ORBIWELD 38S, 76S, 115S









ENCLOSED ORBITAL WELD HEADS

EASIER TO HANDLE, MORE ECONOMICAL, MORE EFFECTIVE - ENCLOSED TIG ORBITAL WELDING HEADS WITH OUTSTANDING CHARACTERISTICS: THE ORBIWELD "S" SERIES FROM ORBITALUM CONVINCES BY ITS EXTREMELY NARROW DESIGN AND HIGH DURABILITY BY ITS EFFICIENT INTEGRATED WATER COOLING SYSTEM.

The small dimensions of the ORBIWELD "S" series make it ideal for applications where space is very restricted, such as the pharmaceutical and chemical industry, the semiconductor, food and beverage industry as well as aerospace.

All enclosed orbital weld heads of the ORBIWELD series are made from strong, durable materials of the finest quality and are characterized by their unique water cooling system.

The appropriate high-grade, functional and longlasting clamping inserts are lasting longer than the inserts of many competitors.

The inserts are available in small and wide design and easily and quickly insert-able into the weld heads.

FEATURES:

- Thanks to the extremely narrow design, parts with short straight welding lengths can also be processed
- · High-quality, rugged housing and handle parts
- High durability due to completely water-cooled weld head housing
- Highly flexible hose package (Length: 7.5 m/ 24.6 ft) with strain relief to the power supply
- 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
- Tool-Free Quick change system for clamping inserts that engages and releases smoothly
- · Cost-effective clamping inserts
- Durable clamping connections in combination with clamping inserts available for all tube dimensions guarantee that the parts to be welded are clamped securely without misalignment
- Comprehensive and customer-specific range of accessories
- NEW: A folding cover at the weld head enables to test and/or to readjust the electrode position before the welding procedure

ORBIWELD 38S, 76S, 115S Enclosed Orbital Weld Heads

ORBIWELD 38S, ORBIWELD 76S, ORBIWELD 115S

Clamping inserts are not included in the scope of delivery.

APPLICATION RANGE	ORBIWELD 38S	ORBIWELD 76S	ORBIWELD 115S
Code	0T826.000.001	0T827.000.001	0T828.000.001
Tube OD, min max.	3 - 38.1 mm	6 - 77 mm	20 - 115 mm
	1/8 in - 1.5 in	1/4 in - 3.0 in	3/4 in - 4.5 in
Electrode Ø	1.6/2.4 mm	1.6/2.4 mm	1.6/2.4 mm
	.063 in/.094 in	.063 in/.094 in	.063 in/.094 in
Weight	9 kg	9.4 kg	13 kg
	19.8 lbs	20.7 lbs	28.7 lbs
Shipping Weight	16.5 kg	16.9 kg	18.6 kg
Hose package length	7.5 m	7.5 m	7.5 m
	24.6 ft	24.6 ft	24.6 ft

SCOPE OF DELIVERY

In	cl	u	d	e	S	:

(available option)s:

- · 1 Enclosed orbital weld head OW 38S OW 76S or OW 115S
- 1 Durable storage and shipping case
- · 1 Tool set
- 1 Operating instructions and spare parts list
- **Accessories**
- · Clamping inserts, small and wide
- · Spare pressure pieces
- Plastic case for clamping inserts
- · Cavity inserts for moldings · Inserts for elbow welding
- · T-piece clamping shells
- · Electrode adapters

- · Table mounts
- ESG tungsten grinders
- · ORBmax digital oxygen analyzer
- · ORBIPURGE forming set
- Hose package extensions
- · Inspection set
- WS2 tungsten electrodes



ORBIWELD 38S

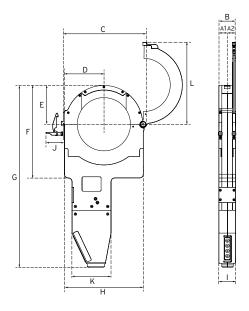


ORBIWELD 76S



ORBIWELD 115S

ORBIWELD 38S ORBIWELD 76S ORBIWELD 115S CLAMPING INSERT CLAMPING CLAMPING **OVERALL** OVERALL OVERALL TYPE **INSERT TYPE INSERT TYPE** DIMENSION DIMENSION DIMENSION [2 PAIR] [2 PAIR] TYPE "W" 0.69in 0.83 1.01in A1 A1 A1 (17mm) (17.5mm) (19mm) (21mm) (22.75mm) (25.75mm) (45.75mm) 0.67in 0.69in 0.75in 0.83 0.84in 0.96in 174in A2 A2 A2 (17mm) (17.5mm) (19mm) (21mm) (21.25mm) (24.25mm) (44.25mm) 1.34in 1.38in 1.5in 1.73in 1.97in 3.54in В В В (38mm) (34mm) (35mm) (42mm) (44mm) (50mm) (90mm) 4.41in 8.66in 6.26in C C С (220mm) 2.66in (67.5mm) 4.09in (104mm) D D D (47.5mm) 1.85in 2.6in 4.02in Ε Ε E (66mm) (102mm) 5.67in 7.36in 9.61in (144mm) (187mm) (244mm) 14.06in 15.75in 18.9in G G G (357mm) (400mm) (480mm) 3.74in 8.19in 5.32in Н Н (135mm) (95mm) (208mm) 1.34in 1.34in 1.73in (34mm) (34mm) (44mm) 2.17in 2 17in 2.17in (55mm) (55mm) (55mm) 2.80in 4.02in K (71mm) 4.33in 6.02in 8.5in (110mm) (153mm) (216mm)



ORBIWELD 170







ENCLOSED ORBITAL WELD HEADS

THE ORBIWELD SERIES WELD HEADS FEATURE VERY HIGH THERMAL RESISTANCE AND ARE SUITABLE FOR APPLICATIONS IN THE CHEMICAL, PHARMACEUTICAL, FOOD AND BEVERAGE INDUSTRY, WHERE INCREASED DEMANDS ARE MADE BY EVER GREATER TUBE DIAMETERS AND WALL THICKNESSES.

Coolant channels running through the entire weld head body ensuring excellent heat dissipation and enabling continuous work at high welding currents and intensive load.

The closed design of the ORBIWELD series and the gas management system of the head ensure a complete infiltration of the weld seam during welding with inert gas, producing welds that are very low in welding colors.

FEATURES:

- High-quality, rugged, durable, water-cooled aluminum weld head housing and handle
- Remote control panel built into handle for all important welding commands
- Quick change tool-free clamping insert system engages and releases with cost-effective inserts smoothly for all tube dimensions, ensuring parts to be welded are clamped securely without misalignment
- Highly flexible hose package with strain relief to the power supply (Length: 7.5 m/ 24.6 ft)

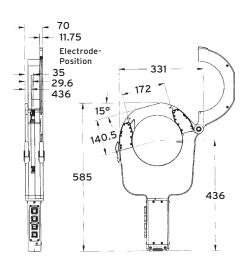


ORBIWELD 170 with integrated remote control

APPLICATION RANGE	ORBIWELD 170		
Code	0T825.000.001		
Tube OD, min max.	1.969 in - 6.693 in (50 - 170 mm)		
Electrode Ø	.063 in/.094 in (1.6/2.4 mm)		
Machine Weight	45.64 lb (20.7 kg)		
Shipping Weight	79.81 lb (36.2 kg)		
Hose package length	24.6 ft (7.5 m)		
SCOPE OF DELIVERY			

- Enclosed orbital weld head
- Durable storage & shipping case (Code 0T821.030.001)
- Tool set
- · Operating instructions and spare parts list

DIMENSIONS (mm)



ORBIWELD CLAMPING **INSERTS**

CLAMPING INSERT PAIRS

Made of aluminum. 1 set of clamping inserts consists of 2 parts for 1 clamping side.

2 clamping inserts (= 4 parts) are required for each tube dimension.

For the ORBIWELD 115, 115S and 170 you can choose between wide "W" and small "S" clamping inserts which can be combined with one another as desired.

CLAMPING INSERT BLANKS

Ideal for special applications. Completely enclosed clamping inserts which can be drilled by customer to specific diameters.

MODEL	KG	CODE
Clamping insert blank for OW 38S, 2 pcs.		0T826.002.210
Clamping insert blank for OW 76S, 2 pcs.	9.9 oz (280 g)	0T827.002.241
Clamping insert blank for OW 115/115S "S" (small), 2 pcs.	1.3 lb (590 g)	0T824.002.220
Clamping insert blank for OW 115/115S ''W'' (wide), 2 pcs.	3.19 lb (1.45 kg)	0T824.002.420
Clamping insert blank for OW 170 "S" (small), 2 pcs.	2.23 lb (1.01 kg)	0T825.002.185
Clamping insert blank for OW 170 "W" (wide), 2 pcs.		0T825.002.385

TABLE MOUNTS

Practical and sturdy (anodized) aluminum table mounts.

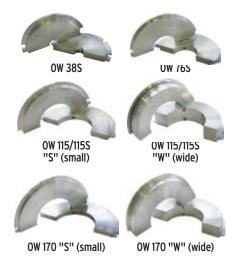
For comfortable and secure storage of the ORBIWELD weld heads.

The mount is quickly and easily clamped to the table top using the integrated screw clamp. Thus, the weld head is firmly fixed in the holder for stationary applications - also ideal for storage or temporary placement of the weld head between individual welding jobs.

SPECIFICATIONS	TABLE MOUNTS
Dimensions (L x W x H)	7.1 in x 5.5 in x 7.3 in (180 x 140 x 185 mm)
Clamping range (bottom surface of table to maximum extended screw clamp)	max. 65 mm / 2.56 in

MODEL	KG	CODE
Table mount for OW 38S, OW 76S	2.76 lb (1.25 kg)	0T826.030.006
Table mount for OW 65, OW 115, OW 115S, OW 170	2.36 lb (1.07 kg)	0T823.030.006
Heavy Duty C-Clamp	3.7 lb (1.68 kg)	0T-823-000







Short Ferrule Collets



Table mounts



Heavy Duty C-Clamp

ORBIWELD Clamping Inserts

APPLICATION	TUBE OD		OW 38S	OW 76S	OW 115/115S "S" (SMALL)	OW 115/115S "W" (WIDE)	OW 170 "S" (SMALL)	OW 170 "W" (WIDE)
Tube	3mm	.118in	0T826.002.120		(omitals)	(115-2)	(5/// 13.2)	, (<u>.</u> ,
Tube	3.18mm	.125in	01826.002.122					
Tube	4.78mm	.187in	0T826.002.126					
Tube	6mm	.236in	0T826.002.128	0T827.002.120				
Tube	6.35mm	.250in	0T826.002.129	0T827.002.121				
Tube	8mm	.314in	0T826.002.133	0T827.002.125				
Tube	9.53mm	.375in	0T826.002.135	0T827.002.127				
Tube	10mm	.394in	0T826.002.137	0T827.002.129				
Tube	12mm	.472in	0T826.002.143	0T827.002.135				
Tube	12.7mm	.500in	0T826.002.145	0T827.002.137	0T824.002.228			
Short Ferrule	12.7mm	.500in		0T-76F-050				
DN 10	13mm	.512in	0T826.002.146	0T827.002.138				
Tube	15.88mm	.625in	0T826.002.157	0T827.002.149				
Tube (DN 15)	19.05mm	.750in	0T826.002.166	0T827.002.158	0T824.002.227			
Short Ferrule	19.05mm	.750in		0T-76F-075				
1/2in Pipe	21.3mm	.840in	0T826.002.170	0T827.002.162	0T824.002.122	0T824.002.322		
Tube	22.22mm	.875in	0T826.002.174	0T827.002.166	0T824.002.126	0T824.002.326		
DN 20	23mm	.905in	0T826.002.176	0T827.002.168	0T824.002.128	0T824.002.328		
Tube	25.4mm	1.000in	0T826.002.181	0T827.002.173	01824.002.133	0T824.002.333		
Short Ferrule	25.4mm	1.000in		0T- 76F-100	0T-115- FK			
Standard Ferrule	25.4mm	1.000in			0T-115SF-100			
3/4in Pipe	26.7mm	1.050in	0T826.002.183	0T827.002.175	0T824.002.135	0T824.002.335		
DN 25	29mm	1.142in	0T826.002.188	0T827.002.180	0T824.002.140	0T824.002.340		
Tube	31.75mm	1.250in	0T826.002.191	0T827.002.183	0T824.002.143	0T824.002.343		
1in Pipe	33.4mm	1.315in	0T826.002.195	0T827.002.187	01824.002.147	0T824.002.347		
DN 32	35mm	1.378in	0T826.002.198	0T827.002.190	0T824.002.150	0T824.002.350		
Tube	38.1mm	1.500in	0T826.002.201	0T827.002.193	01824.002.153	0T824.002.353		
Short Ferrule	38.1mm	1.500in		0T- 76F-150	0T-115- FK			
Standard Ferrule	38.1mm	1.500in			0T-115SF-150			
DN 40	41mm	1.614in		0T827.002.195	0T824.002.155	0T824.002.355		
11/4in Pipe	42.16mm	1.660in		0T827.002.197	0T824.002.157	0T824.002.357		
11/2in Pipe	48.26mm	1.900in		0T827.002.209	0T824.002.169	0T824.002.369		
Tube	50.8mm	2.000in		0T827.002.213	0T824.002.173	0T824.002.373	0T825.002.121	0T825.002.321
Short Ferrule	50.8mm	2.000in		0T-76F-200	0T-115- FK			
Standard Ferrule	50.8mm	2.000in			0T-115SF-200			
DN 50	53mm	2.087in		0T827.002.216	0T824.002.176	0T824.002.376	0T825.002.124	0T825.002.324
2in Pipe	60.3mm	2.375in		0T827.002.221	0T824.002.181	0T824.002.381	0T825.002.129	0T825.002.329
Tube	63.5mm	2.500in		0T827.002.226	0T824.002.186	0T824.002.386	0T825.002.134	0T825.002.334
Short Ferrule	63.5mm	2.500in		0T-76F-250	0T-115- FK			
Standard Ferrule	63.5mm	2.500in			0T-115SF-250			
DN 65	70mm	2.759		0T827.002.228	0T824.002.188	0T824.002.388	0T825.002.136	0T825.002.336
2 1/2in Pipe	73mm	2.875in		0T827.002.231	0T824.002.191	0T824.002.391	0T825.002.138	0T825.002.338
Tube	76.2mm	3.000in		0T827.002.236	0T824.002.196	0T824.002.396	0T825.002.144	0T825.002.344
Short Ferrule	76.2mm	3.000in			0T-115- FK			
Standard Ferrule	76.2mm	3.000in			0T-115SF-300			
DN 80	85mm	3.346in			0T824.002.201	0T824.002.401	0T825.002.149	0T825.002.349
3in Pipe	88.9mm	3.500in			0T824.002.203	0T824.002.403	0T825.002.151	0T825.002.351
Tube	101.6mm	4.000in			0T824.002.211	0T824.002.411	0T825.002.158	0T825.002.358
Short Ferrule	101.6mm	4.000in			0T-115F-400			
Standard Ferrule	101.6mm	4.000in			0T-115SF-400			
DN 100	104mm	4.094in			0T824.002.211	0T824.002.411	0T825.002.159	0T825.002.359
4in Pipe	114.3mm	4.500in			0T824.002.215	0T824.002.415	0T825.002.164	0T825.002.364
Tube	127mm	5.000in					0T825.002.167	0T825.002.367
DN 125	129mm	5.079in					0T825.002.169	0T825.002.369
5in Pipe	141.3mm	5.563in					0T825.002.172	0T825.002.372
Tube	152.4mm	6.000in					0T825.002.173	0T825.002.373
DN 150	154mm	6.063in					0T825.002.174	0T825.002.374
6in Pipe	168.3mm	6.625in					0T825.002.178	0T825.002.378
Blank	Blank	Blank	0T826.002.210	0T827.002.241	0T824.002.220		0T825.002.185	