

### **AXXAIR Orbital facing**



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**

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.



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!





**DC25 MA - DC65 MA** 





HSS TIALN blade Reversible, two cutting edges

High quality blades



#### **Clamping shellls**

Stailess steel molded jaws

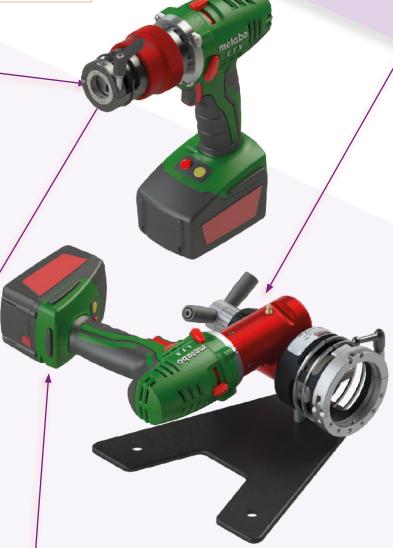


### Easy adjustment

Indexable wrist and wide opening with spring









INNOVATIVE ORBITAL SOLUTIONS

### Accurate manual advance

Graduated vernier scale





## Easy set up of the tube

Large opening and pivot clamping



## Delivered in an anti-shock case

Water- and dustproof



#### **Brushless motor 18V**

- 2 mechanical speeds + electric speed variator
- Special handy design
- Work without return shock
- Integrated work lamp
- Comes with two 5.2 AH battery, LiHD technology, maximum autonomy

Facing range				
DC25-MA	ø3 - ø25.4 mm 0.1 - 1"			
DC65-MA	ø3 - ø63.5 mm 0.1 – 2.5"			







### **DC25 MA - DC65 MA**

#### **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

#### 18 V Drill / Driver motor:

- 220-240 V ~ 50 / 60Hz **or** 100-120V ~ 60Hz
- High rotation torque
- Rugged reduction housing which allows heat dissipation and optimal durability
- Come with two 18V Li-Power, 5.2 Ah batteries and a fast battery charger
- 2 mechanical speeds + electric speed variator :

Speed 1 : 0-500 tr/min (rpm) Speed 2 : 0-1700 tr/min (rpm)

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

#### **DC25**

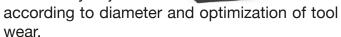
There are two mounting positions for the blade to cover the range of diameter.





#### **DC65**

Adjustment of the tool support by sliding: allows easy adjustment



- 30° and 45° outside bevel possible with optional tool holder
- Facing and bevelling in one operation
- Possibility to use two tools simultaneously



	Product Code	Facing machine for the following diameters (mm)	Net weight	Minimal straight length of tube	Dimensions (HxLxI in mm)
120 V Drill / Driver	DC25-MA1	Ø3 - Ø25.4 0.1 - 1"	2.5 kg	With standard jaws: 9mm (0.354") With micro-fit jaws: 5mm (0,196")	285 x 220 x 75
	DC65-MA1	Ø3 - Ø63.5 0.1 - 2.5"	5.5 kg	With standard jaws : 10mm (0,393")	140 x 325 x 250
230 V Drill / Driver	DC25-MA2	Ø3 - Ø25.4 0.1 - 1"	2.5 kg	With standard jaws : 9mm (0.354") With micro-fit jaws : 5mm (0,196")	285 x 220 x 75
	DC65-MA2	Ø3 - Ø63.5 0.1 - 2.5"	5.5 kg	With standard jaws : 10mm (0,393")	140 x 325 x 250









#### High quality blades

HSS TIALN blade Reversible, two cutting edges



#### **Clamping shellls**

Stailess steel molded jaws

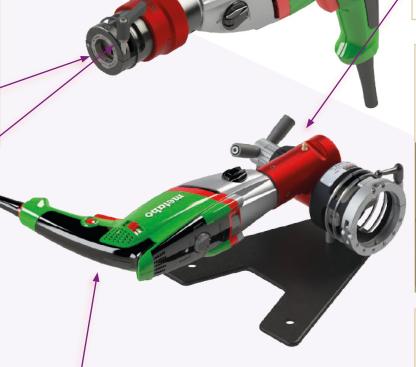


#### Easy adjustment

Indexable wrist and wide opening with spring







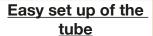


INNOVATIVE ORBITAL SOLUTIONS

### Accurate manual advance

Graduated vernier scale





Large opening and pivot clamping



## Delivered in an anti-shock case

Water- and dustproof



#### Mains motor, 1100 W

- 2 mechanical speeds + electric speed variator
- Special handy design
- Work without return shock
- Rugged reduction housing which allows heat dissipation and optimal durability

Facing range				
DC25-MS	ø3 - ø25.4 mm 0.1 - 1"			
DC65-MS	ø3 - ø63.5 mm 0.1 – 2.5"			





INNOVATIVE ORBITAL SOLUTIONS



### **DC25 MS - DC65 MS**

#### **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

#### Mains motor 1100 W:

- 220-240 V ~ 50 / 60Hz or
- 100-120V ~ 60Hz
- High rotation torque
- Two speed gearbox with variable speed drive
- High quality speed controller
- Immobilizer protection
- Housing reducer in cast aluminum
- 2 mechanical speeds + electric speed variator :

Speed 1 : 0-1000 tr/min (rpm) Speed 2 : 0-3100 tr/min (rpm)

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

#### **DC25**

There are two mounting positions for the blade to cover the range of diameter.





Adjustment of the tool support by sliding: allows easy adjustment

according to diameter and optimization of tool wear.

- 30° and 45° outside bevel possible with optional tool holder
- Facing and bevelling in one operation
- Possibility to use two tools simultaneously



	Product Code	Facing machine for the following diameters (in mm)	Net weight	Minimal straight length of tube	Dimensions (HxLxI in mm)
1100W 120 V	DC25-MS1	Ø3 - Ø25.4 0.1 - 1"	2.5 kg	With standard jaws: 9mm (0.354") With micro-fit jaws: 5mm (0,196")	300x 370 x 76
Mains motor	DC65-MS1	Ø3 - Ø63.5 0.1 - 2.5"	5.5 kg	With standard jaws : 10mm (0,393")	132 x 345 x 340
1100W 230 V	DC25-MS2	Ø3 - Ø25.4 0.1 - 1"	2.5 kg	With standard jaws: 9mm (0.354") With micro-fit jaws: 5mm (0,196")	300x 370 x 76
Mains motor	DC65-MS2	Ø3 - Ø63.5 0.1 – 2.5"	5.5 kg	With standard jaws : 10mm (0,393")	132 x 345 x 340









#### **Clamping shells**

DC115 : Stainless steel clamping jaws

DC221 : Aluminium clamping jaws



## Accurate manual advance

0.1 mm steps (0,0393")

## 30° and 45° outside bevel

possible with optional tool holder

#### Easy set up of of tube

1 set of jaws for each diameter





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

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









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

Motor mains 1100W with large speed range (2 gears)

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

#### **High quality blades**

HSS TIALN blade.

Reversible, two cutting edges



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





### DC115-AM - 221-AM

#### **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 edge breaking possible with optional tool holder
- Squaring and edge breaking in one operation

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



- **Motor 1100W,** large speed range (2 gears): Screw and wheel drive to optimize the speed range and eliminate vibrations



	<b>Product Code</b>	Facing machine for the following diameters (in mm)	Net weight	Minimal straight len- gth of tube	Dimensions (HxLxI in mm)
120V	DC115-AM1	Ø12 - Ø115 0.5" - 4.5"	11 kg	28 mm 1.102"	219x314x462
Moteur 1100W	DC221-AM1	Ø50 - Ø220 2" - 8.5 "	21 kg	39 mm 1.535"	327x425x540
230 V Moteur 1100W	DC 115-AM2	Ø12 - Ø115 0.5" - 4.5"	11 kg	28 mm 1.102"	219x314x462
	DC221- AM2	Ø50 - Ø220 2" - 8.5 "	21 kg	39 mm 1.535"	327x425x540







### DC115-BM - 221-BM

# AXXAIR INNOVATIVE ORBITAL SOLUTIONS

#### 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** 





#### **1100 W motor**

Mains motor 1100W with large speed range (2 gears) Screw and wheel drive to optimize the speed range and eliminate vibrations

#### **Multi-tools**

Possibility to use 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 BM		ø115 mm ' - 4.5"		
DC221 BM		ø220 mm – 8.5 "		







### 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

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



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



	<b>Product Code</b>	Facing machine for the following diameters (in mm)	Net weight	Minimal straight length of tube	Dimensions (HxLxI in mm)
120V	DC115-BM1	Ø12 - Ø115 0.5" - 4.5"	37 kg	58 mm 2.283"	219x314x462
Moteur 1100 W	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

