•	•	•													
BASIC 315	•	•	•	•	•												
BASIC 355	•	•	•	•	•	•											
COMPACT 355	•	•	•	•	•	•	•										
BASIC 160 EASY LIFE	•	•															
BASIC 200 EASY LIFE	•	•	•														
BASIC 250 EASY LIFE	•	•	•	•													
BASIC 315 EASY LIFE	•	•	•	•	•												
BASIC 355 EASY LIFE	•	•	•	•	•	•											
DELTA 500 EASY LIFE																	
DELTA 630 EASY LIFE																	
DELTA 500																	
DELTA 630																	
DELTA 800																	
DELTA 48"																	
DELTA 1600																	
DELTA TRAILER 250	•	•	•	•													
DELTA 355 TRAILER	•	•	•	•	•												
DELTA 355 ALL TERRAIN	•	•	•	•	•	•											
DELTA 500 TRAILER	•	•	•	•	•	•	•										
DELTA 500 ALL TERRAIN	•	•	•	•	•	•	•	•									
DELTA 630 TRAILER	•	•	•	•	•	•	•	•									
DELTA 630 ALL TERRAIN	•	•	•	•	•	•	•	•	•								
DELTA 1000 TRAILER	•	•	•	•	•	•	•	•	•								
DIPS																	



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