

ORBIWELD 12, ORBIWELD 19

Micro weld heads

Extremely narrow design and yet highly durable thanks to intensive water cooling system: The small dimensions of the OW 12 and OW 19 weld heads make it ideal for applications where space is very restricted, such as the semiconductor industry, aerospace, pharmaceutical industry as well as the ultra pure water supply sectors. Particularly suitable for welding all common microfittings.



ORBIWELD 12:

- With its extremely compact design and different clamping cartridges, the OW 12 microweld head offers a uniquely versatile functionality and a high power-on time previously unknown for weld heads of this size thanks to the water coolant system
- Quick change system for clamping shells
- All the important commands for welding can be transmitted to the power supply via a
- control panel built into the robust and durable aluminum handle, so that no additional remote control is required
- Extremely narrow clamping cartridges (Type "A") for welding microfittings and for other applications with very limited clamping lengths
- Wide clamping cartridge (Type "B") with exchangeable clamping shells for standard applications

 The removable clamping cartridge enables accurate alignment with the parts to be welded, even where there is very little space

ORBIWELD 19:

- The 3-part clamping mechanism ensures that the head can be clamped in the most confined spaces, as even when open no parts protrude beyond the contour of the head. Equally, an exact alignment, with no misalignment is guaranteed with the parts to be welded
- All the important commands for welding can be transmitted to the power supply via a control panel built into the robust and durable aluminum handle, so that no additional remote control is required

Possible applications OW 12:	Microfitting- to-microfitting	Microfit- ting-to-tube	Tube- to-tube	Advantages
Clamping cartridges, Type "A" (narrow)	Х	Х	Χ	High flexibility thanks to narrow design
Clamping cartridges, Type "B" (wide)			Х	Low cost due to exchangeable clamping inserts
Clamping cartridges, Type "C" (microfittings)	Х	Х	Х	Form-closed fastening of microfittings for precise alignment



<u>.</u>	orbitalum orbital cutting + welding	www.orbitalum.com

APPLICATION RANGE	ORBIWELD 12	ORBIWELD 19				
Code	821 000 001	822 000 001				
Tube OD, min max.	3.0 - 12.7 mm 0.118" - 0.500"	3.0 - 19.05 mm 0.118" - 0.750"				
Electrode Ø	1.0 mm 0.039"	1.0 / 1.6 mm 0.039" / 0.063"				
Weight	5.7 kg 12.6 lbs	7.5 kg 16.5 lbs				
Hose package length	7.5 m 24.6 ft	7.5 m 24.6 ft				
SCOPE OF DELIVERY						
Including:	 1 Micro weld head ORBIWELD 12 or ORBIWELD 19 1 Durable storage and shipping case 1 Tool set 1 Operating instructions and spare parts list 					
Suitable accessories (available option):	Clamping cartridges for OW 12, Type "B" (wide) Clamping cartridge for OW 12, Type "B" (wide) Clamping inserts for OW 12, Type "B" (wide) Clamping cartridges for OW 12, Type "C" Clamping inserts for OW 19 ESG tungsten grinders ORBmax residual oxygen meter ORBIPURGE forming set Hose package extensions					

Inspection setWS2 tungsten electrodes



			ELECTRODE INTERVAL					
ORBIWELD 12	DIMENSION		CARTRIDGE TYPE "A"		CARTRIDGE TYPE "B"		CARTRIDGE TYPE "C"	
	[MM]	[INCH]	[MM]	[INCH]	[MM]	[INCH]	[MM]	[INCH]
Dimension "A1"	4.25	0.167	6.35	0.250	15.60	0.614	22.79	0.897
Dimension "A2"	3.75	0.148	5.85	0.230	15.10	0.594	21.91	0.863
Dimension " B "	7.62	0.300	12.20	0.480	30.70	1.209	44.70	1.760
Dimension "C"	73.00	2.874						
Dimension " D "	36.50	1.437						
Dimension " E "	27.50	1.083						
Dimension "F"	49.00	1.929						
Dimension " G "	253.00	9.961						
Dimension " H "	59.00	2.323						
Dimension "I"	26.00	1.024						
Dimension "J"	30.00	1.181						
Dimension " K "	59.00	2.323						

			ELECTRODE INTERVAL				
ORBIWELD 19	DIMENSION		CLAMPING TYPE "S"	INSERT	CLAMPING INSERT TYPE "W"		
	[MM]	[INCH]	[MM]	[INCH]	[MM]	[INCH]	
Dimension "A1"	12.00	0.472	12.80	0.504	16.50	0.650	
Dimension "A2"	12.00	0.472	11.70	0.461	17.50	0.689	
Dimension " B "	24.50	0.965	24.50	0.965	34.00	1.339	
Dimension "C"	66.00	2.598					
Dimension " D "	33.00	1.299					
Dimension " E "	35.20	1.386					
Dimension " F "	45.00	1.772					
Dimension " G "	312.00	12.283					
Dimension " H "	76.00	2.992					
Dimension "I"	34.00	1.339					
Dimension " J "	35.00	1.378					
Dimension " K "	71.00	2.795					

