

HX 16P, HX 22P

Enclosed orbital weld heads

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

"HX" stands for "heat exchanger" and for the welding of pre-mounted elbows in tight pipe bundles of heat exchangers into a pipe coil.

There is no other solution as effective as this one in the world!



Due to their compact size, all fully closed or open orbital weld heads commonly available on the market are not suitable for being positioned between the individual pipes of finned heat exchangers.

The HX series scores points in the areas of economy and efficiency when compared to conventional weld heads: The pipe ends of a heat exchanger can be fully fitted with elbows before joining 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 pipe 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 liquid are permanently integrated in the HX.

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

Traditionally, complex heat exchangers for cooling systems were made of copper and soldered with the pipe 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.

FURTHER FEATURES:

- Pneumatic clamping system for easy mounting on the pipe elbow
- Highly durable thanks to liquid-cooled rotor housing
- Horizontal, vertical and tilted welding positions are possible
- Very robust and ergonomic design
- Fast and easy mounting at the tube
- Self-retaining weld head thanks to the patented fixation mechanism via pistons which saves up to 80% of the preparation time
- External stop for adjusting the electrode position

orbitalum

Orbital welding systems and accessories for high-purity process piping



HX 16P



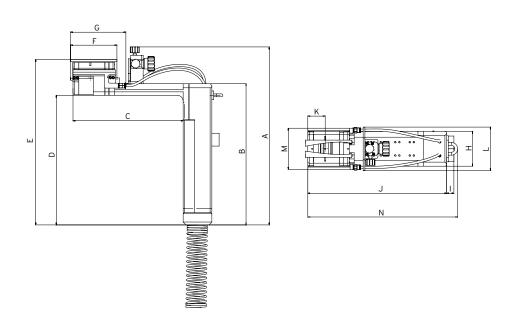
HX 22P



Pneumatic box

APPLICATION RANGE HX 22P HX 16P 848 000 010 846 000 010 Code Tube OD, min. - max.* 15.0 - 16.8 mm 18.0 - 22.0 mm 0.591" - 0.661" 0.709" - 0.866" **TECHNICAL DATA** HX 16P HX 22P Electrode Ø 1.6 mm 1.6 mm 0.063" 0.063" Machine weight including hose package 5.9 kg 5.9 kg 13.0 lbs 13.0 lbs 7.5 m Hose package length 7.5 m 24.6 ft 24.6 ft **TECHNICAL DATA** PNEUMATIC BOX Input Argon Recommended input pressure 8 bar/116PSI SCOPE OF DELIVERY Including: • 1 Enclosed orbital weld head HX 16P or HX 22P • 1 Durable storage and shipping case • 1 Pneumatic box 1 Supply hose (3 m/9.84 ft) for pneumatic box • 1 Pivoting arm (set) for pipes up to OD 16.80 mm (0.661") • 1 Elbow stop • 1 Sheet stop alignment kit • 1 Tool set • 1 Operating instructions and spare parts list • Clamping inserts Suitable accessories • Bar pressure regulator Argon (available option): • Earth cable WS2 tungsten electrodes • ESG tungsten grinders DIMENSIONS HX 16P HX 22P [mm] [inch] [mm] [inch] 305.50 307.00 12.087 Dimension "A" 12.028 9.587 9.528 Dimension "B" 243.50 242.00 Dimension "C" 190.00 7.480 190.00 7.480 223.50 Dimension "D" 8.799 223.50 8.799 Dimension "**E**" 285.50 11.240 285.50 11.240 Dimension "F" 80.00 3.150 80.00 3.150 Dimension "G" 95.45 3.758 97.30 3.831 Dimension "H" 60.00 2.362 2.362 60.00 Dimension "I" 12.50 0.492 12.50 0.492 Dimension "J" 239.50 9.429 239.50 9.429 Dimension "K" 30.00 1.181 30.00 1.181 Dimension "L" 74.85 2.947 74.85 2.947 71.00 3.031 Dimension "M" 2.795 77.00 Dimension "N" 258.50 10.177 258.80 10.189

* Other dimensions on request



The technical data are not binding. They are not warranted characteristics and are subject to change. Please consult our general conditions of supply.

A BRAND OF ITW ORBITAL CUTTING & WELDING

ORBITALUM TOOLS GMBH Josef-Schuettler-Str. 17 78224 Singen Germany Tel. +49 (0) 77 31 792 - 0 Fax +49 (0) 77 31 792 - 524 tools@orbitalum.com