# HX 12P



### Enclosed orbital weld head

Welding stainless-steel pipes economically and with high quality using the TIG welding procedure: Unique in the entire world, HX orbital weld heads are the best solution for efficient, high-quality production thanks to their automated welding technology. Pre-mounted pipe elbows (for example in heat exchanger construction), even those in tight pipe bundles, can be joined to to small stainless-steel pipes reliably, quickly and safely.



## In addition to the HX 12P the series consists of the HX 16P and the HX 22P.

When done by hand, the welding of pipe elbows for heat exchanger construction is an exhausting task. In addition, consistently high quality (and thus the proper sealing of all pipe elbows) on a continual basis by the welder can't be guaranteed. This results in expensive correction work and lots of waste.

While conventional heads and tongs require lots of space between the pipes for positioning, slim HX heads make it possible to build very compact heat exchangers with a high pipe density and thus a high degree of efficiency. Pipe spacing's of less than 40 mm are possible.

Handling is easy, too. HX heads are opened up, placed around a pipe and clamp themselves pneumatically at the push of a button. A stop with coarse and fine adjustment aids secure positioning on the pipe. Following the startup procedure, the water-cooled head floods with argon gas and welding is carried out automatically with consistently high quality. The Orbitalum system ensures clean weld penetration with no recesses, gaps or burrs in the pipe whatsoever. Clamping and starting are activated by pressing buttons on the weld head.

#### Top-quality welding results, even with semiskilled personnel

Orbitalum welding power supplies automatically detect the connected HX head and its specified parameters in such a way that the operator need only call up the corresponding welding procedure and initiate the process prior to the start of welding. Working with the Orbitalum system is so easy and reliable that even semi-skilled operators can achieve optimum welding results.

Practice has shown that waste can be reduced from 4% to under 0.7% with the Orbitalum system. Another advantage of the system is that an operator can work with multiple weld heads at the same time, which increases production efficiency considerably. The closed welding chamber and consistent process also prevent annealing coloration from occurring, so expensive reworking such as pickling and passivation can usually be dispensed with.

### Compact design makes handling easy

In contrast to open welding tongs, all connections for power, gas and cooling water are integrated into the HX head. To facilitate handling, Orbitalum heads are connected to the welding power source with a flexible 7.5 m hose. The HX 12P also scores with its straight design, which enables easy turning of the head at the heat exchanger. The entire unit can be suspended from a balancer to take the strain off the operator. www.orbitalum.com



Extremely narrow design - ideal for the welding of pre-mounted elbows in tight pipe bundles



Pneumatic box included in the scope of delivery



Available option: Diameter-specific clamping inserts

Available option:

Earth cable

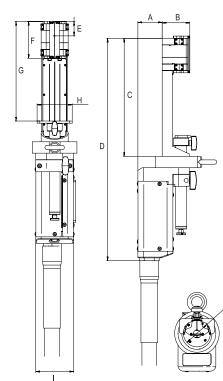


Available option: Adjustable bar pressure regulator for Argon The perfect complement: Orbital welding power supplies ORBIMAT

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APPLICATION RANGE		HX 12P	
Code		847 000 010	
Tube OD, min max.*		9.5 - 13.3 mm / 0.374" - 0.524"	
Wall thickness, min max.		0.5 - 0.8 mm / 0.02" - 0.03"	
TECHNICAL DATA		HX 12P	
Electrode Ø		1.6 mm / 0.06	3"
Machine weight including hose package		6.4 kg / 14.1 lt	20
Hose package length		7.5 m / 24.6 ft	
TECHNICAL DATA		PNEUMATIC BOX	
Input		Argon	
Recommended input pressure		6 bar / 87 PSI	
DIMENSIONS		HX 12P	
		[mm]	[inch]
Dimension " <b>A</b> "		45.00	1.772
Dimension " <b>B</b> "		52.00	2.047
Dimension "C"		219.00	8.622
Dimension " <b>D</b> "		412.00	16.220
Dimension " <b>E</b> " (Electrode)		30.00	1.181
Dimension "F"		70.00	2.756
Dimension " <b>G</b> "		185.00	7.283
Dimension " <b>H</b> "		65.00	2.559
Dimension "I"		70.00	2.756
Dimension " <b>J</b> " (Ø)		50.00	1.969
SCOPE OF DELIVERY		HX 12P	
Enclosed orbital weld head of the HX series	Pc.	1	
Durable storage and shipping case	Pc.	1	
Pneumatic box	Pc.	1	
Supply hose (2 m/6.56 ft) for pneumatic box	Pc.	1	
Pivoting arm	Pair	1	
Elbow stop	Pc.	1	
Tool set	Set	1	
Power connector adapter	Pc.	1	
Operating instructions and spare parts list	Set	1	
SUITABLE ACCESSORIES			
Available option:		<ul> <li>Clamping inserts</li> <li>Bar pressure regulator Argon</li> <li>Earth cable</li> <li>WS2 tungsten electrodes</li> <li>ESG tungsten grinders</li> </ul>	

The technical data are not binding. They are not warranted characteristics and are subject to change.

