

# ORBIWELD 19 HD

Micro weld head  
with robust  
clamping mechanism

## Micro weld head with robust clamping mechanism

Precise, robust and powerful - that's the OW 19 HD micro weld head. As a continuation of the proven OW 19 orbital weld head, the HD version has a high load capacity. The use of a robust clamping mechanism guarantees a long service life with consistently precise weld seam quality. The OW 19 HD is particularly suitable for the installation and hook-up of pipes in the semiconductor industry. Conversion between OW 19 and OW 19 HD is possible at any time.



Tight fit even under  
Permanent load  
during installation  
work and hook-up



**The OW 19 HD is a continuation of the proven OW 19 micro weld head. The name suffix "Heavy Duty" suffix highlights the optimized service life and clamping force compared to the narrower basic version of the OW 19.**

### Robust and stable

The OW 19 HD was developed to withstand extreme loads. This includes a long service life and the completion of many welds within a very short time. Its design guarantees robust and reliable performance, even in demanding work environments.

### Liquid-cooled

To ensure the optimum temperature even during intensive welding work, the OW 19 HD is equipped with efficient liquid cooling. This not only ensures constant performance, but also a longer service life for the welding head.

### Optimized clamping mechanism

The use of a robust clamping mechanism not only ensures a high clamping force, but also precise and stable pipe alignment. The practical clamping fasteners enable convenient operation. The flip cover makes it easy to check the position of the electrodes and ensures that the pipes to be welded are aligned precisely.

### Easy to operate

Like the OW 19, the OW 19 HD has a control panel integrated into the aluminum handle. All relevant functions can be controlled via the control panel. In addition, all orbital welding power sources from Orbitalum automatically recognize the head and its properties, so that the operator only has to call up his specified welding program and start the process before welding begins.

The head weighs 6.5 kg (14.3 lbs). The hose package attached to the welding head has a length of 7.5 meters (24.6 feet). This allows the user to move and work freely around the power source.

### OW 19 HD conversion kit - for more flexibility!

Existing OW 19 welding heads can be easily converted to the OW 19 HD welding head variant using a conversion kit.  
(see "ORBIWELD 19" and "Conversion kit OW 19 HD")



Robust and stable aluminum handle with integrated control panel



Practical tension locks for convenient one-handed operation



Easier insertion of the electrodes due to markings for  $\emptyset$  1.0/1.6 mm (0.039"/0.063")



Flip up weld head cover "Flip Cover"



Diameter-specific clamping inserts (each 4-part, wide and narrow) available separately

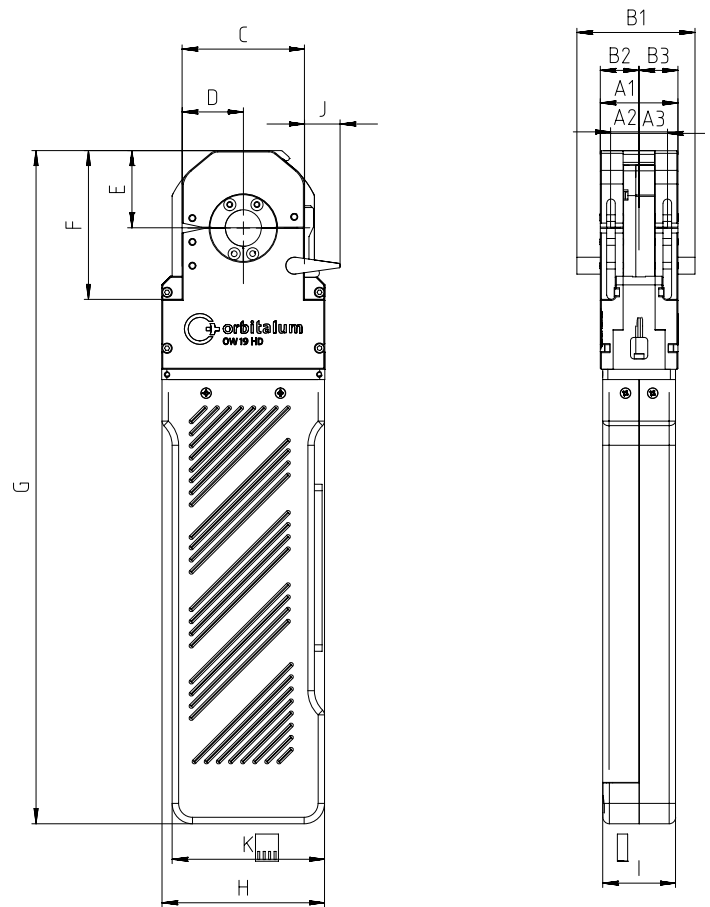


Wide accessories program, e.g. ORBmax residual oxygen meter

APPLICATION AREA	ORBIWELD 19 HD
Code	<b>822 000 011</b>
Pipe OD, min. - max.	3,0 - 19,05 mm 0.118 - 0.750 in
Electrode diameter	1,0 / 1,6 mm 0.039 / 0.063 in
Machine weight including hose package	6,5 kg 14.3 lbs
Hose package length	7,5 m 24.6 ft

SCOPE OF DELIVERY	
Including:	<ul style="list-style-type: none"> <li>• 1 micro weld head ORBIWELD 19 HD</li> <li>• 1 transport case</li> <li>• 1 tool set</li> <li>• 1 feeler gauge</li> <li>• 1 General safety instructions for closed weld heads</li> <li>• Operating instructions and spare parts list (PDF)</li> </ul>
Suitable accessories (optionally available):	<ul style="list-style-type: none"> <li>• Clamping inserts for OW 19 HD</li> <li>• ESG electrode grinders</li> <li>• ORBmax residual oxygen meter</li> <li>• Hose package extensions</li> <li>• WS2 tungsten electrodes</li> </ul>

ORBIWELD 19 HD	DIMENSIONS		ELECTRODE GAP	
	DIMENSION		CLAMPING INSERT TYPE "W"	
	[MM]	[INCH]	[MM]	[INCH]
Dimension "A1"	36,00	1.417		
Dimension "A2"				
Dimension "A3"				
Dimension "B1"	55,20	2.173		
Dimension "B2"			18,00	0.709
Dimension "B3"			18,00	0.709
Dimension "C"	57,20	2.252		
Dimension "D"	28,60	1.126		
Dimension "E"	36,00	1.417		
Dimension "F"	69,50	2.736		
Dimension "G"	31,50	1.240		
Dimension "H"	76,20	3.000		
Dimension "I"	34,00	1.339		
Dimension "J"	16,60	0.654		
Dimension "K"	71,20	2.803		



Technical specifications are non-binding. They do not constitute any assurance of properties. We reserve the right to make changes.





ORBIWELD 19 HD

## Micro weld head OW

### ORBIWELD 19 HD

Properties, application area, technical specifications and delivery scope, see page 2.

Clamping inserts are not included in the scope of delivery, see page 4.

ITEM	CODE	MACHINE WEIGHT KG*	SHIPPING WEIGHT KG
Micro weld head OW 19 HD	822 000 011	6,500	14,800

\* Machine weight including hose package

### Suitable accessories (optionally available):

- Clamping inserts for OW 19 HD
- Welding current connection adapter set

## Clamping inserts for OW 19 HD

A clamping insert consists of 4 individual parts (2 inserts per side).



Clamping insert for OW 19 HD 4-part

ITEM	PIPE OD		CODE
	[MM]	[INCH]	
Clamping insert for OW 19 HD, 4-part	3,00	0.118	<b>822 002 201</b>
Clamping insert for OW 19 HD, 4-part	3,18	0.125	<b>822 002 202</b>
Clamping insert for OW 19 HD, 4-part	6,00	0.236	<b>822 002 203</b>
Clamping insert for OW 19 HD, 4-part	6,35	0.250	<b>822 002 204</b>
Clamping insert for OW 19 HD, 4-part	8,00	0.315	<b>822 002 205</b>
Clamping insert for OW 19 HD, 4-part	9,53	0.375	<b>822 002 206</b>
Clamping insert for OW 19 HD, 4-part	10,00	0.394	<b>822 002 207</b>
Clamping insert for OW 19 HD, 4-part	12,00	0.472	<b>822 002 208</b>
Clamping insert for OW 19 HD, 4-part	12,70	0.500	<b>822 002 209</b>
Clamping insert for OW 19 HD, 4-part	13,00	0.512	<b>822 002 210</b>
Clamping insert for OW 19 HD, 4-part	13,50	0.531	<b>822 002 211</b>
Clamping insert for OW 19 HD, 4-part	13,70	0.539	<b>822 002 212</b>
Clamping insert for OW 19 HD, 4-part	14,00	0.551	<b>822 002 213</b>
Clamping insert for OW 19 HD, 4-part	15,00	0.591	<b>822 002 214</b>
Clamping insert for OW 19 HD, 4-part	15,88	0.625	<b>822 002 215</b>
Clamping insert for OW 19 HD, 4-part	16,00	0.630	<b>822 002 216</b>
Clamping insert for OW 19 HD, 4-part	17,20	0.677	<b>822 002 217</b>
Clamping insert for OW 19 HD, 4-part	18,00	0.709	<b>822 002 218</b>
Clamping insert for OW 19 HD, 4-part	19,00	0.748	<b>822 002 219</b>
Clamping insert for OW 19 HD, 4-part	19,05	0.750	<b>822 002 220</b>

## Other accessories for orbital welding

- ESG electrode grinders, see page 98
- ORBmax residual oxygen meter, see page 102
- Hose package extensions, see page 106
- WS2 tungsten electrodes, see page 106
- Welding current connection adapter set, see page 107