

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) ideal for thin walled stainless steel tubes. Mechanical 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!



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NEW PRODUCTS

In the SXx22 orbital welding range

We have decided to strengthen this part of our range of orbital welding machines.



Robustness, improved seating, more "positive" clamping and continuity guided the choices of our developers and pilot customers.

The **stability** of the assembly has been greatly improved by the **redesign of the support plate**.

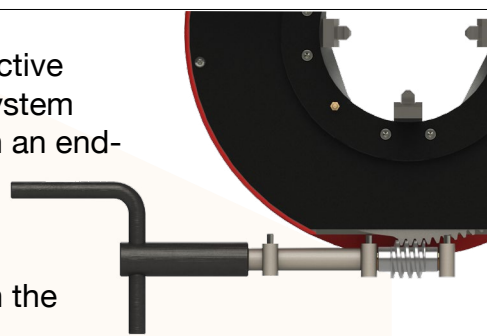


Easy handling

Introduction of a lifting eye for use in a workshop or on site.

Robustness

A more effective clamping system (+30%) with an end-less screw engaging directly with the cam lock.

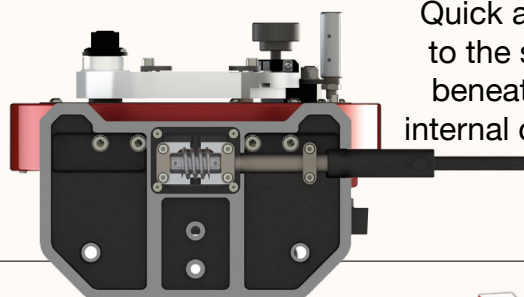


Easy maintenance and inspection

The internal clamping components are lubricated using a greaser

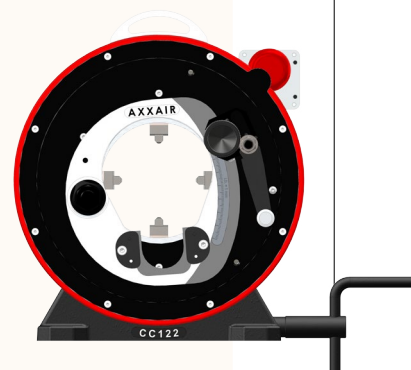
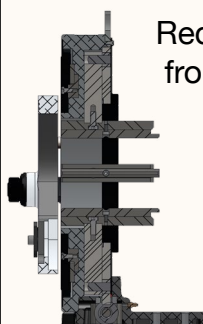


Quick access to the screw beneath the internal cowling



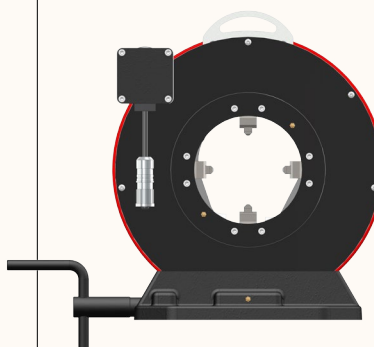
A perfect seal against chips

Redesigned front baffle



Rotating parts incorporated into the body

No moving parts visible at the rear



SX122 - 172 - 222 - 322**AXXAIR**

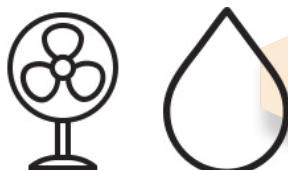
INNOVATIVE ORBITAL SOLUTIONS

No tube distortion

Concentric clamping



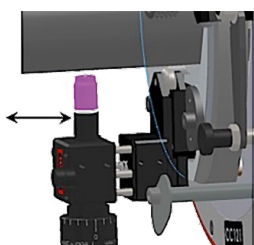
Stainless steel
basic and auxiliary
jaws
as standard

Air Cooled or Water Cooled**Rotating**

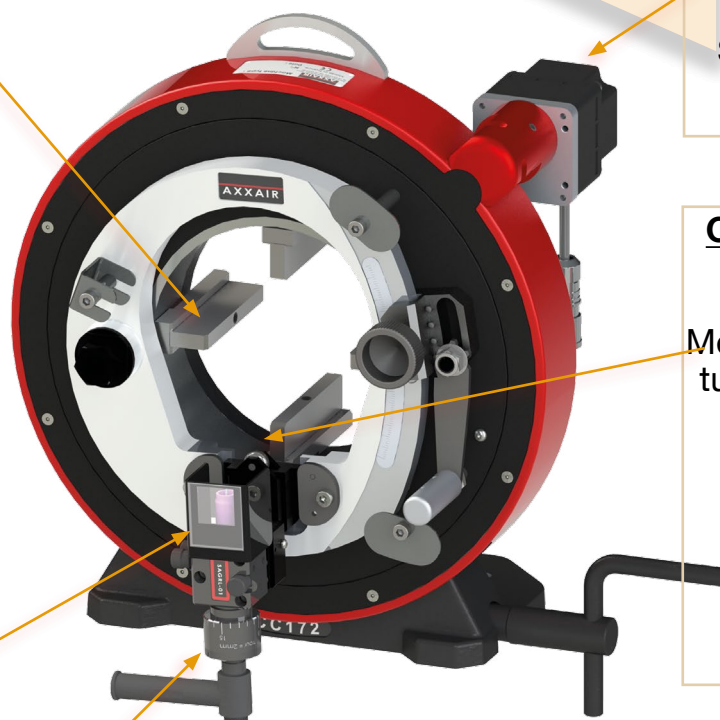
Connect to the
SAXX range welding
generator

Accurate positioning

Axial adjustment of
the electrode
position: facilitates
location of the parts
to be welded
Adjustment of the
tube'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 generators****Welding range**

122	ø5 - ø119 mm 0.25" - 4.5"
172	ø16 - ø173 mm 0.625" - 6.625"
222	55 - ø228 mm 2.375" - 8.625"
322	ø141 mm - ø328 mm 5.563" - 12.750"



SX122 - 172 - 222 - 322**AXXAIR**

INNOVATIVE ORBITAL SOLUTIONS

Technical characteristics:

Machines for TIG orbital prefab welding.

Choice of: AIR cooling or WATER cooling

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.

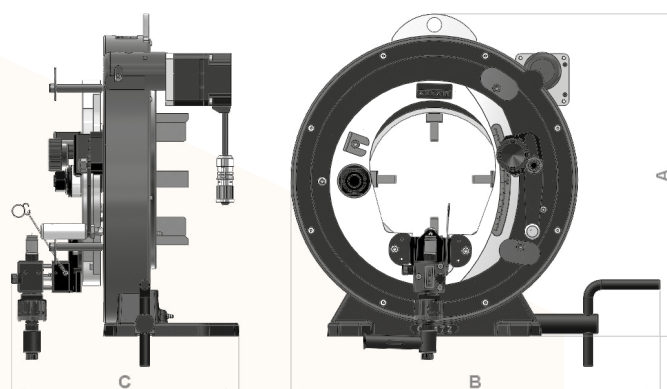
The generator will offer you parameters adapted to the characteristics of the tubes / accessories to be welded.

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

For welding with an AVC / OSC system please refer to the "thick" catalogue



SX-xx2-E (WATER)	200 A.
SX-xx2-A (AIR)	100 A



	Product Code	Tube welding machine for the following diameters (in mm):		Net weight	Customs code	Dimensions (AxBxC in mm)
		With basic jaws	With extra jaws (included)			
NEW Cooling AIR	SX122-A	Ø29 - Ø119	Ø5 - Ø99	45 kg	85153 10000	446 x 541 x 350
	SX172-A	Ø74 - Ø173	Ø16 - Ø116	52 kg		493 x 566 x 350
	SX222-A	Ø128 - Ø228	Ø55 - Ø155	60 kg		548 x 594 x 350
	SX322-A	Ø230 - Ø328	Ø141 - Ø239	73 kg		649 x 644 x 350
Cooling WATER	SX122-E	Ø29 - Ø119	Ø5 - Ø99	45 kg	85153 10000	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

