# **Orbital cutting**



A proper tube preparation is essential to produce a proper weld.

AXXAIR's orbital cutting machines feature stainless steel concentric jaws to prevent the deformation of the tubes, especially the one with thin walls, during clamping.

The perfect position of the tube within the machine also guaranty the perpendicularity of the cut as the saw travels around the tube and the consistency that perpendicularity cut after cut. The precision of our cutting machine allow a



perfect tube to tube alignment with the smallest gap possible, removing the need to facing the tube therefore saving a significant amount of time and money.

AXXAIR's orbital cutting machines are an indispensable tool for any automatic and orbital welding.

AXXAIR offers the largest orbital cutting range in the world !

11 different models to cut tubes from diameter 5 to 1100 mm !



### FLEXIBILITY, PRODUCTIVITY

AXXAIR frames (except CC81, CC121ECO and 171ECO) are easily scalable for beveling and welding use.

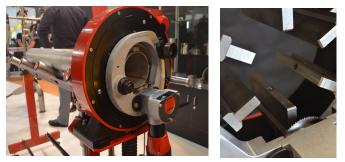
#### QUALITY, GEOMETRIC PRECISION

Cutting with no tube distortion (multi-contacts concentric clamping) ideal for thin wall stainless steel tubes. Great perpendicularity (<0.25 mm) of the cut and superb surface finish (few burrs).

#### PORTABILITY

With the easy to remove sawing attachment, AXXAIR's cutting machines are easy to transport on site or move within a workshop.





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

We are glad to share our decades long experience in orbital cutting and helping you to select the solution that fits your needs.



ORBITAL CUTTING

V4 - 11/2022



V4 - 11/2022



122 - 172 - 222 - 322

## No tube deformation

Concentric clamping



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

Reduced vibration and increased blade life

ORBITAL CUTTING

Optimised blade to jaw distance



1200W motor or pneumatic motor (as required)

**Cutting capacity:** Up to 5 mm wall thickness\*





\*depending on the type of steel

**Cutting precision** Perpendicularity of < 0.25 mm

AXXAIR

Continuous use

Anti-twist cable with bearings.

Protects the electric cable from damage

resulting from rotation around the tube.

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### **Cutting quality**

Rotation handle for controlled and continuous cutting speed

A perfect sealing against chips

All rotating parts are incorporated in the



### **Global Process**

Can be transformed into an orbital bevelling and welding machine

#### Uptake

feature a dual blade position allowing to cut elbows or flanges with no wasting of tube.

#### **Opening capacity** ø5 - ø119 mm 122 0.25" - 4.5 " ø16 - ø173 mm 172 0.625" - 6.625 " ø55 - ø228 mm 222 2.375" - 8.625 " ø141 - ø328 mm 322 5.563" – 12.750 "



# 122 - 172 - 222 - 322

## **Technical features:**

#### - Fast speed motor:

120V or 230V, 1200W, electronic speed variator with cutting compensator *Vibration level according to EN 28662 norm : <2.5m/s<sup>2</sup>, protection class : IP 20* **Rotation speed (6 speed variations): from 95 RPM to 280 RPM** 

#### - Pneumatic motor:

60 to 110 rpm, air flow rate1500 l/min at 6 bar.

#### - Robustness:

Very efficient clamping system thanks to a screw withoutend directly engaged on the clamping cam.

#### - Easy maintenance and control:

Lubrication of the inner parts with the grease nipples

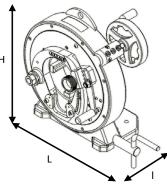
All motors are supplied in their own individual cases, including the necessary tools

	Product Code	Machine's jaw opening capacity in mm		Netweight	Dimensions
		With basic jaws	With extra jaws (included)	Net weight	(HxLxw in mm)
120V 1200W fast motor	122FS19	Ø29 - Ø <mark>119</mark>	Ø <mark>5</mark> - Ø99	44 kg	443 x 541 x 304
	172FS19	Ø74 - Ø <mark>173</mark>	Ø <mark>16</mark> - Ø116	51 kg	493 x 566 x 304
	222FS19	Ø128 - Ø <mark>228</mark>	Ø <mark>55</mark> - Ø155	59 kg	548 x 594 x 304
	322FS19	Ø230 - Ø <mark>328</mark>	Ø141 - Ø239	71 kg	649 x 644 x 304
230V 1200W fast motor	122FS29	Ø29 - Ø <mark>119</mark>	Ø <mark>5</mark> - Ø99	44 kg	443 x 541 x304
	172FS29	Ø74 - Ø <mark>173</mark>	Ø <mark>16</mark> - Ø116	51 kg	493 x 566 x 304
	222FS29	Ø128 - Ø <mark>228</mark>	Ø <mark>55</mark> - Ø155	59 kg	548 x 594 x 304
	322FS29	Ø230 - Ø <mark>328</mark>	Ø141 - Ø239	71 kg	649 x 644 x 304
Pneu- matic motor	122PD	Ø29 - Ø <mark>119</mark>	Ø <mark>5</mark> - Ø99	44 kg	443 x 541 x304
	172PD	Ø74 - Ø <mark>173</mark>	Ø <mark>16</mark> - Ø116	51 kg	493 x 566 x 304
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