

## BUTT WELDING MACHINES

### DEVICES FOR ELECTROHYDRAULIC WELDERS

#### **INSPECTOR** data-logger:

This is an electronic device that can be used with the DELTA and ALFA hydraulic welders.

It keeps the pressure and real time parameters under control during the entire welding cycle, by means of a group of sensors, independent from the welding machine itself. The INSPECTOR is supplied with a software that helps to process the parameters set in by the operator (ex: diameter, SDR, etc.), in accordance to preset standards.

#### **ECP EASY LIFE:**

This is an electronic device that can be used with some of the DELTA welding machines and, in the nearest future, with the ALFA series, as well.

The ECP EASY LIFE allows a simple control of the entire welding cycle by means of a light touch control panel, very easy to use.

With this electronic device, welding can be defined as:

- assisted*, once the operator has only to press the push buttons to start each phase of the cycle;
- semiautomatic*, once there's a software that automatically controls the pressure/time parameters, and the repeatability of the welding, thanks to a memory (which data can be changed at any time).

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### TECHNICAL FEATURES

Dimensions	250 x 200 x 175 mm
Weight	4,94 Kg
Power supply	Through switching power supply 48 ÷ 230 V-Single phase-50/60 Hz
Power absorbed	<b>11 W</b>
Protection degree	IP 65
Control system	Microprocessor
Transducers	For pressure, heating plate T° and ambient T°
Display	2 x 20 mm Alphanumerical backlighted LCD
Indicators	LED type for the various welding phases
Running autonomy	Backup battery to finish recording the welding cycle and to print the report
Memory	Extractable memory card with a capacity of up to 1,020 welding cycles
Printer for the welding report	Impact rapid type
PC communication interface	RS 232

**Ritmo SpA**

```

*****
DATA:          21-11-01
ORA :          18:50:09
TEMP AMBIENTE: 21 C
*****
NUM. SALD.    3
COD. OPERAT.: 000000
COD. ORDINE : 000000
COD. CANTIE. : 000000
COD. FORNIT.: 000000
*****
MACCHINA: ALFA 630-1
ANGOLO:       45 G.
UNIONE: BARRA FASE 1
NORMA/DVS: 2207 8/95
MATERIALE: PE 100
DIAMETRO:     225 mm
SPessore:     20.5 mm
SDR:          11.0
*****
LUCE ALLIN.   1.0 mm
PERDITE CARICO 1 b
*****
DIMENS. BORD. 3.0 mm
P BORD INO NOM 15 b
P BORD INO MIN 20 b
P BORD INO MAX 23 b
T BORD INO EFF 12 s
*****
P RISCALD. NOM 2 b
P RISCALD. MIN 2 b
P RISCALD. MAX 5 b
T RISCALD. NOM 370 s
T RISCALD. EFF 372 s
*****
T SCAMBIO NOM 16 s
T SCAMBIO EFF 2 s
*****
T SALITA NOM 19 s
T SALITA EFF 17 s

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**Ritmo SpA**

```

*****
DATE:          21-11-01
TIME:         18:50:09
ROOM TEMPE.: 21 C
*****
WELD.NUMB.:   3
USER CODE : 000000
JOB CODE : 000000
B SITE COD: 000000
PIPE SUPPL.: 000000
*****
WELDER: ALFA 630-1
ANGLE:        45 G.
FITTING: WVE PHASE 1
STAN.: DVS 2207 8/95
MATERIAL: PE 100
DIAMETER:     225 mm
U THICKNESS: 20.5 mm
SDR:          11.0
*****
ALIGN. LIGHT  1.0 mm
DRAG PRESSURE 1 b
*****
BERD HEIGHT   3.0 mm
REQD BERD FOR.P 15 b
MIN BERD FOR.P 20 b
MAX BERD FOR.P 23 b
ACTL BERD FOR.T 12 s
*****
REQD HEAT.PRES. 2 b
MIN HEAT.PRES. 2 b
MAX HEAT.PRES. 5 b
REQD HERT. T. 370 s
ACTL HEATING T. 372 s
*****
REQD CHANG. T. 16 s
ACTL CHANGIN.T. 2 s
*****
REQD PR.RAIS.T. 19 s
ACT.PRE.RAIS.T. 17 s

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*****
P SALDATURA NOM 15 b
P SALDATURA MIN 20 b
P SALDATURA MAX 23 b
T SALDATURA NOM 45 m
T SALDATURA EFF 45 m
*****
TEMP MIN NOM : 191 C
TEMP MIN EFF : 201 C
TEMP MAX NOM : 211 C
TEMP MAX EFF : 201 C
*****
SALDATURA CORRETTA

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```

*****
REQD WELD.PRES. 15 b
MIN WELD.PRES. 20 b
MAX WELD.PRES. 23 b
REQD WELD. T. 45 m
ACTL WELDING T. 45 m
*****
REQD MIN TEMP.: 191 C
ACTL MIN TEMP.: 201 C
REQD MAX TEMP.: 211 C
ACTL MAX TEMP.: 201 C
*****
WELDING WAS O.K.

```

### Welding report



INSPECTOR-welding machine connection cables

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ECP EASY LIFE



Control panel



Electrical panel

## ECP - EASY LIFE

A *patented technological innovation*

This is a completely new way of conceiving the butt welding process. The **ECP EASY LIFE** manages the welding cycle in a semi-automatic way, and can be used with the DELTA machines (and, in the nearest future, to the ALFA series, as well).

The unit features a light touch control panel, that substitutes entirely the traditional gearcase (see Price List ref. "DELTA EASY LIFE" pages or standard DELTA pages, accessories "ON REQUEST").

The **ECP EASY LIFE** allows a simple and quick selection of the pressure and time data, which can be modified whenever necessary. The welding process buttons are logically displayed, therefore making its use easy to understand. Furthermore, its electronics allows the continuous repeat of the welding cycles, and controls automatically the preset parameters.

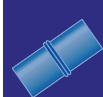
The use of this unit together with the INSPECTOR data-logger assures the operator that the welding comply with the stored Italian and German standards (UNI and DVS), as the ones made with CNC automatic welding machines.

The **ECP EASY LIFE** system is very flexible, and can be adapted to other welding methods, such as "Dual Pressure" (\*), with the same ease of use and certification.

**(\*) This method is used when welding PE 100 (UNI Italian standard, and PE 80-PE 100 WIS British standard).**

The **ECP EASY LIFE** gearcase for the DELTA 160-250-315 (230V) and DELTA 500 (400V) welding machines consists of:

- an *extractable box* in plastic featuring:
  - a *control panel* with push buttons for managing "programming and process", welding pressure/time display;
  - an *electrical panel* with electronic thermoregulator to control the working temperatures, a safety circuit breaker and overload cutout;
  - power outlets* for the heating plate and milling cutter, with connection for the electronic data-logger INSPECTOR (see page 46 );
- bearing frame and stainless steel box containing the *hydraulic unit*;
- *hydraulic hoses* with non-drip quick couplings.



## TECHNICAL FEATURES

Used with:	<b>DELTA 160 - 250 - 315 (230 V)</b>
Dimensions (W x D x H)	596 x 438 x 573 mm
Weight	48,00 Kg
Power supply	230 V - Single phase -50/60 Hz
<b>Maximum absorbed power</b>	<b>1100 W</b>
Pressure's working range	0 ÷ 150 bar

Used with:	<b>DELTA 500 (400V)</b>
Dimensions (W x D x H)	596 x 438 x 573 mm
Weight	48,00 Kg
Power supply	400 V - Three-phase - 50/60 Hz
<b>Maximum absorbed power</b>	<b>1100 W</b>
Pressure's working range	0 ÷ 150 bar



ECP EASY LIFE with DELTA



ECP EASY LIFE and  
INSPECTOR