You want to learn more about us?

Feel free to ask for a meeting on our premises.
Detailed information on the company and on
our product range is also available on-line at
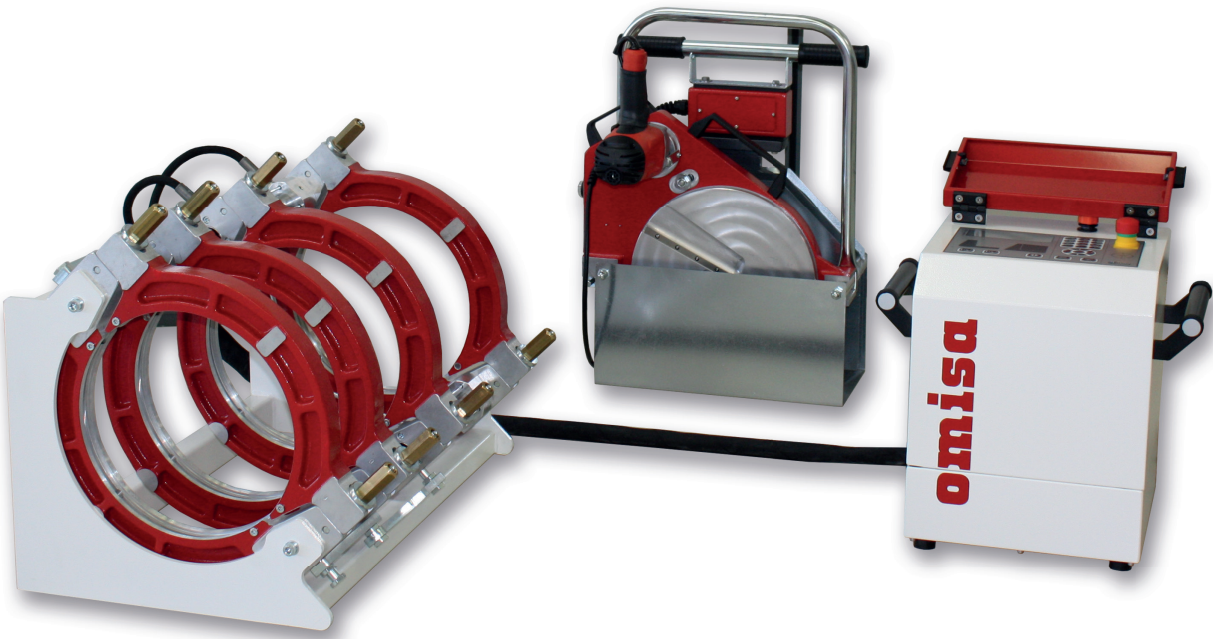**www.omisa.it**

SMART PLASTIC WELDING

02.2020

OMISA CNC ECO 2.0 250-315-355

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CNC ECO 2.0

EN

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Example picture

Stand-alone in Butt-Welding

Bluetooth

The **OMISA** CNC ECO 2.0 is a high-quality and durable, next-generation CN-controlled plastic pipe butt-welding machine that has been developed in compliance, as applicable, with the machinery directive 2006/42/EC as amended. The design of the machine is such that with 12 basic machine chassis models, pipes from O.D. 40 through 1200 mm can be jointed.

The welding machines ship with a fully encased CNC hydraulic and control box of ingress protection IP 54 managing pressures up to 220 bar. Both the anti-stick-coated heating element and the facing tool are hooked up along with the machine chassis on the hydraulic and control box. No additional power distribution is needed.

Furthermore, all **OMISA** CNC ECO machines of the next generation allow an optional upgrade with a hardware-based input voltage monitor, inclusive of the associated voltage recording capabilities.

Heating element temperature and pressure control throughout the welding process is implemented as provided for by the applicable standard (DVS, UNI, WIS, NEN, etc.). Of course, all welding-related parameters that matter for a high-quality and reproducible joint are monitored for the full duration of the process and saved to the internal memory with a capacity of 10,000 reports.

It is absolutely unique and a first in butt-welding technology that user identification and access control does not rely on bar codes and scanner with these machines, as in the past, but makes the data available to the hydraulic and control box by the totally error-proof and extremely user-friendly RFID technology.

Of course, the tried and tested input devices, scanning pen and handheld scanner, continue to be available as options. All **OMISA** CNC ECO machines also feature a USB interface port and Bluetooth connectivity for download of the welding data to a USB stick as a short abstract or an extended report in the PDF format or for archiving them in the **OMISA** DataWork format.
Add to all the above the new **OMISA** WeldTrace app's QR code scanning capability, and comprehensive end-to-end tracing of all project and welding information is a given even years after the fact.
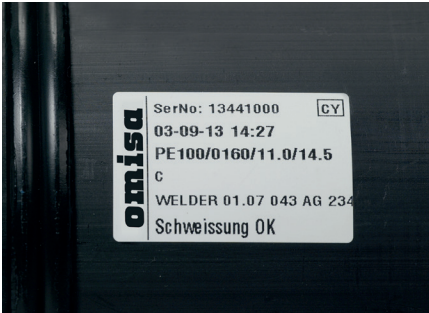
In their CNC ECO + 2.0 model version, all machines additionally feature the HDC – **OMISA** Distance Control – sensing system for accurate verification of proper welding and welding process preparation.

All components are covered by the OMISA warranty.

Tag printer and label tags

Immediate quality labeling of every welded joint is possible with the optional dedicated tag printer that delivers an abrasion-proof plastic sticker which can be used as a label on the fitting or joint

Front panel

The standard version of the machine ships with a next-generation, high-resolution, temperature range-extended character display. The novel GT keyboard enables convenient input of both required component parameters and traceability data.

Technical Specs	160 mm	250 mm	315 mm	355 mm	500 mm	630 mm	800 mm	1000 mm	1200 mm
P/N SP-CNC...	160	250	315	355	500	630	800	1000	1200
Welding range, O.D. (mm)	40 - 160	(63) 75 - 250	90 - 315	90 - 355	(200) 250 - 500	315 - 630	500 - 800	(630) 710 - 1000	(630) 710 - 1200
Power Supply	230 V 50 Hz	230 V 50 Hz	230 V 50 Hz	230 V 50 Hz	400 V 50 Hz, 3 P	400 V 50 Hz, 3 P	400 V 50 Hz, 3 P	400 V 50 Hz, 3 P	400 V 50 Hz, 3 P
Rated power (kW)	2.65	3.85	4.85	5.6	6.45	11.65	17.8	21.2	22.2
Overall weight with all components (kg)	80	125	179	216	372	581	1233	1397	1775
Reducer inserts available	40, 50, 63, 75, 90, 110, 125, 140	(63)*), 75, 90, 110, 125, 140, 160, 180, 200, 225	90, 110, 125, 140, 160, 180, 200, 225, 250, 280	90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315	(200), (225)*), 250, 280, 315, 355, 400, 450	(250), (280)*), 315 , 355, 400, 450, 500, 560	(400), (450)*), 500, 560, 630, 710	(630)*), 710, 800, 900	(630)*), 710, 800, 900, 1000
Welding neck support*)	■	■	■	■	■	■	■	■	■
Automatic, "jumping" heating element*)	■	■	■	–	–	–	–	–	–
Included standard delivery:									
CNC ECO hydraulic controller	■	■	■	■	■	■	■	■	■
Basic machine chassis	■	■	■	■	■	■	■	■	■
Facing tool with micro-switch	■	■	■	■	■	■	■	■	■
PTFE-coated heating element	■	■	■	■	■	■	■	■	■
Carrying rack	■	■	■	■	■	■	■	■	■
OMISA transport box for reducers and machine optional	■	■	■	–	–	–	–	–	–
OMISA aluminium reducers[1]	■	■	■	■	■	■	■	■	■
OMISA steel reducers[1]	■	■	■	■	–	–	–	–	–

[1] Modified design: Screw-Fastened
*) Available as an option

OMISA CNC ECO 2.0 characteristics

Automatic data logging	10,000 reports
Data input	RFID transponder, manually, bar code scanner[2]
System self-monitoring	Hardware-base input voltage monitor[2] incl. data recording, system check, computerized maintenance management, including recording
Welding monitoring system	Welding pressures, welding times, ambient temperature, input voltage, memory control, motor operating temperature, heating element temperature, service schedule management, welding road/length
Traceability	Commission number 32 alphanumeric characters, RFID-fed ISO welder ID code, additional data 20 and 15 alphanumeric characters, ISO pipe codes, fitting data, pipe length, weather conditions, installing company, joint number, inventory number, display of maintaining company
Welding standard	DVS, WIS, SEDIGAS, UNI, UNI, NEN, and others upon request
Data output	USB A port for data transfer as short abstract or extended report in the PDF format to a USB stick or a label tag printer, incl. tag printer menu; transfer also possible in the OMISA DataWork format, CNC ECO 2.0 now with powerful download menu with date range selection, commission number selection, and download of all reports in memory
Languages	DE, EN, FR, BG, CS, ZH, NL, FI, GR, IT, NO, RO, SK, TR, RU, and others upon request
Display elements	Robust, high-resolution and temperature range-extended display screen with font size 8 mm, welding diagram with LED indicators
Miscellaneous	Keyboard switching, menu-controlled report review incl. search capability, ViewWeld feature, interactive carriage mover pushbutton on machine chassis, special memory backup feature
Standards, approvals, quality	Machinery directive 2006/42/EC (as applicable), DVS 2207, RAEE-compliant, ISO 9001:2015, RoHS-compliant
Manufacturer warranty	12 months

[2] optional