

Orbital welding (Prefabrication)

AXXAIR

INNOVATIVE ORBITAL SOLUTIONS

Orbital welding involves rotating a Tungsten electrode around a tube to weld it to other tubes or accessories.

Our programme incorporates a unique and atypical orbital welding machine for so-called "prefab" because it cannot be brought to the tube, it is the tube that is brought to the machine.

It is an axial loading machine which involves being able to pull out the tube as well as the welded accessory.



These machines that use standard cutting and bevelling frames have the advantage of being very robust and easy to use.

In fact, the SX range is mainly intended for workshop or building site prefabrication use. These machines are also used to carry out repeatable production welding on suitable elements.

Our machines can all be equipped with either an air-cooled torch or a water-cooled torch, with or without filler metal.

FLEXIBILITY, PRODUCTIVITY

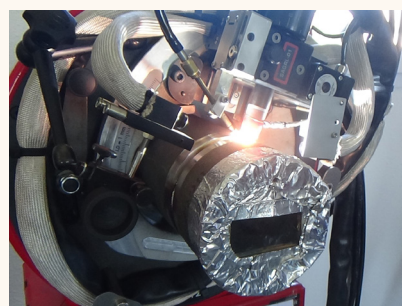
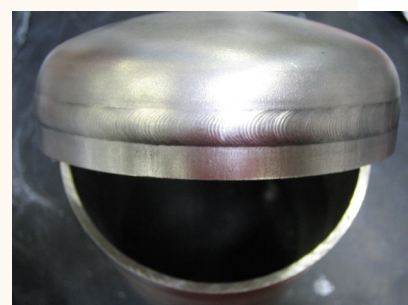
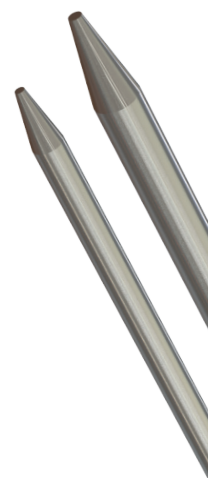
Welding with a water or air cooled torch with or without filler metal. It allows production of medium to large series of welding sub-assemblies. The diameter range of each machine is very wide and does not require specific jaws.

QUALITY AND REPEATABILITY

TIG welding without tube distortion (multi-contact concentric clamping). Mechanical or motorised tracking and axial adjustment optimize the quality of your welds.

EASY TO USE

Robust and intuitive, it is adapted to any operator profile.



Please do not hesitate to contact us for all enquiries relating to orbital welding technology.

We will be glad to share our know-how with you and to devise a solution that best meets your needs!



SX122 - 172 - 222 - 322 (simple wire)

AXXAIR

INNOVATIVE ORBITAL SOLUTIONS

No tube deformation

Concentric clamping



Basic and extra **stainless steel** jaws: no pollution of stainless steel tubes

Water Cooled

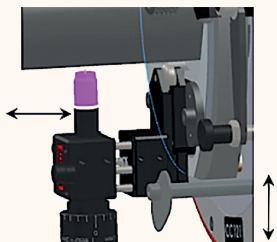


Automatic rotation

Connected to the SAXX welding power sources

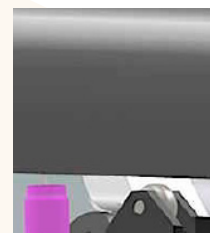
Accurate positioning

Axial adjustment of the electrode position: facilitates location of the parts to be welded
Adjustment of the electrode's axial position : +/- 5 mm



Constant distance: electrode-tube

Mechanical tracking of tube ovalization from the outside.

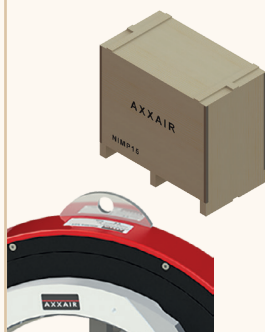


Micrometric adjustment of the height of the arc

Accuracy of adjustment without specific tooling



Easy handling and transportation



Compatible with the SAXX power sources



Opening capacity

122	ø12 - ø119 mm 0.25" - 4.5 "
172	ø16 - ø173 mm 0.625" - 6.625 "
222	ø55 - ø228 mm 2.375" - 8.625 "
322	ø141 - ø328 mm 5.563" - 12.750 "


Join **experience**


SX122 - 172 - 222 - 322 (simple wire)**AXXAIR**
INNOVATIVE ORBITAL SOLUTIONS**Technical characteristics:**

Machines for TIG orbital prefab welding, water cooled.

For optimum use, the ambient temperature must be between 0 °C and + 40 °C.

Compatible with AXXAIR type SAXX welding generators, we have an automatic parameter calculation mode.

The generator will offer you parameters adapted to the characteristics of the tubes / accessories to be welded.

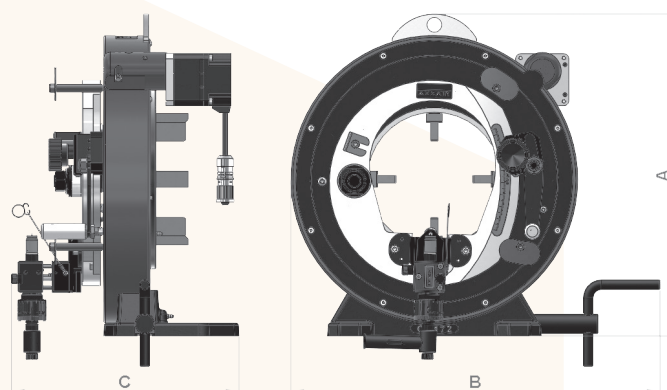
The machine can be supplemented by a wire feed system. For details, please refer to accessories.

A welding generator with liquid cooling system must be used when welding using these weld module. Cf welding generator characteristics

For welding with an AVC / OSC system please refer to following pages of this catalogue in order to choose a machine already provided with this system.



Model	Operating factor of 100%
SX-xx2-E (WATER)	200 A.



	Product Code	Machine's jaw opening capacity in mm		Net weight	Dimensions (AxBxC in mm)
		With basic jaws	With extra jaws (included)		
Water cooled EAU	SX122-E	Ø29 - Ø119	Ø12 - Ø99	45 kg	446 x 541 x 350
	SX172-E	Ø74 - Ø173	Ø16 - Ø116	52 kg	493 x 566 x 350
	SX222-E	Ø128 - Ø228	Ø55 - Ø155	60 kg	548 x 594 x 350
	SX322-E	Ø230 - Ø328	Ø141 - Ø239	73 kg	649 x 644 x 350

