

Orbital Welding: Microfit closed heads

The new SAMX-17 microfit head is ideal for welding tubes and fittings 3 mm and up in diameter, mainly used in the semiconductor industry.

Controlled by the SAXX power source, the SAMX-17 can be used with different types of cassettes, depending on the configuration of the parts to be welded: tube/tube, tube/fitting, fitting/fitting, etc.

The steps for welding with the SAMX-17 closed head are as follows:

1 - **The cassette**, composed of 2 sideplates equipped with jaws, is brought onto the assembly to be welded. There are **several types of sideplates** depending on the parts to be welded.

2- The machine is then slid into this cassette, which allows the **electrode** to be easily placed on the section to be welded.

FLEXIBILITY, PRODUCTIVITY

The duty cycle of 70A at 50% and 80A at 40% provides a high level of performance.

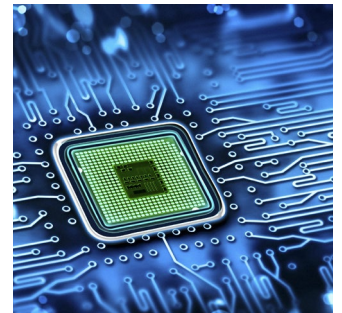
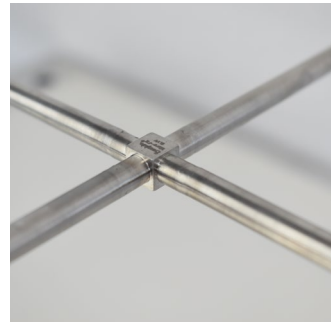
The cassettes have been designed to fit various configurations of parts to be welded.

QUALITY AND REPEATABILITY

High quality materials, greaseless operation, easy maintenance and cleaning thanks to an Allen key integrated in the body of the machine: the SAMX-17 machine meets the requirements of high-tech industries and allows intensive use while producing a quality weld seam.

PORTABILITY

In order to allow you to weld in restrictive conditions and locations, the size and weight of the machines have been optimized.



3- **The automatic welding cycle** is started directly through the integrated remote control. This head is used in combination with our SAXX power source and is compatible with all the features: dual digital gas control, welding monitoring by alarm, auto-calculation of welding parameters, remote control.

Contact us for all your inquiries as the applications can be various and the welding configurations multiple.

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

NEW !**SAMX-17****AXXAIR**
INNOVATIVE ORBITAL SOLUTIONS

General characteristics

- **Microfit closed head with cassettes for orbital TIG welding**, powered by SAXX power source
- High level of performance with a **duty cycle of 70A at 50% and 80A at 40%**.
- **Grease-free operation:** compatible with clean room standards
- Optimal positioning of tubes and fittings in the cassettes with an optimized clamping system, without risk of deforming the part to be welded
- **Optimized inert gas diffusion:** welds with very limited coloration
- **Easy maintenance and cleaning :** thanks to a tool integrated in the machine body

AIR cooling

Aluminum side plates contribute to heat dissipation

Heat shield

Allows to protect the area near the the electrode

Belt hook

Compact and light
Weight : 5.5 kg with
8 meters cable

Compatible with SAXX power sources



Integrated remote control

Start/stop, gas and electrode rotation



Illuminated logo
while welding

Constant effort cassette locking lever

Stable holding of the cassette, without the risk of over tightening.

Compatible with Swagelok cassettes, please contact us

Delivered in a shockproof case

Waterproof and dustproof

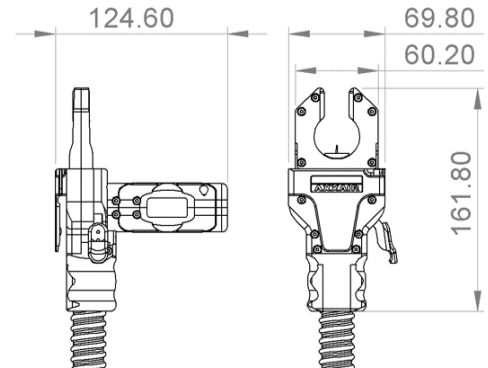


Tool for disassembling the machine, adjust/change the electrode and position the jaws

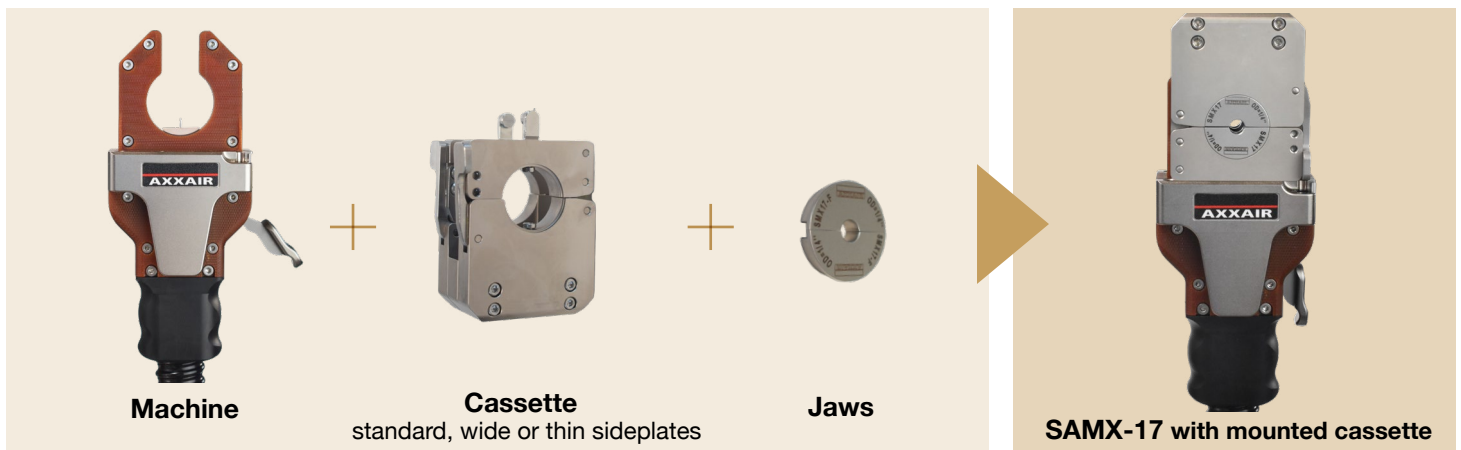


Technical characteristics

Product code	SAMX-17
Description	Microfit closed welding head with 8m cable
Tube diameter (min - max)	ø 3 - ø 17,2 mm (1/8" to 5/8")
Electrode diameter	Ø1.0 mm (0,04")
Weight with cable	5,5 kg
Duty cycle at 50%	70A
Duty cycle at 40%	80A
Maximum welding current	100 A
Dimensions	see on the right
Operating temperature	0C° to +40C° (32°F to 104°F)



Complete composition of a microfit closed head SAMX17

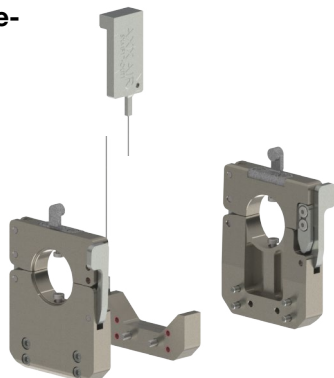


MODULAR CASSETTES

Designed to adapt to various configurations of parts to be welded, they are made of nickel-treated aluminum, which ensures lightness and high electrical conductivity.

A cassette consists of **2 sideplates and a central body** (common to all sideplates).

3 types of sideplates are available (**standard, wide and thin**) and can be combined according to the configuration of the parts to be welded.



SPECIFIC JAWS

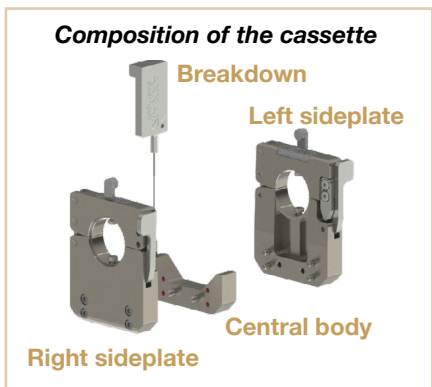
Each model of sideplates has its own references of jaws corresponding to the specificities of the parts to be welded.

All AXXAIR clamping jaws are made of stainless steel.

The tubes are thus neither polluted nor deformed.



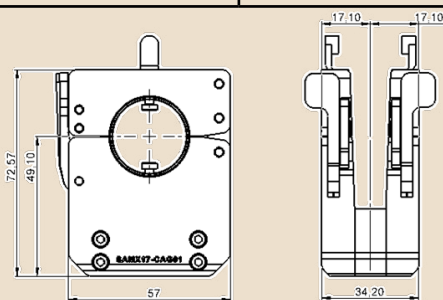
Standard Cassette & Sideplates



Standard cassette SAMX

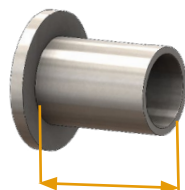
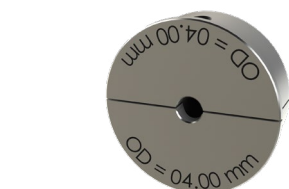
Description	Product code
Standard Cassette SAMX Tube-Tube (complet kit)	SAMX17-CA01
Standard right sideplate	SAMX17-CAD01
Standard left sideplate	SAMX17-CAG01
Standard central body SXMF (common to all siteplates)	SXMF17-CAM01

Recommended standard cassette set for your microfit welds. Subsequently, the thin or wide sideplates can be ordered for specific welds.



Jaws for standard siteplates

Product code Ø in inches		Product code Ø in mm	
SMX17-03.175	1/8	SMX17-03	3.00
SMX17-04.763	3/16	SMX17-04	4.00
SMX17-06.35	1/4	SMX17-05	5.00
SMX17-07.938	5/16	SMX17-06	6.00
SMX17-09.525	3/8	SMX17-08	8.00
SMX17-12.70	1/2	SMX17-09	9.00
SMX17-14.287	9/16	SMX17-10	10.00
SMX17-15.875	5/8	SMX17-11	11.00
These jaws (sold by 2) are compatible only with the standard siteplates		SMX17-12	12.00
		SMX17-14	14.00
		SMX17-15	15.00
		SMX17-16	16.00
		SMX17-17.2	17.20



Minimal straight length of the tube: 0.689" (17.5 mm)

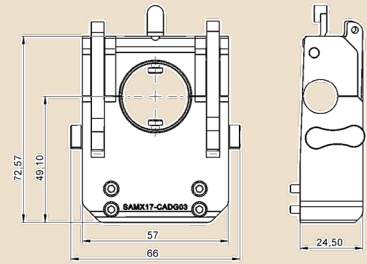
Cassettes - Wide Sideplate



Wide sideplate (right and left)

Wide sideplate for SAMX

Description	Product code
Wide sideplate (right and left)	SAMX17-CADG03
Standard central body SXMF (common to all sideplates)	SXMF17-CAM01



* An adaptation kit for old cassettes is available (contact us).

Tube jaws for wide sideplate

Product code	Ø in inches	Product code	Ø in mm
SMX17-LT03.175	1/8	SMX17-LT03	3.00
SMX17-LT06.35	1/4	SMX17-LT06	6.00
SMX17-LT09.525	3/8	SMX17-LT08	8.00
SMX17-LT12.70	1/2	SMX17-LT10	10.00
SMX17-LT15.875	5/8	SMX17-LT12	12.00

These jaws (sold by 2) are compatible only with the wide sideplates



Tube jaws for wide sideplate

Minimal straight length of the welding piece: 1.189" (30.20 mm)

Fitting jaws for wide sideplate

Fitting jaws for wide sideplate

Product code	Fitting body size	Fitting type
SMX17-LRA	1/8 in, 1/4 in 6 mm	Body Union Elbow or Body Union Tee
SMX17-LRB	3/8 in 8 mm 10 mm	Body Union Tee or Body Union Cross
SMX17-LRC	1/2 in 12 mm	Body Union Cross

Cassettes - Thin sideplates



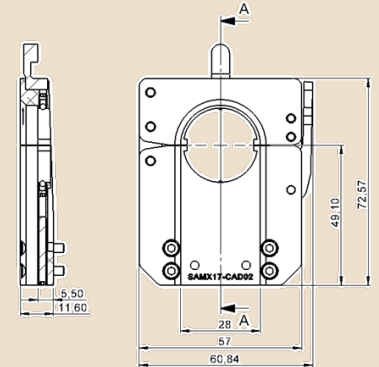
Left thin sideplate



Right thin sideplate

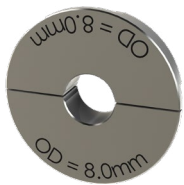
Thin sideplates

Description	Product code
Right thin sideplate	SAMX17-CAD02
Left thin sideplate	SAMX17-CAG02
Standard central body SXMF (common to all sideplates)	SXMF17-CAM01



* An adaptation kit for old cassettes is available (contact us).

It is possible to order the entire cassette assembly or only the right or left sideplates with the center body for a customized configuration.



Jaws for thin sideplate



Jaws for thin sideplates

Product code	Ø in inches	Product code	Ø in mm
SMX17-F03.175	1/8	SMX17-F03	3.00
SMX17-F06.35	1/4	SMX17-F06	6.00
SMX17-F09.525	3/8	SMX17-F08	8.00
SMX17-F12.70	1/2	SMX17-F12	12.00

These jaws (sold by 2) are only compatible with the thin sideplates



Minimal straight length of the tube: 0.5" (12.70 mm)

Accessories - SAMX 17



Cable extension

Product code	Length	Net weight
SAFS-05MAX	5m	7 kg
SAFS-10MAX	10m	14 kg

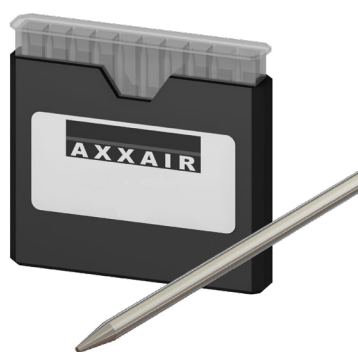
The SAMX-17 machines is delivered with a cable of 8 meters

To increase the operating distance between the welding head and the SXXX power source, we offer cable extensions.

We strongly advise to be limited to one extension per head.

Consumables - SAMX 17

Electrodes for SAMX-17



Product code	Outside diameter of the tube to be welded		Electrode length
	min (mm)	max (mm)	
SCE10-14.0	13,4	17,3	14.0 mm
SCE10-16.0	9,4	13,8	16.0 mm
SCE10-18.0	5,4	9,8	18.0 mm
SCE10-20.0	2,0	5,8	20.0 mm

- Electrode diameter of 0.040" (1,02mm) with the length adapted to the tube diameter.
- Sold per pack of 10