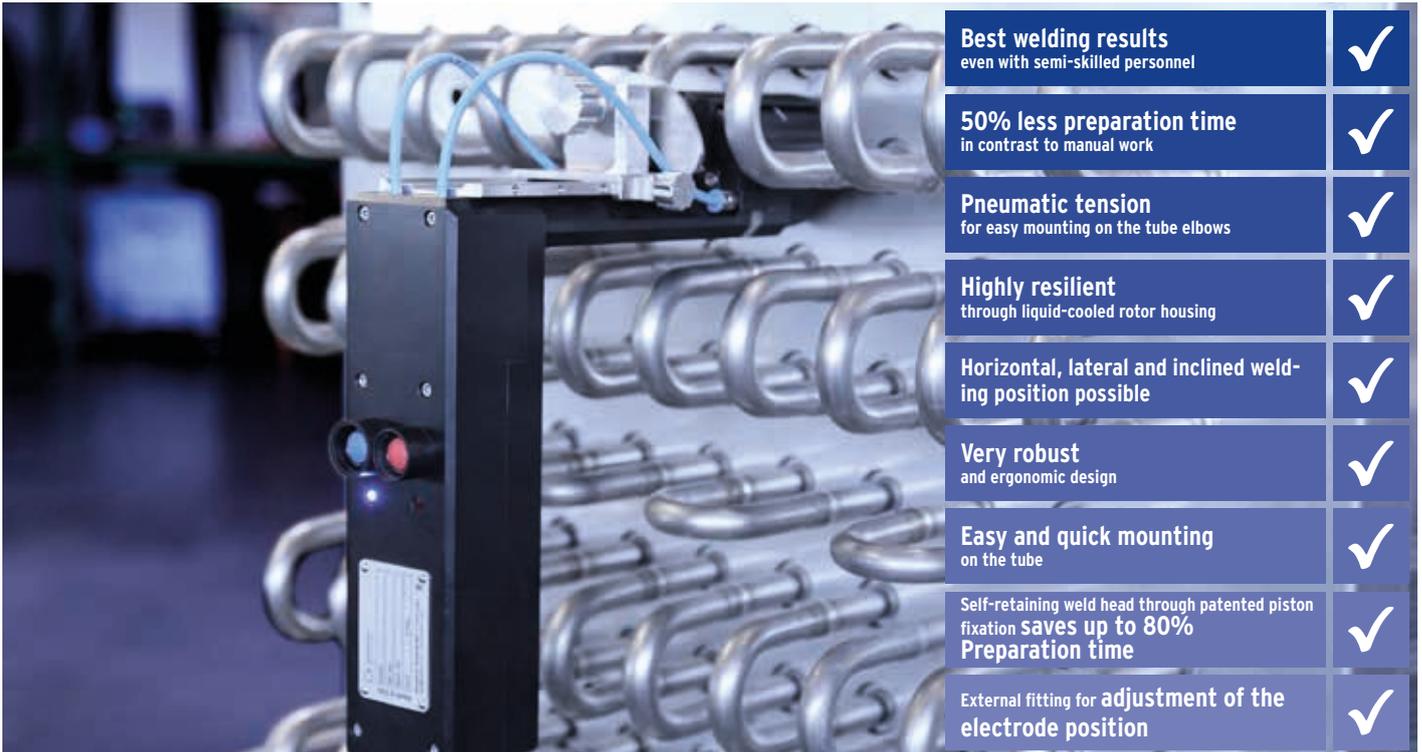


HX 16P

Closed orbital weld head

The orbital weld heads HX for compact cooling systems set new standards!

HX stands for heat exchanger and for the welding of pre-mounted elbows in tight tube bundles of fin heat exchangers. There is no other solution as effective as this one in the world!



All common closed or open weld heads are not suitable for their positioning between individual tubes of fin heat exchangers because of their size.

The HX series impresses in terms of economy and efficiency when compared to conventional machines in several ways: The tube ends of the heat exchanger can be fully fitted with elbows before welding and then welded in any order. For conventional orbital weld heads, the principle of fit elbow, weld, fit elbow, weld etc. applies, always starting from the center of the tube sheet and working outward. If quality testing reveals a faulty weld later on, all elbows must be disconnected and new ones must be welded on in the worst case scenario (fault in the middle of the bundle) due to the accessibility factor. With the HX head, only the affected elbow would have to be replaced. This design-based advantage also makes the Orbitalum system the ideal tool for unbeatably cost-effective repairs.

In contrast to open weld heads with a cumbersome hose assembly, all connections for power, gas and cooling water are permanently integrated in the HX.

All orbital welding power sources from Orbitalum automatically detect the head and its properties so that, before beginning to weld, the operator only has to call up their specified welding program and start the welding process.

Traditionally, complex heat exchangers for cooling systems were made of copper, and soldered with the tube elbows. The high price of copper prompted manufacturers to switch over to stainless steel for production. Stainless steel can only be joined economically, reliably and in high quality with tungsten inert gas (TIG) welding in conjunction with mechanized orbital welding.

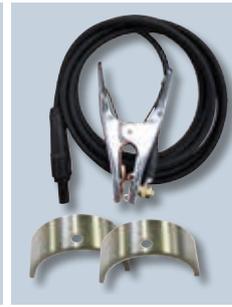


Extremely narrow design - ideal for welding pre-mounted arcs in narrow tube bundles

All connections for electricity, gas and cooling water are firmly integrated



Including pneumatic box



Optionally available: Diameter-specific clamping inserts and ground cable



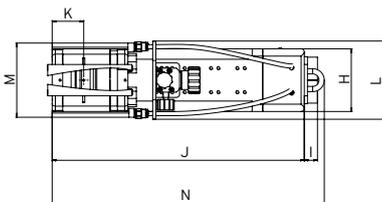
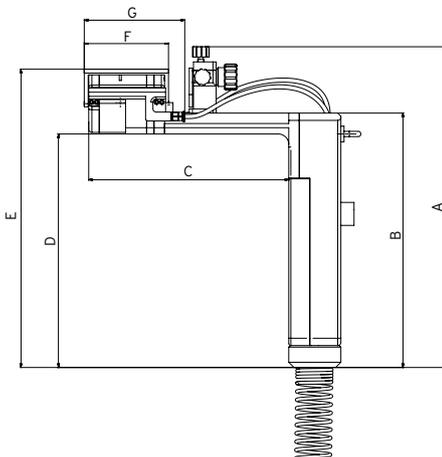
Adjustable bar pressure reducer for argon for pneumatic clamping of the HX 16P - available separately



The perfect supplement: Orbital welding power sources ORBIMAT



HX 16P



APPLICATION AREA		HX 16P	
Code		848 000 010	
Tube OD, min. - max.*	[mm]	15.0 - 16,8	
	[inch]	0.591 - 0.661	
TECHNICAL SPECIFICATIONS		HX 16P	
Electrode diameter	[mm]	1.6	
	[inch]	0.063	
Machine weight	[kg]	5.9	
including hose package	[lbs]	13.0	
Hose package length	[m]	7.5	
	[ft]	24.6	
TECHNICAL SPECIFICATIONS		PNEUMATICS BOX	
Input medium		Argon	
Recommended input pressure	[bar]	8	
	[PSI]	116	
DIMENSIONS		HX 16P	
		[mm]	[inch]
Dimension "A"		307.00	12.087
Dimension "B"		243.50	9.587
Dimension "C"		190.00	7.480
Dimension "D"		223.50	8.799
Dimension "E"		285.50	11.240
Dimension "F"		80.00	3.150
Dimension "G"		95.45	3.758
Dimension "H"		60.00	2.362
Dimension "I"		12.50	0.492
Dimension "J"		239.50	9.429
Dimension "K" (electrode)		30.00	1.181
Dimension "L"		74.85	2.947
Dimension "M"		71.00	2.795
Dimension "N"		258.50	10.177
SCOPE OF DELIVERY		HX 16P	
Orbital weld head of the HX series	PCS.	1	
transport case	PCS.	1	
Pneumatics box	PCS.	1	
Supply hose (2m/6.56ft) for pneumatics box	PCS.	1	
Swivel bracket pair	Pair	1	
Elbow stop	PCS.	1	
Sheet stop alignment kit	PCS.	1	
Tool set	set	1	
Operating instructions and spare part list	set	1	
SUITABLE ACCESSORIES:			
Optionally available:		<ul style="list-style-type: none"> • Clamping inserts • Bar pressure reducer "Argon" • Ground cable • WS2 tungsten electrodes • ESG electrode grinders 	

* Other dimensions on request

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



HX 12P / HX 25P



HX 16P



Pneumatics box
(included in the scope of delivery of the HX heads)

Closed orbital weld heads

HX 12P, HX 16P, HX 25P

Properties, application area, technical specifications and delivery scope, see page 52 and page 54.

The following accessories are mandatory for the use of the HX orbital weld heads and must be ordered separately:

- Clamping inserts, see page 57
- Ground cable, see page 93
- Bar pressure reducer "Argon", see page 57

ITEM	CODE	MACHINE WEIGHT KG*	SHIPPING WEIGHT KG
Orbital weld head HX 12P	847 000 010	6.400	14.100
Orbital weld head HX 16P	848 000 010	5.900	16.600
Orbital weld head HX 25P	845 000 010	18.500	40.800

* Machine weight including hose package

Suitable accessories (optionally available):

- Clamping inserts, see page 57
- Bar pressure reducer "Argon", see page 57
- Ground cable, see page 93
- WS2 tungsten electrodes, see page 94
- ESG electrode grinders, see page 86
- Welding current connection adapter set, see page 95

CLOSED ORBITAL WELD HEADS