

Orbital welding (Closed head)

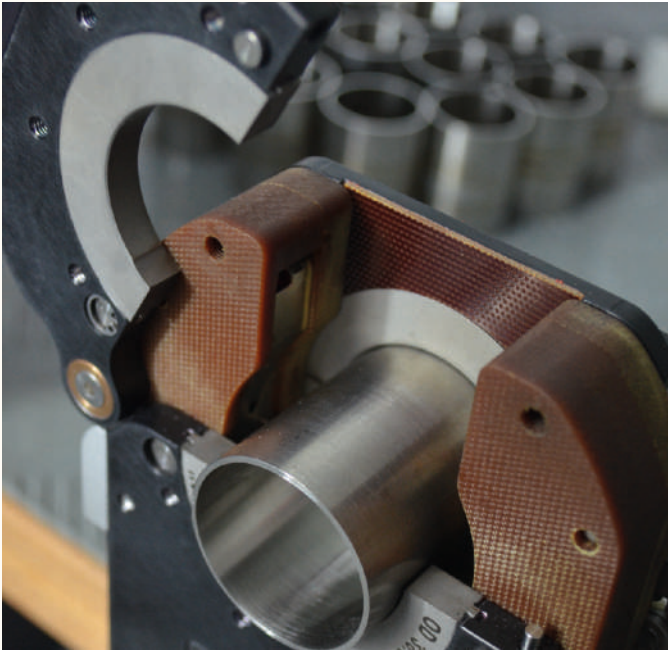
AXXAIR
INNOVATIVE ORBITAL SOLUTIONS

Our range of closed welding heads (SATF series) allows you to make very high quality welds in a minimum space.

These heads have been studied to meet the most stringent welding requirements and in the tightest areas.

This type of equipment is mainly used in the aerospace, semiconductor, pharmaceutical or food industries. It is essential for welding titanium which is very sensitive to oxidation.

Closed heads provide optimum gas protection



(closed chamber) which results in welds with very limited colouration. They are recommended for welding stainless steel tubes of wall thickness <3 mm in simple fusion without added wire.

The alloy parts of the machine are designed to accept any type of assembly and to offer more welding possibilities.

A control keypad is integrated into the handle of the machine. It allows you to control all primary functions of the head. The welding cycle is visualized by an LED.

The SATF range, combined with our AXXAIR welding generators and its permanent control of the welding parameters, guarantees repeatable and quality welding. This type of weld can be inspected using the most stringent means, such as X-ray inspection.

FLEXIBILITY, PRODUCTIVITY

Productivity remains our primary concern. A liquid cooling circuit has been developed to increase the machine life cycle and also to allow a high welding rate.

QUALITY AND REPEATABILITY

Thanks to its new adjustable closing system and the carefully designed shape of its jaws, the SATF range allows optimum tube positioning (concentricity between the axis of rotation of the electrode and your tube) while controlling the tightening forces so as not to distort or mark your tubes.

PORTABILITY

In order to allow you to weld in restrictive conditions and locations, the size and weight of the machines have been optimized. Our welding cable, housed in an ultra flexible and very resistant protective sheath, also facilitates manipulation of the welding head.



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!



Join **experience**



SATF-40NDHX - 65NDHX - 115NDHX




Protection
High protection against arcing outside the electrode

Thin walled tube welding
Up to 2.5 mm (3 mm in some cases)

Power drive system with encoder
Allows STARTING IN ALL ANGULAR POSITIONS of the electrode

Water cooled
Length of the cable: 5 metres

Compatible with SAXX power source




These heads can also be used on the former AXXAIR power sources with adapter cables


Transport + suspension
These heads are delivered in their work site case and with a suspension assembly



Viewing window
Fixed and transparent as an option



Strengthening of closing systems
Adjustable force closing systems. Allows precise adjustment of the force of the jaws on the tube to be welded according to its geometry



Remote control keypad
It incorporates an LED on the handle to indicate whether the machine is in welding cycle or not.

Welding range	
SATF-40	∅ 6 - ∅ 40 mm 0.25 - 1.5 "
SATF-65	∅ 6 - ∅ 65 mm 0.25 - 2.5 "
SATF-115	∅ 12 - ∅ 115 mm 0.5 - 4.5 "

SATF 40NDHX - 65NDHX - 115NDHX



Technical characteristics:

Maximum welding current	120 A
100% Duty cycle	60 A

The new NDHX heads are used with SAXX range welding stations.

Changes have been incorporated in the upper part, for the closing and flap guide systems. The new adjustable force closing system allows you to precisely set the force of the jaws on the tube to be welded according to its geometry. Closing is more precise and the parts to be welded are better positioned.

The heads are cooled in two ways: on the electrode holder by contact and on the outer aluminium plates in the lower part.

This cooling is essential to guarantee a long service life of the parts because it minimizes distortion effects due to expansion.

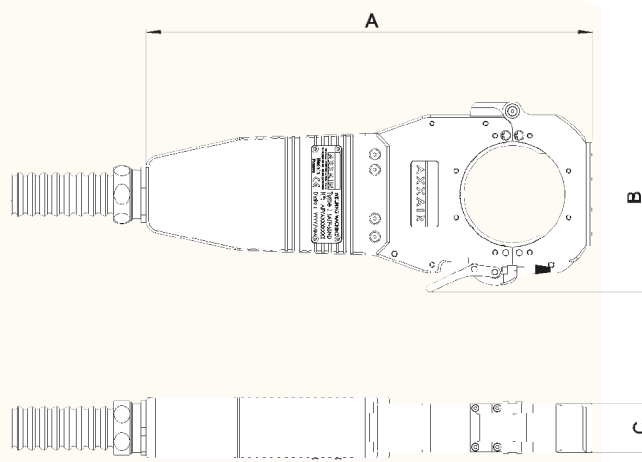
- Cable extensions
- Remote electrodes
- Flange for welding elbows



Specific features

Option: Possibility of mounting a window in the upper part thus verifying the correct positioning of the electrode, for the parts to be welded, before starting the cycle.

CAUTION: If you use the head with a window, it is necessary to wear suitable eye protection (welding mask).



Product Code	Description	Tube welding machine for the following diameters (in mm):	Net weight	Dimensions (AxBxC in mm)
SATF-40NDHX	Water-cooled closed head for SAXX power sources	ø 6 to ø 40 mm	8.8 kg	336 x 122 x 40
SATF-65NDHX		ø 6 to ø 65 mm	9.2 kg	366 x 152 x 40
SATF-115NDHX		NEW ø 12 à ø 115 mm	9.9 kg	421 x 222 x 40



SATF 40MIH - 65MIH - 115MIH



Machines for AMI stations with original connectors



Viewing window

Fixed and transparent as an option



Strengthening of closing systems

Adjustable force closing systems. Allows precise adjustment of the force of the jaws on the tube to be welded according to its geometry



Compatible with SAXX

Can also be used on SAXX power sources with an adapter cable (Ref SAFS-ADMI1)

Protection

High protection against arcing outside the electrode

Thin walled tube welding

Up to 2.5 mm (3 mm in some cases)

Power drive system with encoder

Allows STARTING IN ALL ANGULAR POSITIONS positions of the electrode

Water cooled



Length of the cable: 5 metres

Compatible with AMI stations

AMI stations with auto-calibration of welding heads Generator type 205, 207, and 217.

(Not compatible with 227 and 415)

Transport + suspension

These heads are delivered in their work site case and with a suspension assembly



Welding range

SATF-40	∅ 6 - ∅ 40 mm 0.25 - 1.5 "
SATF-65	∅ 6 - ∅ 65 mm 0.25 - 2.5 "
SATF-115	∅ 12 - ∅ 115 mm 0.5 - 4.5 "



SATF 40MIH - 65MIH - 115MIH



Technical characteristics:

Maximum welding current	120 A
100% Duty cycle	60 A

These heads are compatible with AMI (Arc Machines) stations that have the auto-calibration option. The connectors are an integral part of the cable.

If you want to use these heads later with the new AXXAIR SAXX-200, you only need to get an adapter cable. You will find all the information on the adapter cables in the welding generator accessories.

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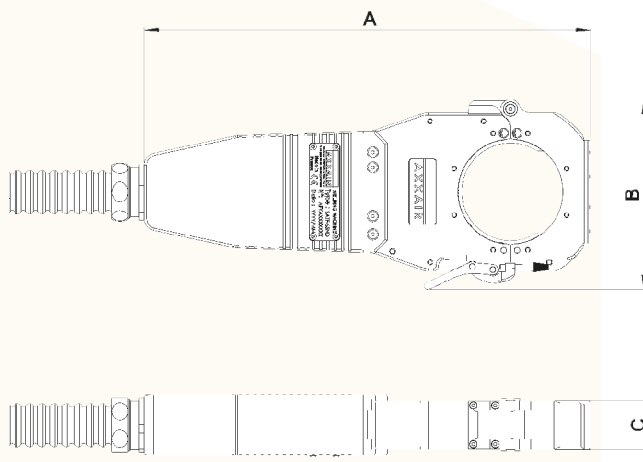
The heads are cooled in two ways: on the electrode holder by contact and on the outer aluminium plates in the lower part. This cooling is essential to guarantee a long life of the parts as it minimises the effects of distortion by expansion.



Specificities

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Product Code	Description	Tube welding machine for the following diameters (in mm):	Net weight	Dimensions (AxBxC in mm)
SATF-40MIH	Water cooled closed head compatible with AMI orbital power sources 205, 207 et 217	ø 6 to ø 40 mm	8.8 kg	336 x 122 x 40
SATF-65MIH		ø 6 to ø 65 mm	9.2 kg	366 x 152 x 40
SATF-115MIH		NEW ø 12 à ø 115 mm	9.9 kg	421 x 222 x 40

