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SMART PLASTIC WELDING

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OMISA WeldControl 2.0 250-315-355

# OMISA WeldControl 2.0

EN

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Stand-alone in Butt-Welding

Technical Specs	160 mm	250 mm	315 mm	355 mm	500 mm	630 mm	800 mm	1000 mm	1200 mm	1400 mm	1600 mm
P/N SP-CW...	.160	.250	.315	.355	.500	.630	.800	.1000	.1200	.1400	.1600
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	800 - 1400	1000 - 1600
Power Supply	230 V 50 Hz	230 V 50 Hz	230 V 50 Hz	230 V 50 Hz	400 V 50Hz, 3P	400 V 50Hz, 3P	400 V 50Hz, 3P	400 V 50Hz, 3P	400 V 50Hz, 3P	400 V 50Hz, 3P	400 V 50Hz, 3P
Rated power (kW)	2,45	3,65	4,65	5,25	6,45	11,65	16,8	21,2	23,0	43,5	54
Overall weight with all components (kg)	66	109	168	201	295	448	771	1135	1998	2100	2450
Reducer inserts available	40, 50, 63, 75, 90, 110, 125, 140	(63)*, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280	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, 500, 560	(250), (280)*, 315, 355, 400, 450, 500, 560, 630, 710	(400), (450)*, 500, 560, 630, 710	(630)*, 710, 800, 900	(630)*, 710, 800, 900, 1000	800, 900, 1000, 1200, 1400	1000, 1200, 1400
Welding neck support*)	■	■	■	■	■	■	■	■	■	■	■
Automatic, "jumping" heating element*)	■	■	■	-	-	-	-	-	-	-	-
<b>Included standard delivery:</b>											
WeldControl hydraulic controller	■	■	■	■	■	■	■	■	■	■	■
Basic machine chassis	■	■	■	■	■	■	■	■	■	■	■
Facing tool with micro-switch	■	■	■	■	■	■	■	■	■	■	■
PTFE-coated heating element	■	■	■	■	■	■	■	■	■	■	■
Carrying rack	■	■	■	■	■	■	■	■	■	■	■
OMISA transport box for reducers and machine*	■	■	■	■	■	■	-	-	-	-	-
OMISA aluminium reducers <sup>1)</sup>	■	■	■	■	■	■	■	■	■	■	■
OMISA steel reducers <sup>1)</sup>	■	■	■	■	-	-	-	-	-	-	-

<sup>1)</sup> Modified design: Screw-Fastened  
\*) Available as an option

The handling of a WeldControl machine is simply unique and it enables an approach to welding no other system is able to offer. Either the operator makes use of the assistance of the interactively responding hydraulic and control unit. Or the manual mode is selected to make the joint "by hand".

- In the WeldControl mode the system walks the operator through the process after the pipe parameters were entered or confirmed. This includes monitoring the operator's inputs and recording the entire process. WeldControl machines do not only provide presets, though; they facilitate the work, e. g., by reducing the pressure automatically when the automode was enabled. Welding reports have all data required by ISO traceability.
- In the Manual mode the display screen works as a digital gauge. It displays the welding pressures and heating element temperatures and is a one-stop provider of all data.
- Via the USB port data can be sent as an abstract or extended report in the PDF format to a USB stick or a label tag printer.

Downloading them in the DataWork format enables using **OMISA's** PC program DataWork for archiving and managing the welding data.

- The machine ships with a totally encased WeldControl hydraulic and control unit of ingress protection IP 54 for pressures of up to 250 bar. Both the heating element and the facing tool are connected to the WeldControl hydraulics. No additional power distribution is needed! Component traceability data, pipe material, diameter, and wall thickness or SDR can be entered on a GT keypad with a highly user-friendly menu. All pressures and times relevant to the jointing operation are computed and monitored by the WeldControl system and displayed on the screen for the welder's convenience.
- The machine chassis is set on a specifically developed support frame exhibiting a warp resistance that manages with ease even the most extreme pipe parameters. Operators can be sure that the machine chassis does not tilt

or twist even when very long lengths of pipe with very thick walls are processed.

- Large, knurled turning knobs mean easy handling for the operator who opens or closes the clamps of the machines sized up to O.D. 315. No tools are needed for this.
- The facing tool with integrated micro-safety switch is driven by a high-quality power drive engaged by a transmission chain. The precision heating element ships with a very rugged anti-stick coating.
- A carrying rack is provided for the heating element and the facing tool, to store them with no worries about the heat.
- Maximum protection of the stowed-away machine is provided (up to O.D. 315) by an optional high-quality transport box that has been specifically designed for the entire machine assembly, with drawer-style storage compartments for the reducer inserts.
- For all machines a welding neck support is of course available, too.

All components are covered by the OMISA warranty.



Front panel with GT keypad



Transport Box



Welding neck support



**WeldControl jointing** – no errors, no welding parameter look-up, but data recording

OMISA WeldControl Hydraulic characteristics

Automatic data logging	10,000 welding reports
Data input	<b>WeldControl mode:</b> RFID transponder, scanner or manually; <b>Manual mode:</b> manual temperature control
Welding monitoring system	Welding pressures, welding times, ambient temperature, memory control, operating temperature, heating element temperature
Standard-compliant ISO 12176 traceability	Commission number with 32 alphanumeric characters, ISO-compliant welder ID code, OMISA welder ID code, 1 <sup>st</sup> additional (user-defined) data with 20 alphanumeric characters, 2 <sup>nd</sup> additional (user-defined) data with 15 alphanumeric characters, ISO-compliant traceability: fitting code, 1 <sup>st</sup> and 2 <sup>nd</sup> pipe codes, pipe length, weather conditions, joint number, installing company, inventory number
Welding standard	DVS, WIS, SEDIGAS, UNI, 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, now with powerful download menu with date range selection, commission number selection, and download of all reports in memory
Display screen	LED-lit screen of 4 lines 20 alphanumeric characters each, character height 5 mm, welding process diagram with control LEDs
Approvals, quality, ingress rating	CE, ISO 9001 : 2015, IP 54 (IP 64 optional), RAEE-compliant, RoHS-compliant
Language	DE, EN, FR, BG, CS, ZH, NL, FI, GR, IT, NO, RO, SK, TR, RU, and others upon request
Miscellaneous	Easy switch from WeldControl mode to Manual mode by a dedicated keypress; ViewWeld: viewing reports on the display rather than printed <sup>1)</sup>
System settings	Automode, manual input of welding parameters, gauge operation (for pressure, temperature)
Hydraulic and control unit	Only one external power supply needed! Power to all electronic components is supplied from the hydraulic unit; automatic heating element temperature control pursuant to national standards; hydraulic unit in encased, rugged steel enclosure with a weight of as little as 19,5 kg (up to O.D. 355 mm); max. pressure, up to O.D. 355 mm, 130 bar, O.D. 500 - 630 mm, 150 bar, O.D. 800 - 1600 mm, 220 bar
Manufacturer warranty	12 months