# **AXXAIR's orbital facing**



V2.1 - 01/2018

Tube facing is used on thin tubes with a thickness of less than 3 mm. It consists in bringing into conformity the end of a tube or an accessory.

This conformity acts on three aspects:

the perpendicularity of the face of the tube the surface state of the face - potentially a length adjustment.

After the facing process, the face will be perpendicular to the axis of the tube, without burrs, with a low RA and the desired length.

Facing machines are used when the cutting process is not sufficiently precise for the application or when the cutting process generates burrs.

To give an exemple: abrasive cutting disc, band saw or tube cutter.



Tube with small diameters <25.4 mm are particularly concerned by the facing process. They are often cut with tube cutters or abrasive cutting machines. Generally speaking, tube must be faced before welding in order to obtain quality welds.

One category of tube is particularly concerned: electropolished tube used in semiconductor or pharmaceutical industries.

It is forbidden to scratch the polished surface inside the tubes: the cuts are therefore only done with a cutting wheel. This process does not generate chips but only dust. The result of this cut is not exploitable without a facing operation which unrolls the chip towards the outside of the tube.

### FLEXIBILITY, PRODUCTIVITY

3 mm wall thickness

Our facing machines operate on battery or corded for more flexibility. HSS TIALN blades, reversible with two cutting edges guarantee optimal lifetime of consumables.

### QUALITY

Facing creates a clean and burfree surface without tube deformation: sharpness and accuracy guaranteed.

Thin tube are therfore ready for welding.

#### PORTABILITY

Our facing machines are llightweight and designed to be used on site as well as in the workshop.





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

We will be glad to share our know-how with you and find an adapted solution to your needs!



## Join <mark>experience</mark>

## 3 mm wall thickness

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INNOVATIVE ORBITAL SOLUTIONS

# DC115-BM - 221-BM



#### Stainless steel concentric jaws

DC115 : 4 Stainless steel concentric jaws

DC221 : 6 Stainless steel concentric jaws

High quality blades

HSS TIALN blade Reversible, two cutting edges

Accurate manual advance

0.1 mm steps

Bench mounting option



# Possibility to use

**Multi-tools** 

two (DC115) or three (DC221) tools simultaneously

Sliding adjustment of tool holder offers easy diameter change and optimal tip wearing



### 30° and 45° outside bevel

possible with optional tool holder

Delivered in a wooden box



Facing range						
DC115	ø12 - ø115 mm					
BM	0.5" - 4.5"					
DC221	ø50 - ø220 mm					
BM	2 – 8.5 "					



Join experience

### <u>1100 W motor</u>

Motor 1100W with large speed range (2 gears)

Screw and wheel drive to optimize the speed range and eliminate vibrations

## 3 mm wall thickness

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INNOVATIVE ORBITAL SOLUTIONS

# DC115-BM - 221-BM

### **Technical characteristics:**

# Thickness < 3 mm (0,12") according to material

Burr-free tube squaring and edge breaking machine used after a band saw cut or on electropolished tubes. Ideal tool to face a band saw cut before automatic welding

- Accurate manual advance: 4/1000" (0,1 mm) step graduation

- Sliding adjustment of tool holder offers easy diameter change and optimal tip wearing

- 30° and 45° outside bevel possible with optional tool holder

- Squaring and beveling in one operation

- Possibility to use two (DC115) or three (DC221) tools simultaneously

- Delivered in high quality protection case

<u>All motors are supplied in their own individual cases, including the necessary tools</u>



Wide range of use with stainless steel concentric clamping for all diameters



	Product Code	Facing machine for the following diameters (in mm)	Net weight	Minimal straight len- gth of tube	Customs Code	Dimensions (HxLxI in mm)
120V Moteur 1100 W	DC115-BM1	Ø12 - Ø115 0.5" - 4.5"	37 kg	58 mm 2.283"	846190 0000	219x314x462
	DC221-BM1	Ø50 - Ø220 2" - 8.5 "	55 kg	62 mm 2.440"		327x425x540
230 V Moteur 1100 W	DC 115-BM2	Ø12 - Ø115 0.5" - 4.5"	37 kg	58 mm 2.283"		219x314x462
	DC221- BM2	Ø50 - Ø220 2" - 8.5 "	55 kg	62 mm 2.440"		327x425x540



## Join experience