

## THIN WALLED TUBES < 3mm WALL THICKNESSES

### ORBITAL CUTTING AND FACING



### ORBITAL WELDING





**SPECIALIZED FABRICATION EQUIPMENT**  
GROUP

**Aidan Tagliaferro**  
- CEO and founder of AXXAIR -

### AXXAIR

- designer, manufacturer and distributor -

AXXAIR supports its customers in more than 60 countries worldwide by offering global orbital cutting, squaring, bevelling and welding solutions.

We focus heavily on the needs of users and have adopted a service-oriented approach. We begin by determining the user's needs in terms of preparing items for welding and, of course, orbital welding itself.

We then provide the user's personnel with training on this equipment, in order to ensure that users are able to independently manage the applications they may need to use.

“

Understanding our customers and their needs, anticipating and meeting their expectations - these are AXXAIR's goals. We are able to respond to developments in our customers' ever-changing markets thanks to our various departments, R&D and Design Office.

AXXAIR offers **unique and original tube working solutions**. We believe that a lasting, high quality relationship with our customers is essential and have therefore developed local services to provide our customers with advice, by means of our subsidiaries and our distribution network.

AXXAIR is able to assist you at every stage of your project: creating samples, demonstrations, training, after-sales service, advice, etc.

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### Services and a team : - Join experience -

AXXAIR is your first point of contact for all tube working issues, from preparation to welding. With an experienced, responsive and committed team, AXXAIR will always suggest the most suitable solution.

“**Join experience**” sums up our philosophy, which is based on a community that always goes the extra mile.



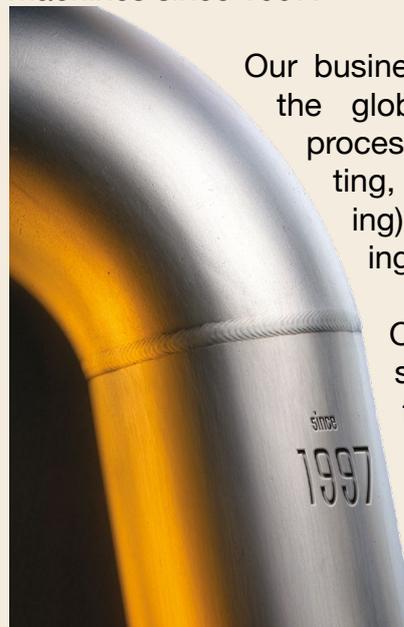
**Join experience**

[www.axxair.com](http://www.axxair.com)



## Global Process

AXXAIR has been designing, manufacturing and distributing its orbital tube working machines since 1997.



Our business is based upon the global tube working process: preparation (cutting, bevelling or squaring) and orbital welding.

Our overall product strategy allows us to offer innovative solutions and adopt a global approach to your tube and pipe-work projects.

## A Worldwide presence

AXXAIR is established in areas where customer demand is high, in order to be able to provide a local, high-quality service, with ever faster turnaround times.

Our products are distributed in more than 60 countries by our network of subsidiaries (in Korea, the USA and Germany) and our “distributor” partners, all of whom have been trained on our premises. With a commercial strategy based on **innovation, quality and performance**, the AXXAIR Group, a family-owned company, has become a successful group, whose business is continually expanding both in France and on export markets.



## Production

AXXAIR SAS is committed to maintaining industrial employment in France. To this end, 98% of manufacturing is carried out in the Rhone-Alpes region of France.

We sub-contract 100% of our production to partners, including machine shops, sheet metalworking sub-contractors, electronics specialists, etc.

We design all our machines in our in-house design office, which has an expert team.



## Sustainable development

AXXAIR is committed to the sustainable development of industrial activities. As a part of our sustainable approach, we have decided to stop producing printed catalogues.

In today's connected world, we believe that digital catalogues, with added features, are a practical and suitable alternative for everyone. We hope that you understand and will adopt this approach, for our good and the good of future generations.

This on-line catalogue can be printed, should you wish to do so, such that our vision is not imposed unilaterally. However, we would like to encourage you not to print it, or to only print out the information that is of greatest interest to you.





## Transporting sensitive fluids

Many industries are using tubes to transport fluids. The more sensitive the more attention has to be paid to all connections that are most of the time welded: tube to tube or tube to T or tube to elbows for example. Most of those tubes are made of stainless steel in order to avoid corrosion and exchanges between the tube and the fluid.

## Food-processing industry

Food and beverage manufacturing are using a lot of Stainless steel tubes. It is necessary of course to correctly seal the connections but also to be sure the internal surface of the tube is correctly welded (penetration).

The purpose is always to avoid any retention zones that could pollute the liquids you transport in the tube.

- Food processing
- Beverage processing: beer or wine manufacturing for example

## Semi-conductor industry

The manufacturing of electronic components needs to have a very highly controlled atmosphere (clean rooms) as well as very high level quality tubes for the process.

Those tubes are transporting pure gases or pure water and to be welded with a very high quality.

An example is the manufacturing of memory.



## Pharmaceutical industry

In this case the liquid that is transported is for producing medicine. In this case, even the inner surface of the tubes need to be electro polished to lower the possibility of interaction between liquid and tube surface.

As a consequence, the welds have to be with a very high quality of geometric aspects, in width, in surface finish. They are usually 100% X-rayed to guaranty the production will not be polluted.

## Aeronautics industry

This industry is paying a lot of attention to weight and is therefore using a lot of aluminium components and almost all tubing is made with titanium tubes which is very light and resistant.

Welding titanium needs a very high gas protection inside and outside the tube.

Orbital closed head welding is the best solution for those applications.

- Aerospace
- Aircraft manufacturing



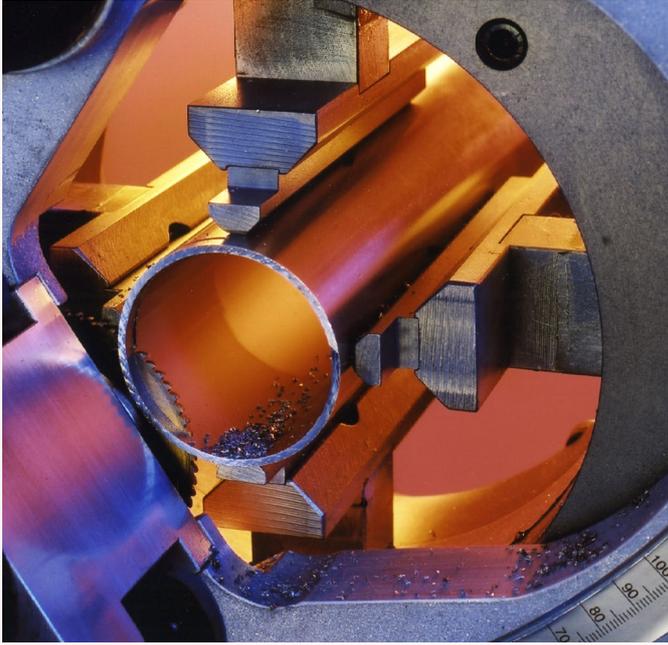
# AXXAIR Orbital cutting

**AXXAIR**  
INNOVATIVE ORBITAL SOLUTIONS

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.

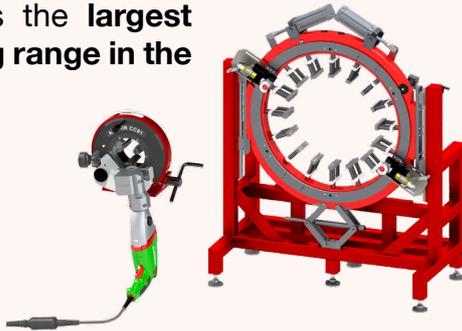


The precision of our cutting machine allow a perfect tube to tube alignment with the smallest gap possible, removing the need to facing the tube therefore saving a significant amount of time and money.

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

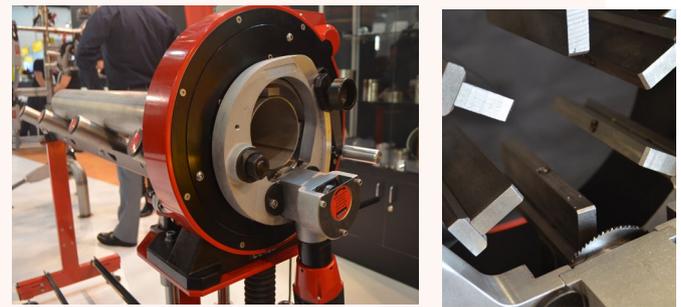
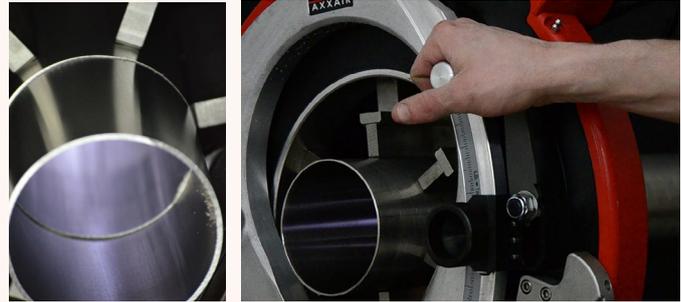
AXXAIR frames (except CC81, CC121ECO and 171ECO) are easily scalable for beveling and welding use.

## 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.

# The ECO Cutting range

## 81M - 121ECO - 171ECO



For more than 20 years AXXAIR has been developing scalable, flexible and reliable machines featuring our patented concentric clamping design and many other functions.

The frames of our cutting machines 122 - 322 can be fitted with a cutting motor, a bevelling motor or with a TIG welding torch.

Our ECO range differs from this concept and is specialized in cutting thin wall tubes. It offers the same quality of cut than the CC 122 - 322 range in a more affordable package for customers who do not need to bevel or weld with the same machine.

We developed the ECO cutting range in order to respond to these users looking simply for a cutting solution for thin tubes.

Machines dedicated to thin tubes < 5 mm wall thickness\*

Easy to move around and lightweight

Attractive prices

AXXAIR choose Metabo to power our ECO range because of the large speed range and higher torque matching the requirements for cutting stainless steel thin wall tubes.

The handle of the Metabo power unit also makes easy and convenient to rotate the blade around the tube.

Our 121 and 171ECO range share the same safe and efficient diameter setting and blade penetration unit than our CC range.

The ECO range comes in a more affordable package but still features most of the designs that made our more advanced CC range so popular among the industry.

Because our ECO range is dedicated to cutting, some of the upgrades and accessories available on the CC range like automatic rotation or automatic clamping are not available for this type of cutting machines.

For more details, accessories and the references please see the following pages of this catalogue.



\*depending on the type of steel



# 81M - 121ECO - 171ECO



## No tube deformation

Concentric clamping system



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

## Cutting precision

Perpendicular cuts < 0.25 mm

## Operator safety feature

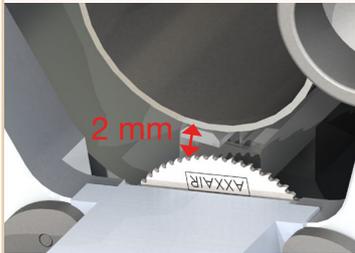
Penetration check feature

## Uptake

121ECO +171ECO: feature a dual blade position allowing to cut elbows or flanges with no wasting of tube.

## Limited vibration and tube distortion

Optimised blade to jaws distance



## Motor 1300W

Speed adjustment through gearbox and electronic variator

## Cutting capacity:

Up to 5 mm wall thickness\*



## Easy handling and transportation



## Continuous use

Anti-twist cable with bearings. Protects the electric cable from damage resulting from rotation around the tube.

## Opening capacity

81M	ø5 - ø78 mm 0.25 - 3 "
121ECO	ø5 - ø121 mm 0.25 - 4.5 "
171ECO	ø16 - ø170 mm 0.625 - 6.625 "

\*depending on the type of steel





# 81M - 121ECO - 171ECO



## Technical features :

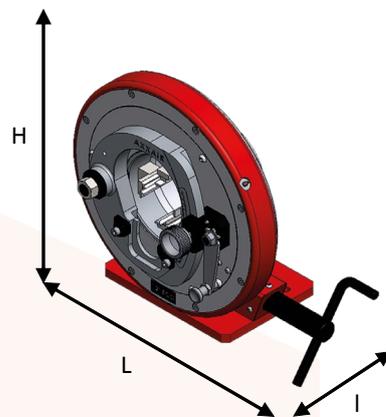
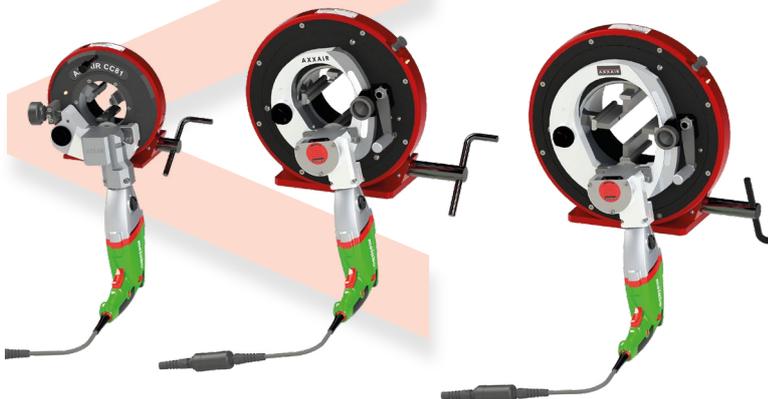
With the Metabo power unit, our ECO range features a large range of blade rotation speed and the right torque for cutting stainless steel thin wall tubes.

### Electric motor 1300W:

- Mechanical gearbox and electric speed variator
- 50/60 HZ
- single-phase motor

Exept the 81M, all the machines' cutting motors are shipped in a convenient carrying case together with all necessary tools for operating the machine.

Because of it's small form and low weight, the 81M cutting motor and the tools are included in the machine's transport case.



	Product Code	Machine's jaw opening capacity in mm		Net weight	Dimensions (HxLxw in mm)
		With basic jaws	With extra jaws (included)		
120V 1300W	81M11	Ø5 - Ø78	-	15 kg	263 x 346 x 236
	121ECO1	Ø24 - Ø121	Ø5 - Ø108	38 kg	432 x 520 x 297
	171ECO1	Ø70 - Ø170	Ø16 - Ø118	44 kg	453 x 550 x 307
230V 1300W	81M21	Ø5 - Ø78	-	15 kg	263 x 346 x 236
	121ECO2	Ø24 - Ø121	Ø5 - Ø108	38 kg	432 x 520 x 297
	171ECO2	Ø70 - Ø170	Ø16 - Ø118	44 kg	453 x 550 x 307



**122 - 172 - 222 - 322**



**No tube deformation**

Concentric clamping



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

**Cutting precision**

Perpendicularity of < 0.25 mm

**Cutting quality**

Rotation handle for controlled and continuous cutting speed

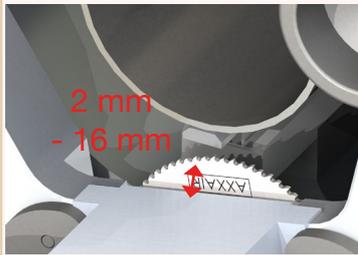
**A perfect sealing against chips**

All rotating parts are incorporated in the body



**Reduced vibration and increased blade life**

Optimised blade to jaw distance



**Global Process**

Can be transformed into an orbital bevelling and welding machine

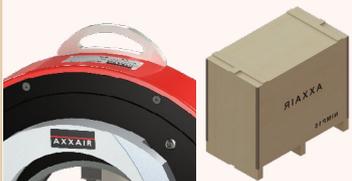
**Uptake**

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

**1200W motor or pneumatic motor** (as required)

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

**Easy handling and transportation**



**Continuous use**

Anti-twist cable with bearings. Protects the electric cable from damage resulting from rotation around the tube.

**Opening capacity**

122	ø5 - 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 "

\*depending on the type of steel



122- 172 - 222- 322



**AXXAIR**  
INNOVATIVE ORBITAL SOLUTIONS

**Technical features:**

**- Fast speed motor:**

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

**- Pneumatic motor:**

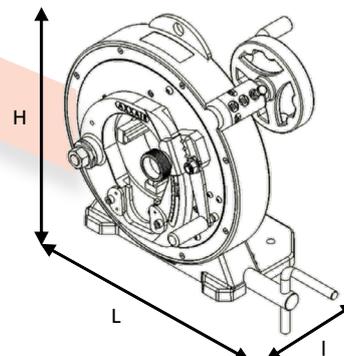
60 to 110 rpm, air flow rate 1500 l/min at 6 bar.

**- Robustness:**

Very efficient clamping system thanks to a screw without end 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		Net weight	Dimensions (HxLxw in mm)
		With basic jaws	With extra jaws (included)		
120V 1200W fast motor	122FS19	Ø29 - Ø119	Ø5 - Ø99	44 kg	443 x 541 x 304
	172FS19	Ø74 - Ø173	Ø16 - Ø116	51 kg	493 x 566 x 304
	222FS19	Ø128 - Ø228	Ø55 - Ø155	59 kg	548 x 594 x 304
	322FS19	Ø230 - Ø328	Ø141 - Ø239	71 kg	649 x 644 x 304
230V 1200W fast motor	122FS29	Ø29 - Ø119	Ø5 - Ø99	44 kg	443 x 541 x 304
	172FS29	Ø74 - Ø173	Ø16 - Ø116	51 kg	493 x 566 x 304
	222FS29	Ø128 - Ø228	Ø55 - Ø155	59 kg	548 x 594 x 304
	322FS29	Ø230 - Ø328	Ø141 - Ø239	71 kg	649 x 644 x 304
Pneu- matic motor	122PD	Ø29 - Ø119	Ø5 - Ø99	44 kg	443 x 541 x 304
	172PD	Ø74 - Ø173	Ø16 - Ø116	51 kg	493 x 566 x 304
	222PD	Ø128 - Ø228	Ø55 - Ø155	59 kg	548 x 594 x 304
	322PD	Ø230 - Ø328	Ø141 - Ø239	71 kg	649 x 644 x 304



# 421- 521-721-1100



**No tube deformation**

Concentric clamping



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

**Cutting precision**

Perpendicular cuts < 0.4 mm

**Uptake**

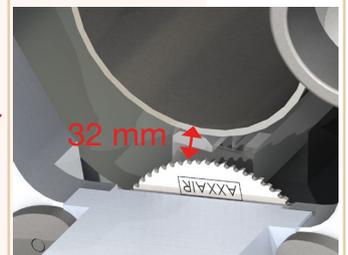
feature a dual blade position allowing to cut elbows or flanges with no wasting of tube.

**Cutting quality**

Rotation handle for controlled and continuous cutting speed

**Reduced vibration and increased blade life**

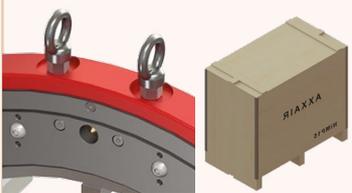
Optimised blade to jaw distance



**Continuous use**

Anti-twist cable with bearings. Protects the electric cable from damage resulting from rotation around the tube.

**Easy handling and transportation**



**1200W motor or pneumatic motor (as required)**

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

**Opening capacity**

421	ø212 - ø422 mm 8.625 - 16 "
521	ø312 - ø522 mm 12.75 - 20 "
721	ø447 - ø725 mm 18 - 28"
1100	ø711 - ø1016 mm 28 - 40 "

\*depending on the type of steel



# 421- 521-721-1100



## Technical features:

### - Fast motor:

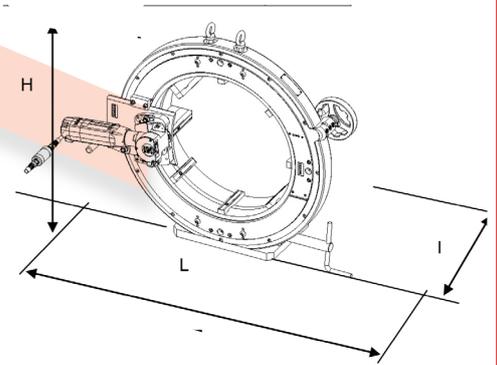
120V or 230V, 1200W, electronic speed variator with cutting compensator  
 Vibration level according to EN 28662 norm : <math>< 2.5m/s^2</math>, protection class : IP 20

**Rotation speed** (6 speed variations): from 95 RPM to 280 RPM

### - Pneumatic motor:

60 to 110 rpm, air flow rate 1500 l/min at 6 bar

All motors are delivered in their individual case, including the necessary tools



	Product Code	Machine's jaw opening capacity in mm		Net weight	Dimensions (HxLxw in mm)
		With basic jaws	With extra jaws (included)		
120V 1200W fast motor	421FS19	Ø350 - Ø422	Ø212 - Ø352	186 kg	802x838x315
	521FS19	Ø450 - Ø522	Ø312 - Ø452	223 kg	905x889x315
	721FS19	Ø653 - Ø725	Ø447 - Ø654	256 kg	1104x1077x315
230V 1200W fast motor	421FS29	Ø350 - Ø422	Ø212 - Ø352	186 kg	802x838x315
	521FS29	Ø450 - Ø522	Ø312 - Ø452	223 kg	905x889x315
	721FS29	Ø653 - Ø725	Ø447 - Ø654	256 kg	1104x1077x315
Pneu- matic motor	421PD	Ø350 - Ø422	Ø212 - Ø352	186 kg	802x838x315
	521PD	Ø450 - Ø522	Ø312 - Ø452	223 kg	905x889x315
	721PD	Ø653 - Ø725	Ø447 - Ø654	256 kg	1104x1077x315
	1100	On demand			



# Orbital cutting - Accessories



Our support legs and stands have been designed to further facilitate cutting by ensuring that the machine is stable in different conditions: in a workshop or on site.

The great advantages of these products:

- lightness
- flexible handling
- easy to use



Product Code	Description	Net Weight	Dimensions (in cm)
CCPS21	Support feet	10 kg	103 x 32 x 11

Support legs for orbital cutting machine:

- quick assembling and dismantling
- storage box at the back
- height adjustment with screws
- optimum stability

81	✓121ECO	✓171ECO	✓122	✓172	✓222	✓322	421	521	721	1100
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Product Code	Description	Net Weight	Dimensions (in cm)
CCSER1	Simple stand	10 kg	60 x 26 x 10

Simple stand for supporting tubes with height adjustment:

- quick assembling and dismantling
- height adjustment

✓81	✓121ECO	✓171ECO	✓122	✓172	✓222	✓322	421	521	721	1100
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Product Code	Description	Net Weight	Dimensions (in cm)
CCSER2	Stand (with chrome steel bearings)	11 kg	60 x 26 x 10

Stand with chrome steel bearings for supporting tubes with height adjustment:

- easy assembling and dismantling
- facilitates tube feeding after each cut
- height adjustment

✓81	✓121ECO	✓171ECO	✓122	✓172	✓222	✓322	421	521	721	1100
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# Orbital cutting - Accessories

**AXXAIR**

INNOVATIVE ORBITAL SOLUTIONS

Our support benches help you to position and feed your tubes without the aid of stands. The height-adjustable table helps you easily and precisely set the height of your machine, for cutting tubes placed on the support bench.

The additional tube support bench allows you to position your longest tubes in a stable manner on all benches.

We also recommend that you support the cut section in front of your cutting machine using one or more additional benches, depending on the length of the tube.



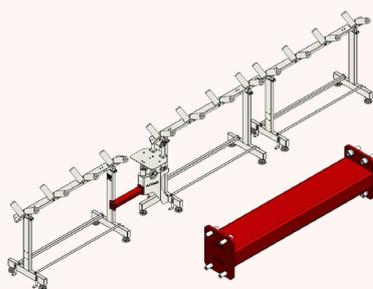
Product Code	Description	Net Weight	Dimensions (in cm)
CCBSB-X1	Bench with height adjustment	57 kg	184 x 95 x 51
<u>Height-adjustable support bench, 1.5m</u>			
<ul style="list-style-type: none"> <li>- stainless steel rollers</li> <li>- handle for height adjustment</li> <li>- 1.5 m long</li> <li>- maximum load: 350 kg</li> <li>- ø min pipe: 5 mm</li> <li>- ø max pipe: 321 mm</li> <li>- compatible with machines 121 to 321</li> </ul>			

81	✓ 121ECO	✓ 171ECO	✓ 122	✓ 172	✓ 222	✓ 322	421	521	721	1100
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Product Code	Description	Net weight	Dimensions (in cm)
CCBSB-X2	Additional 1.5 m bench	38 kg	150 x 95 x 51
<u>Additional support bench:</u>			
<ul style="list-style-type: none"> <li>- stainless steel rollers</li> <li>- 1.5 m long</li> <li>- maximum load 350 kg uniformly distributed</li> <li>- ø min pipe : 5 mm</li> <li>- ø max pipe: 321 mm</li> <li>- compatible with machines 121 to 321</li> </ul>			

81	✓ 121ECO	✓ 171ECO	✓ 122	✓ 172	✓ 222	✓ 322	421	521	721	1100
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Product Code	Description	Net Weight	Dimensions (in mm)
CCBSB-B005	Connection	3 kg	100 x 80 x 402
<u>Connecting bar for CCBSB-X1 and CCBSB- X2:</u>			
<ul style="list-style-type: none"> <li>- Allows the height-adjustable table to be connected to a bench placed in front of the machine</li> </ul>			

81	✓ 121ECO	✓ 171ECO	✓ 122	✓ 172	✓ 222	✓ 322	421	521	721	1100
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# Orbital cutting - Accessories (End stop)

In addition to our CCBB-X1 and CCBB-X2 benches, we offer benches with an end stop system. These stops are very simple to use and avoid all measurement errors.

No pollution of the tube:

All parts that are in contact with the tube are made of stainless steel (the rollers but also the stop finger)

Retractable stop:

In order to facilitate the evacuation of the cut, the stop is manually retractable.



- Lengths available:  
1500 - 3000 - 4500 - 6000 - 7500 and 9000 mm
- Working stroke: Length - 200 mm
- Delivered by module of 1500mm to be put together
- Max load per module: 350 kg (evenly distributed)
- Max push on the stop: 10 kg
- Operating temperature: 0 - 50 ° C
- Relative humidity: 35 - 85%

They can be assembled on the **feed-in or feed-out** section of the cutting machine

They are available **with a ruler or with an LCD display.**

**Feed-in assembly**



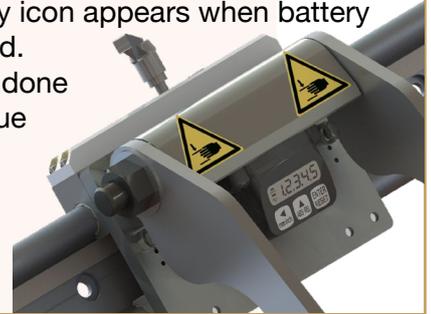
**Feed-out assembly**



**LCD display**

Possibility of selecting the direction of counting, the position of the decimal point, the unit of measurement (mm or inches), reset / preset of the measurement, absolute / relative dimension.

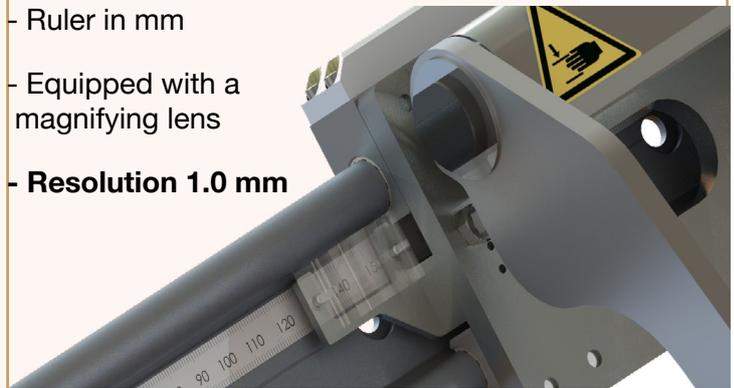
- Battery powered. Lifetime of about 4 years. The discharged battery icon appears when battery replacement is required. Replacement is easily done without loss of the value and configuration parameters.



- Resolution 0.1 mm

**Ruler**

- Ruler in mm
- Equipped with a magnifying lens
- Resolution 1.0 mm



81	✓121ECO	✓171ECO	✓122	✓172	✓222	✓322	421	521	721	1100
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# Orbital cutting - Accessories (End stop)

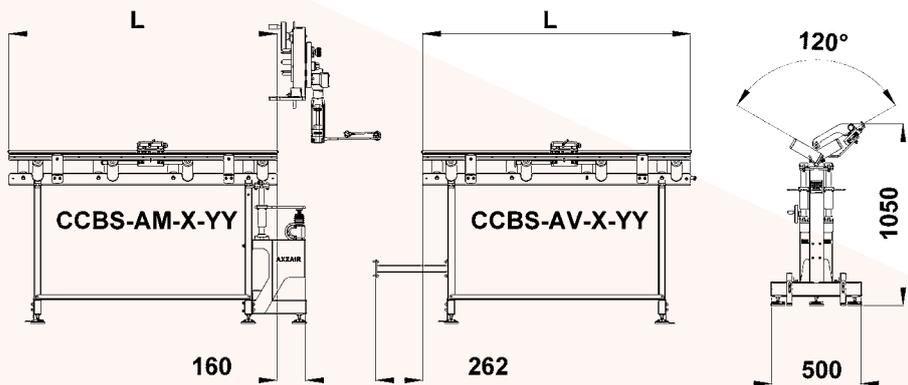
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## Feed-in assembly

The parts are delivered unassembled in transport boxes, per module of 1,5 m.

They must be assembled, aligned and fixed to the ground. The magnetic ruler (with LDC display) or the ruler must be glued at the end of the assembly.



The system is delivered with the height-adjustable support bench (CCBSB-X1), additional support benches, the starting end stop module and its extensions.

Assembly	Reader	Length (in mm)	Working stroke (in mm)	Product code	Net weight					
on the feed-in section of the cutting line	Ruler	1500	1300	CCBSB-AM-R-15	65 kg					
		3000	2800	CCBSB-AM-R-30	104 kg					
		4500	4300	CCBSB-AM-R-45	143 kg					
		6000	5800	CCBSB-AM-R-60	163 kg					
		7500	7300	CCBSB-AM-R-75	200 kg					
		9000	8800	CCBSB-AM-R-90	238 kg					
	LCD display	1500	1300	CCBSB-AM-D-15	65 kg					
		3000	2800	CCBSB-AM-D-30	104 kg					
		4500	4300	CCBSB-AM-D-45	143 kg					
		6000	5800	CCBSB-AM-D-60	163 kg					
		7500	7300	CCBSB-AM-D-75	200 kg					
		9000	8800	CCBSB-AM-D-90	238 kg					
81	✓121ECO	✓171ECO	✓122	✓172	✓222	✓322	421	521	721	1100

You can add CCBBSB-X2 modules to support the tube after the cutting process (in front of the cutting machine) with the CCBSB-B005 connecting bar (see previous pages).



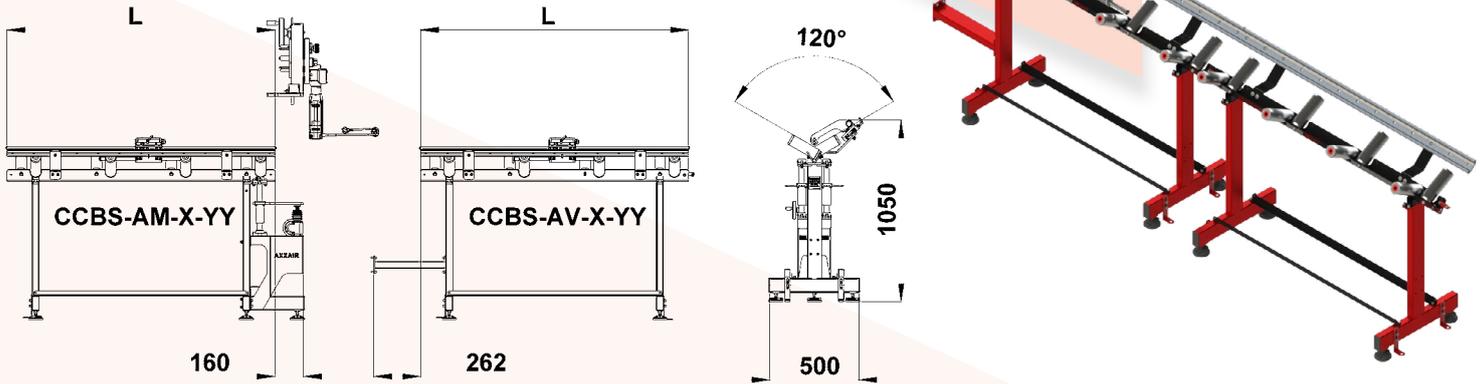


# Orbital cutting - Accessories (End stop)



## Feed-out assembly

The parts are delivered unassembled in transport boxes, per module of 1,5 m. They must be assembled, aligned and fixed to the ground. The magnetic ruler (with LDC display) or the ruler must be glued at the end of the assembly.



The system comes with: CCBSB-X2 support bench modules, the starting end stop module and its extensions, the CCBSB-B005 connecting bar.

**Attention:** For all references with AV (bench with end stop on the feed-out section) we must also deliver at least one CCBSB-X1 bench (height-adjustable support bench) to support the cutting machine.

Assembly	Reader	Length (in mm)	Working stroke (in mm)	Product code	Net weight
<b>on the feed-out section of the cutting line</b>	Ruler	1500	1300	<b>CCBSB-AV-R-15</b>	46 kg
		3000	2800	<b>CCBSB-AV-R-30</b>	85 kg
		4500	4300	<b>CCBSB-AV-R-45</b>	124 kg
		6000	5800	<b>CCBSB-AV-R-60</b>	163 kg
		7500	7300	<b>CCBSB-AV-R-75</b>	201 kg
		9000	8800	<b>CCBSB-AV-R-90</b>	240 kg
<b>on the feed-out section of the cutting line</b>	LCD display	1500	1300	<b>CCBSB-AV-D-15</b>	46 kg
		3000	2800	<b>CCBSB-AV-D-30</b>	85 kg
		4500	4300	<b>CCBSB-AV-D-45</b>	124 kg
		6000	5800	<b>CCBSB-AV-D-60</b>	163 kg
		7500	7300	<b>CCBSB-AV-D-75</b>	201 kg
		9000	8800	<b>CCBSB-AV-D-90</b>	240 kg

81	✓121ECO	✓171ECO	✓122	✓172	✓222	✓322	421	521	721	1100
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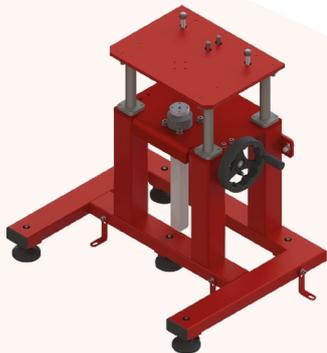
# Orbital cutting - Accessories



Our support benches help you to position and feed your tubes without the aid of stands. The height-adjustable table helps you easily and precisely set the height of your machine, for cutting tubes placed on the support bench.

The additional tube support bench allows you to position your longest tubes in a stable manner on all benches. We also recommend that you support the cut section in front of your cutting machine using one or more additional benches, depending on the length of the tube.

These products are available on request



Product Code	Description	Net weight	Dimensions (in mm)
CCBSB2-003	Height-adjustable table	53.5 kg	75 x 73 x 54
<u>Height-adjustable table for 422 / 521 / 721:</u>			
- adjustable table height		- optimum stability	

81	121ECO	171ECO	122	172	222	322	✓421	✓521	✓721	1100
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Product Code	Description	Net Weight	Dimensions (in mm)
CCBSB2-004	Support bench	72.8 kg	97 x 71 x 150
<u>Tube support bench for 422 / 521 / 721:</u>			
- quick assembly and dismantling - 1.5 m long		- optimum stability	
- height adjustment			

81	121ECO	171ECO	122	172	222	322	✓421	✓521	✓721	1100
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Product Code	Description	Poids net	Dimensions (en mm)
CCBSB2-005	Connecting bar	6.5 kg	8.5 x 4 x 65
<u>Connecting bar between two CCBSB2 support benches:</u>			
- quick assembly and dismantling		- ensures optimum stability	

81	121ECO	171ECO	122	172	222	322	✓421	✓521	✓721	1100
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# Orbital cutting - Accessories



## New autoline electric rotation:

- Measures and displays the cutting/bevelling motor's power consumption
- enables the motor and cycle to be stopped in the event of overconsumption
- protects the motor and frees the operator from watching the machine
- detects whether the motor is straining and whether the blade is worn

## 3.5 colour touch-screen allowing you to:

- enter the diameter and precisely adjust the feed speed in mm/min
- aid adjustment with a suggested motor speed and feed speed based on the type of material and the blade used
- perform quick and easy configuration
- display the cutting/bevelling motor's consumption
- display in English, French or German
- choose the unit of measure: mm or inch

**Welding mode with prefab machine and SAXX power source** : 4-button display (Start, Stop, Left, Right) with the addition of a power source connection cable

(Ref. SAEX-A02 for addition, more details in the "ORBITAL WELDING" section of this catalogue)

This rotation is compatible with our previous **121, 171, 221, 321, 421, 521 and 721** models.

The previous SAEP-00/000 rotation cannot be fitted to our new 122, 172, 222 and 322 models.



Product Code	Description	Net Weight	Dimensions (in mm)
SAEX-00	Autoline electric rotation	6.3 kg	320 x 261x 193

### Autoline electric inverter for CC122 to 322:

- 110 V to 230 V
- even rotation
- easy to use
- precise adjustment

81	121ECO	171ECO	✓ 122	✓ 172	✓ 222	✓ 322	421	521	721	1100
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Product Code	Description	Net Weight	Dimensions (in mm)
SAEX-000	Autoline electric rotation	6.3 kg	320 x 261x 193

### Autoline electric inverter for CC421 to 721:

- 110 V to 230 V
- even rotation
- easy to use
- precise adjustment

81	121ECO	171ECO	122	172	222	322	✓ 421	✓ 521	✓ 721	1100
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**AXXAIR**

INNOVATIVE ORBITAL SOLUTIONS

**Accessories (electric clamping)**

NEW



You realize **important series** in your company and want to be more effective during your projects? Our electric clamping is the ideal answer for the preparation and / or welding of your tubes.

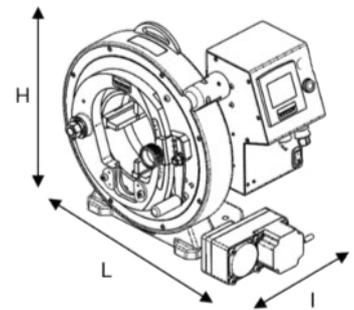
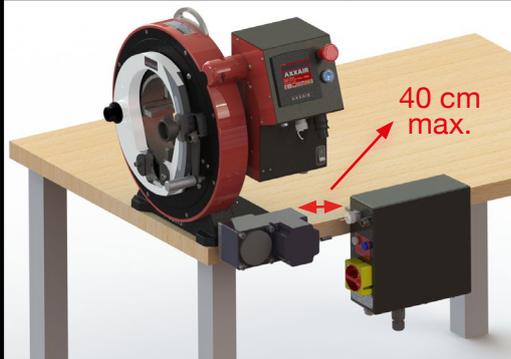
The electric clamping makes it possible to carry out a **repetitive and constant force tightening** on tubes with identical diameters and thicknesses. The **clamping force is adjustable**, it prevents the tubes from being deformed or marked.

**Technical specifications:**

- 24Vdc brushless motor, motor torque: 34N.m
- Tightening force on the tube: 850 kg maximum, adjustable from 15 to 100%
- Clamping speed: 86 mm / min (diameter)
- The electric clamping is sold with the body frame and the automatic rotation

Fixation on an AXXAIR support bench

Fixation on an other support (example: workbench)



Product code	Body frame, automatic rotation and electric clamping Machine's jaw opening capacity in mm		Net weight	Dimensions (HxLxI in mm)
	With basic jaws	With extra jaws (included)		
122-AU	Ø29 - Ø119	Ø5 - Ø99	51 kg	470 x 498 x 359
172-AU	Ø74 - Ø173	Ø16 - Ø116	58 kg	520 x 530 x 359
222-AU	Ø128 - Ø228	Ø55 - Ø155	66 kg	575 x 575 x 359
322-AU	Ø230 - Ø328	Ø141 - Ø239	80 kg	675 x 662 x 359

**Caution:** Remember to order one or more motors (cutting, beveling or welding torch) and the consumables needed with the sets listed above.

Join **experience**

www.axxair.com



# Orbital cutting - Consumables

**AXXAIR**

INNOVATIVE ORBITAL SOLUTIONS



## Orbital cutting blades

High quality blades (HSS + Cobalt) sold in boxes of 5:

- The tooth pitch & design are essential for chip evacuation, in order to achieve a high quality cut. AXXAIR has produced the most efficient blade design possible for various cutting applications.
- Often preferred to our competitors' blades, AXXAIR blades are compatible with the majority of other orbital cutting machines.

Product Code	Cutting tubes with wall thickness of		ø of the blade	Number of teeth
LS63128	0,5 to 0,9 mm	,02 - ,04"	63 mm	128
LS63100	0,7 to 1,5 mm	,03 - ,06"	63 mm	100
LS6364	1 to 3 mm	,04 - ,12"	63 mm	64
LS6872	1 to 3 mm	,04 - ,12"	68 mm	72
LS6844	2 to 7mm	,08- ,28"	68 mm	44
LS8080	1 to 3 mm	,04 - ,12"	80 mm	80
LS8054	2 to 7 mm	,08- ,28"	80 mm	54

✓ 81	✓ 121ECO	✓ 171ECO	✓ 122	✓ 172	✓ 222	✓ 322	✓ 422	✓ 521	✓ 721	✓ 1100
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Product Code	Description	Volume
CCLUH	Liquid lubricant	250 ml

High performance oil lubricant, sold in packs of 5:

- Recommended for all FS cutting motors
- Safety data sheet available on request

81	121ECO	171ECO	✓ 122	✓ 172	✓ 222	✓ 322	✓ 422	✓ 521	✓ 721	✓ 1100
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Product Code	Description	Volume
CCLUP	Paste lubricant	250 ml

Paste lubricant, sold in packs of 5 lubricants-tubes:

- Recommended for metabo motors
- Safety data sheet available on request

✓ 81	✓ 121ECO	✓ 171ECO	122	172	222	322	422	521	721	1100
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## 1 machine - 3 applications



The AXXAIR Group was the first to offer a triple and exclusive solution, from preparation to orbital welding:

**the global process**

For more than 20 years, a single machine frame (122, 172, 222 and 322) has enabled three operations to be carried out:

Cutting, bevelling and orbital welding



Cutting motor, bevelling motor or orbital welding torch interface

Join **experience**



# A machine - 3 applications



Product Code	Description	Net weight
FS xx / MOPD	Cutting motor	5 kg
Low-speed / high-speed / pneumatic motor with dual output (uptake):		
120V	Low-speed motor: FS15	122
	High-speed motor: FS19	
230V	Low-speed motor: FS25	222
	High-speed motor: FS29	
Pneumatic	MOPD	322

To use this motor you will need to order: suitable cutting blades for the tube thickness you want to cut and, if necessary, lubricant.

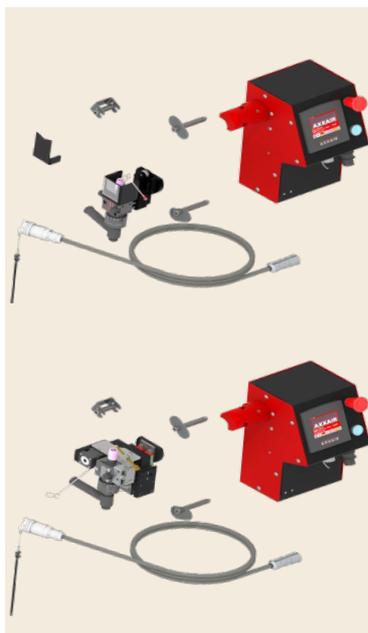
All information and relevant product codes appear in the orbital cutting accessories and consumables section of this catalogue.



Product Code	Description	Net Weight			
GA10 - x - xx	Beveling motor kit	5 kg			
120V / 230V beveling motor supplied with a chip shield and a workpiece guide tailored to the frame of your cutting / prefab welding machine:					
120V	Product Code	Frame	230V	Product Code	Frame
	GA10-M1-122	122		GA10-M2-122	122
	GA10-M1-172	172		GA10-M2-172	172
	GA10-M1-222	222		GA10-M2-222	222
	GA10-M1-322	322		GA10-M2-322	322

To use this motor and bevel your tubes you will need to order: one or more milling heads and carbide inserts.

All information and relevant product codes appear in the orbital beveling accessories and consumables section of this catalogue.



Product Code	Description	Net Weight
SX - KIT x	Torch kit	depending on the chosen product
KIT for upgrading a CC/GA to an SX Air / Water / AVC+OSC torch		
Cooling	Product Code	Frame
AIR	SX-2KITA	122
EAU	SX-2KITE	172
	SX-2KITNAOF (AVC/OSC)	222
		322
If you have acquired the electrical clamping (xx2-AU), please order the references below, they are delivered without automatic rotation:		
AIR	SX-3KITA	122
EAU	SX-3KITE	172
	SX-3KITNAOF (AVC/OSC)	222
		322

To use this KIT and to prefab weld, you will need to order: a suitable AXXAIR welding power supply for the tubes you want to weld.

All information and relevant product codes appear in the orbital welding section of this catalogue.





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