

## orbital | cutting + welding

# **ORBIWELD 170**

www.orbitalum.com

# Closed orbital weld head

The ORBIWELD 170 is characterized by a very high thermal load. This means it is particularly suitable for applications in the pharmaceutical, chemical, semiconductor and food processing industry or aerospace technology, where, due to ever increasing diameters and wall thicknesses of the tubes to be welded, higher and higher requirements are placed on the closed weld heads.





Stable clamping locks for secure and offset-free clamping



Robust and stable aluminum handle with integrated control panel



With cooling channels running through the entire weld head body, excellent heat dissipation has been ensured which allows for continuous work with the ORBIWELD weld head even with high quality weld seams and intensive operation.

The closed design of the ORBIWLES 170 as well as the gas flow system ensure permanent flushing of the weld seam during welding with protective gas resulting in seams hat are almost without tempering color.

#### CHARACTERISTICS:

- Quick change system for clamping inserts allows simple locking and releasing without tools
- Highly resilient through completely liquid-cooled weld head housing
- Stable clamping locks in connection with the clamping inserts available for all tube dimensions ensure a secure and offset-free clamping and centering of the parts to be welded
- With a control panel integrated in the robust and stable aluminum handle of the weld head, all

commands which are important for the welding can be transferred to the power source so that no additional remote control is required

- · High quality, robust housing and handles
- Highly flexible hose package (length: 7.5 m/24.6 ft) with strain relief to the power source
- · Cost-effective clamping inserts
- Comprehensive and customer-specific accessories program



#### Comprehensive and customer-specific accessories program (optionally available):



Hose package length extensions up to max. of 20 m (64ft)



Cost-effective clamping inserts



Chamber inserts for fittings for welding of fittings



T-piece clamping inserts with absorption possibility of the collared hose and the hose to be welded



Electrode adapter for lateral offset of the tungsten electrode

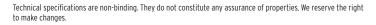


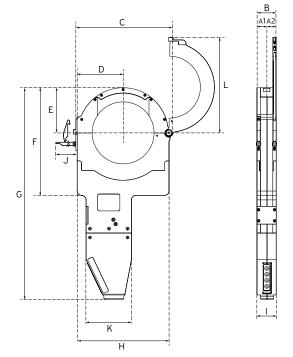
Practical and sturdy aluminum table mount

APPLICATION AREA	ORBIWELD 170
Code	825 000 001
Tube OD, min max.	50 - 170 mm 2 - 6 in
Electrode diameter	1.6/2.4 mm 0.063/0.094 in
Machine weight including hose package	18.9 kg 41.7 lbs
Hose package length	7.5 m 24.6 ft
SCOPE OF DELIVERY	
Including:	<ul> <li>1 orbital weld head 0W 170</li> <li>1 transport case (code 821 030 001)</li> <li>1 tool set</li> <li>1 feeler gauge</li> <li>1 set of operating instructions and spare parts list</li> </ul>
Suitable accessories (optionally available):	Clamping inserts, narrow and wide Chamber insert for fittings Inserts for arc welding T-piece clamping inserts Electrode adapters Table mounts ESG electrode grinders ORBmax residual oxygen meter ORBIPURGE forming set Hose package extensions Double pressure reducer

			ELECTRODE GAP			
ORBIWELD 170	DIMENSION		CLAMPING INSERT TYPE "S" [2 PAIRS]		CLAMPING INSERT TYPE "W" [2 PAIRS]	
	[MM]	[INCH]	[MM]	[INCH]	[MM]	[INCH]
Dimension "A1"	30.00	1.181	32.00	1.260	50.00	1.969
Dimension "A2"	41.00	1.614	43.00	1.693	61.00	2.402
Dimension "B"	70.00	2.756	72.00	2.835	110.00	4.331
Dimension "C"	345.00	13.583				
Dimension " <b>D</b> "	160.00	6.299				
Dimension "E"	140.00	5.512				
Dimension "F"	365.00	14.370				
Dimension "G"	585.00	23.031				
Dimension "H"	285.00	11.220				
Dimension "I"	50.00	1.969				
Dimension " <b>J</b> "	67.00	2.638				
Dimension "K"	88.00	3.465				
Dimension "L"	332.00	13.071				

WS2 tungsten electrodes







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Properties, application area, technical specifications and delivery scope, see page 42.

Clamping inserts are not included in the scope of delivery (see from page 45).

ITEM	CODE	MACHINE WEIGHT KG*	SHIPPING WEIGHT KG
Orbital weld head OW 170	825 000 001	18.900	36.200

<sup>\*</sup> Machine weight including hose package

### Suitable accessories (optionally available):

- Clamping inserts for ORBIWELD S and ORBIWELD, see page 45
- Chamber inserts for fittings, see page 48
- Inserts for arc welding, see page 49
- T-piece clamping inserts, see page 49
- Electrode adapters, see page 49
- Table mounts, see page 51
- Welding current connection adapter set, see page 95