

# MECANICA CATALOGUE March - 2025









#### MAS4000 SHARK: DOUBLE HEAD ALUMINUM PROFILE CUTTING MACHINE 4m. $\varnothing$ 550

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(45°& 90°) Only

**Cutting Capacity (up to)** 

Saw Blade Diameter:

Cutting Lenght  $max(90^{\circ})$ :

Cutting Lenght min (90°):

Power of Motor:

Tilting Range:



w:170mm x h: 380mm (at 90°)

Ø:550mm

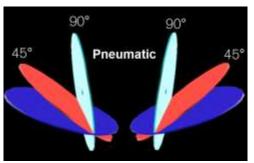
4.000mm, 8.000mm by software

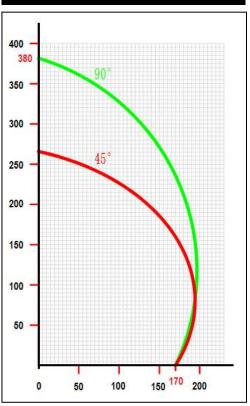
480mm

3kW

45° and 90° only

Double head cutting and serial cutting
Hydro pneumatic blade feeding
Frontal blade feed with speed adjustment
Pneumatic vertical support vices X 2pcs.
Automatic Profile Supports
Touchscreen CNC Control Board
Design in accordance with EEC regulations







# MAS7000 SHARK: DOUBLE HEAD ALUMINUM PROFILE CUTTING MACHINE 7 m. Ø550

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(45°& 90°) Only

**Cutting Capacity (up to)** 

Saw Blade Diameter:

Cutting Lenght max(90°):

Cutting Lenght min (90°):

Power of Motor:

Tilting Range:



w:170mm x h: 380mm (at 90°)

Ø:550mm

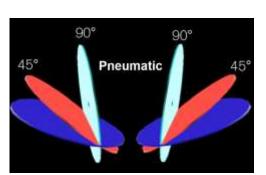
7.000mm, 14.000mm by software

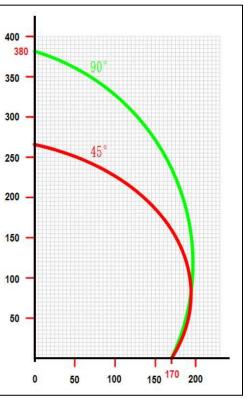
480mm

3kW

45° and 90° only

Double head cutting and serial cutting
Hydro pneumatic blade feeding
Frontal blade feed with speed adjustment
Pneumatic vertical support vices X 2pcs.
Automatic Profile Supports
Touchscreen CNC Control Board
Design in accordance with EEC regulations







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# MAS6800 SHARK/3: 3 AXIS SERVO CONTROLLED DOUBLE HEAD PROFILE CUTTING MC. 6,8m. $\emptyset$ 600



**Servomatic Tilting Heads** (All degrees from 135° to 22.5°) (Intermediate degrees can be cut fully automatically)

Cutting Capacity (up to)

Saw Blade Diameter: Ø:600mm

Cutting Lenght max(90°):

Cutting Lenght min (90°):

Power of Motor:

Tilting Range:



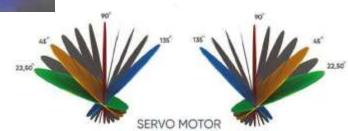
w:220mm x h: 288mm (at 90°)

6.800mm, 13.600mm by software

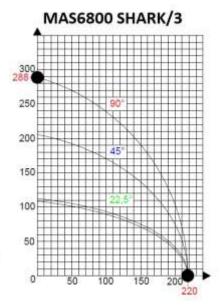
480mm

4kW

135° to 22.5°



Double head cutting and serial cutting
Hydro pneumatic blade feeding
Frontal blade feed with speed adjustment
Pneumatic vertical support vices X 2pcs.
Design in accordance with EEC regulations









# MAS6000 SHARK/5: 5 AXIS SERVO CONTROLLED DOUBLE HEAD PROFILE CUTTING MACHINE 6m. $\emptyset$ 600

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MECANICA MAS6000

**5 Axis Control for Compound Cuts** 

**Full CNC Control for Automatic cutting of Large Alu Profiles** 

Saw Blade Diameter: Ø:600mm

Cutting Lenght  $max(90^{\circ})$ : 6.000mm,12.000mm software

Power of Motors: 7,5kW

135° to 22.5° Tilting Range:

45° to 90° **Rotation Range:** 

Cutting Capacity (up to) w:500mm x h: 210mm (at 90°)

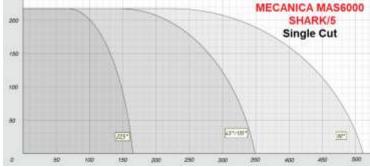
Double head cutting and serial cutting

Hydro pneumatic blade feeding

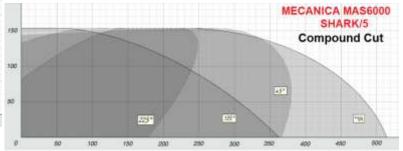
Frontal and upwards blade feed with speed adjustment

Pneumatic vertical support vices X 2pcs.

Designed in accordance with EEC regulations



Video1













X Axis (Longitidunal Axis)

MAT3000 ORCA/4:

Machining Length 3.000mm. (6.000 by shifting profiles) mm.

Max. Axis Speed: 100 m/min.

Y Axis (Transversal Axis)

510mm Y Axis Stroke mm.

m/min. 60 m/min. Max. Axis Speed:

Z Axis (Vertical Axis)

300 Z Axis Stroke mm.

Max. Axis Speed: 40 m/min.

A Axis (Profile Rotation Axis) ± 90°

**Electro-Spindle ISO 30** 24.000 rpm

**Spindle Power** 9.5kW - S1

No. Of Tools 6 Positions

**Tool Length Measurement** Automatic

No. Of Clamps 4 ( with **Servo Motor** Movement)

Handwheel for manul and safe operation

**Barcode Reader** 





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### **Single Zone & Closed Cabinet**



4 Axis Machining Capacity at A axis: 0°

L: 3.000 x W: 250mm x H: 250mm

L: 6.000 x W: 250mm x H: 250mm – by Software



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# MAT3000L ORCA/4 LASER:

#### X Axis (Longitidunal Axis)

Machining Length mm.

Max. Speed:

#### Y Axis (Transversal Axis)

Y Axis Stroke mm. Max. Speed: m/min.

#### **Z Axis (Vertical Axis)**

Z Axis Stroke mm.

Max. Speed:

A Axis (Profile Rotation Axis)

**Laser Cutting Head Screw Type Air Compressor** 

**Electro-Spindle ISO 30** 

**Spindle Power** 

No. Of Tools

**Tool Length Measurement** 

No. Of Clamps

No. Of Profile Reference Points:

# 4 Axis CNC Profile Machining & Laser Cutting Center

3.000mm.

(6.000mm by software)

130 m/min.

510mm

60 m/min.

300

30 m/min.

± 90°

2kW Fiber Laser- Dry Air Cooling + Chiller Unit for Laser 11kW

24.000 rpm

9.5kW - S1

Automatic

4 ( Servo Motor Movement)

2 (1 at left side, 1 at right side)







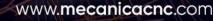




L: 3.000 x W: 250mm x H: 200mm

L: 6.000 x W: 250mm x H: 200mm – by Software







# (f) (a) (b) (in) (c)

# MAT4000 ORCA/4: 4 Axis CNC Profile Machining Center

X Axis (Longitidunal Axis)

Machining Length mm. 4.000mm. (8.000 by shifting profiles)

Max. Axis Speed: 100 m/min.

Y Axis (Transversal Axis)

Y Axis Stroke mm. 510mm

Max. Axis Speed: m/min. 60 m/min.

Z Axis (Vertical Axis)

Z Axis Stroke mm. 300

Max. Axis Speed: 40 m/min.

A Axis (Profile Rotation Axis)  $\pm 90^{\circ}$ 

Electro-Spindle ISO 30 24.000 rpm

**Spindle Power** 9.5kW – S1

No. Of Tools 6 Positions

**Tool Length Measurement** Automatic

No. Of Clamps 4 ( with Servo Motor Movement)

Handwheel for manul and safe operation

**Barcode Reader** 

# Single Zone & Closed Cabinet





4 Axis Machining Capacity at A axis: 0°

L: 4.000 x W: 300mm x H: 250mm

.: 8.000 x **W: 300mm x H: 250mm – by Software** 



# MAT4000L ORCA/4 LASER: 4 Axis CNC Profile Machining & Laser Cutting Center

# **Patented Inovation!!!**

X Axis (Longitidunal Axis)

Machining Length

mm. 4.000mm.

(8.000mm by software)

Max. Speed: 130 m/min.

Y Axis (Transversal Axis)

Y Axis Stroke mm. 510mm Max. Speed: m/min. 60 m/min.

Z Axis (Vertical Axis)

Z Axis Stroke mm. 300

Max. Speed: 30 m/min.

A Axis (Profile Rotation Axis)  $\pm 90^{\circ}$ 

Laser Cutting Head 2kW Fiber Laser – Dry Air Cooling
Screw Type Air Compressor 11kW + Chiller Unit for Laser

Screw Type Air Compressor 11kW + Chiller Ur Electro-Spindle ISO 30 24.000 rpm

**Spindle Power** 9.5kW – S1

No. Of Tools

. . .

**Tool Length Measurement** Automatic

No. Of Clamps 4 ( Servo Motor Movement)

**No. Of Profile Reference Points:** 2 (1 at left side, 1 at right side)







Video1



Video2





4 Axis Machining Capacity at A axis: 0°

L: 4.000 x W: 300mm x H: 250mm

L: 8.000 x W: 300mm x H: 250mm – by Software



# MAT4800 ORCA/5: 5 Axis CNC Profile Machining Center

X Axis (Longitidunal Axis)

Machining Length

mm. 5.500mm. (4 Axis)

4.800mm. (5 Axis)

Max. Speed: 125 m/min.

Y Axis (Transversal Axis)

Y Axis Stroke mm. 900mm Max. Speed: m/min. 60 m/min.

Z Axis (Vertical Axis)

Z Axis Stroke mm. 560

Max. Speed: 60 m/min.

A Axis (Profile Rotation Axis) ± 125°

C Axis (Spindle Rotation Axis)  $\pm 90^{\circ}$ 

Electro-Spindle ISO 30 24.000 rpm

**Spindle Power** 9.5kW – S1

**No. Of Tools** 12 + 1 (**Ø:300mm** Saw Blade)

**Tool Length Measurement** Automatic

No. Of Clamps 6 ( Automatic Movement by Spindle Head)

Handwheel for manul and safe operation



# Single Zone & Closed Cabinet





**DPR**® Dynamic Profile Referencing System On Spindle Head !!!

5 Axis Machining Capacity at A axis: 0°

L: 4800 x **W: 300mm x H: 250mm** 

4 Axis Machining Capacity at A axis: 0°

L: 5500 x W: 300mm x H: 250mm





# MAT6800 ORCA/5: 5 Axis CNC Profile Machining Center

#### X Axis (Longitidunal Axis)

(f) (a) (b) (in) (c)

Machining Length mm. 7.500mm. (4 Axis)

6.800mm. (5 Axis)

Max. Speed: 125 m/min.

#### Y Axis (Transversal Axis)

Y Axis Stroke mm. 900mm Max. Speed: m/min. 60 m/min.

#### Z Axis (Vertical Axis)

Z Axis Stroke mm. 560

Max. Speed: 60 m/min.

A Axis (Profile Rotation Axis) ± 125°

C Axis (Spindle Rotation Axis)  $\pm 90^{\circ}$ 

Electro-Spindle ISO 30 24.000 rpm

**Spindle Power** 9.5kW – S1

**No. Of Tools** 12 + 1 (**Ø:300mm** Saw Blade)

**Tool Length Measurement** Automatic

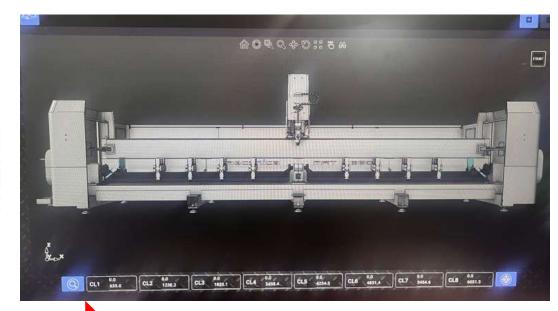
No. Of Clamps 8 (4+4 Left& Right Automatic Movement by Spindle Head)

Handwheel for manul and safe operation





#### **Dual Zone & Pendular Working**



**DPR**® Dynamic Profile
Referencing System On Spindle
Head !!! + 2 Fixed Ref Points

5 Axis Machining Capacity at A axis: 0°

L: 6800 x **W: 300mm x H: 250mm** 

4 Axis Machining Capacity at A axis: 0°

L: 7500 x W: 300mm x H: 250mm





Video2



MAT7000 ORCA/4: 4 Axis CNC Profile Machining Center

X Axis (Longitidunal Axis)

Machining Length mm. 7.000mm. (4 Axis)

Max. Speed: 110 m/min.

Y Axis (Transversal Axis)

Y Axis Stroke mm. 1410mm Max. Speed: m/min. 60 m/min.

Z Axis (Vertical Axis)

Z Axis Stroke mm. 500

Max. Speed: 40 m/min.

A Axis (Profile Rotation Axis)  $\pm 90^{\circ}$ 

Electro-Spindle ISO 30 24.000 rpm

**Spindle Power** 9.5kW – S1

No. Of Tools 8 Positions ATC

**Tool Length Measurement** Automatic

No. Of Clamps 6 (3+3 Left& Right Automatic Movement by Spindle Head)

Automatic Clamp Spacing Setup by Servo Motors

Handwheel for manul and safe operation





**Dual Zone & Pendular Working** 



4 Axis Machining Capacity at A axis: 0°

L: 7000 x **W: 350mm x H: 350mm** 



# MCN6600 LYNX: 3 Axis CNC Panel Machining Center

X Axis: 6650 mm Y Axis: 1600 mm Z Axis: 200 mm

Pendular (Dual zone) working. Independent 2- zone working ability that bypasses the loading-unloading time. Possibility of working with 1250 X3200mm sized composite panels in dual zone.

- Z Axis: 200mm (Net Machining Height 100mm)
- Electro-Spindle Motor type: HSD 7,5 kW ISO30 ER32 Automatic Tool Changing
- Electro-Spindle Speed: 0 24.000 rpm
- X Axis Rapid Speed: 60 m/min.
- Y Axis Rapid Speed: 60 m/min.
- Z Axis Rapid Speed: 40 m/min.
- Tool Magazine: 12 Position, Under the Bridge for Fast Machining & Fast Tool Changing
- Automatic Tool Lubrication System: Microdrop Type (Solid alu Sheet Machining)
- Automatic Vortex® Toll Cooling System. (-12°C, 10 Bar) (A2 Non-Flameble ACP Machining)
- Automatic Centralised Lineer Guides Lubricating Sytem (X, Y, Z Axes Maintenance Free)
- Safety Light Barrier for conformity with CE Security Standards
- 5,5kW Suction Unit for Maching Chips& Dust for Clean Working Area
- 3 Pcs Vacuum Pomps, hydraulic Type: 250m³/h. x 2 = 500m³/h.
- 12 Positions ISO30 Type Tools Magasine & Tools Set
- Fully ; Automatically Operated Vacuum Table for Material Holding
- Steel Construction + Alu. Vacuum Channels + MDF Table Top Recahangeble.
- Automatic Tool Measurement System for Accurate Machining
- Handwheel for manul and safe operation

Video1











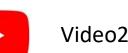


# MCN4220 LYNX: 3 Axis CNC Panel Machining Center

X Axis: 4250 mm Y Axis: 1600 mm Z Axis: 200 mm

- Electro-Spindle Motor type: HSD 7,5 kW ISO30 ER32 Automatic Tool Changing
- Electro-Spindle Speed: 0 24.000 rpm
- X Axis Rapid Speed: 60 m/min.
- Y Axis Rapid Speed: 60 m/min.
- Z Axis Rapid Speed: 40 m/min.
- Tool Magazine: 12 Position, Under the Bridge for Fast Tool Changing
- Automatic Tool Lubrication System: (Solid alu Sheet Machining)
- Automatic Vortex® Toll Cooling System. (-12°C, 10 Bar) (A2 Non-Flameble ACP Machining)
- Automatic Centralised Lineer Guides Lubricating Sytem (X, Y, Z Axes – Maintenance Free)
- Safety Light Barrier for conformity with CE Security Standards
- 5,5kW Suction Unit for Maching Chips& Dust for Clean Working Area
- 2 Pcs Vacuum Pomps, hydraulic Type: 250m³/h. x 2 = 500m³/h.
- 12 Positions ISO30 Type Tools Magasine & Tools Set
- Fully ; Automatically Operated Vacuum Table for Material Holding
- Steel Construction + Alu. Vacuum Channels + MDF Table Top Recahangeble.
- Automatic Tool Measurement System for Accurate Machining
- Handwheel for manul and safe operation







Video1





#### MTK600E: 3 AXIS CNC CONTROLLED INDUSTRIAL ALUMINUM PROFILE CUTTING MACHINE

- High-Performance Automatic Circular Saw
- Designed for cutting of Industrial aluminium profiles for Automotive Industry
- Full automatic operation by CNC Touch Screen Control Unit
- Sawblade Motor Power: 18,5 kW
- Sawblade Diameter: Ø 600mm
- Cutting Capacity: W:420mm x H: 200mm
- Profile Feeding Speed: Automatic by Servocontrol
- Saw Blade Feeding Speed: Automatic by Servocontrol
- Saw Blade Rot. Speed: 0-2.750rpm Adjustable by a Convertor
- Max. Profile Feeding Length: 1000mm
- Min. Cut Piece Length: 4mm
- P.I.D. Control on Saw Blade Speed Feeding Speed
- Saw Blade vibration dampers made of special material for high cutting accuracy
- Saw blade Automatic Cooling by Micro Drop Lubrication
- Additional Vertex Air cooling System for Saw Blade for Higher accuracy and life time of saw baldes
- Patented Profile Feeding Carriage with triple level
- Centralised Lubirication of Linear Guides
- Seperate Gauge for each Penumatic Clamp



#### **Options:**

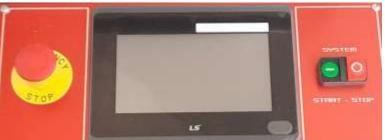
Automatic Profile Loading Conveyor 7m Automatic Cut Pieces Unloading Table Clean Cut - Suction unit for aluminum chips:





#### MTK500E PLC CONTROLLED INDUSTRIAL ALUMINUM PROFILE CUTTING MACHINE









Designed for fully automatical feeding and cutting of Aluminum Bars, Profiles, Corner Cleats and Industrial Work Pieces at 90° fixed angle.



• Saw Blade Motor: **7,5kW** Motor

Saw Blade Speed: 3. 000 rpm

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• Min. Cutting Length: 4mm

• Max. Cutting Length: 1.000mm

PLC Control Unit with Touch Screen

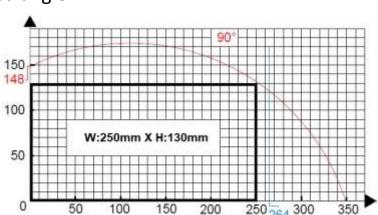
4 pcs Seperate gauge for each Penumatic Clamp

Blade Cooling System with mineral Cutting Oil

- Servomotor for profile feeding
- Servomor for saw blade feeding
- Special cut piece seperation system for perfect cutting surfaces
- High productivity due to robust design and powerful cutting motor
- Profile loading roller conveyor in 4meter length
- Suction unit for collecting aluminum chips

# **Options:**

Manual Profile Loading Conveyor 4m Clean Cut - Suction unit for aluminum chips





#### MDK550E 4 AXIS CNC CONTROLLED INDUSTRIAL PROFILE CUTTING AND DRILLING CENTRE





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HSD E330 ISO30

Spindle Motor Max. Speed

Auto Tool Changing Sysyem:

• Saw Blade diameter :

• Saw Blade Motor Power:

• Blade Rotation Speed :

• Profile Feeding Speed:

Saw Blade Feeding Speed:

Cutting Capacity:

4kW spindle motor for Drilling & Tapping

0- 18.000 rpm

6 position magasine

550mm

11 kW.

**Full Automatic Convertor** 

Automatic by Servocontrol

Automatic by Servocontrol

W:400mm x H: 175mm

Designed for Small Aluminum Parts production with drilling and tapping operations on them.

4 Axis CNC controlled, MDK550E can perform tapping after drilling and then cutting. Automatic Tool Cahnging System supplies mulit operational production.

Multiple bars can be loaded side by side also.

#### **Options:**

Automatic Profile Loading Conveyor 7m:

Automatic Cut Pieces Unloading Table:

Clean Cut - Suction unit for aluminum chips:





#### MPK300E: INDUSTRIAL ALUMINUM PROFILE PUNCHING AND CUTTING MACHINE

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#### **Options:**

Hydraulic Punching Die - Custom Made – Single piece side by side Hydraulic Punching Die - Custom Made - Double piece side by side Clean Cut - Suction unit for aluminum chips:



MECANICA can produce custom designed machines for specific customer demands.

MPK300E is designed for Small Aluminum Parts production especially for Solar Panel fixing brackets and clapms made by aluminum. With a Hydraulic Punching unit and Cutting Saw; Alu. punching and cutting operations are done precisely. According to customer's technical drawings we can produce specific Die Sets for the machine.

Profile Feeding is done by a servo-motor

MPK300E can perform also double part production side by side optionally.



# MDK300E/2: INDUSTRIAL PROFILE DRILLING, TAPPING AND CUTTING MACHINE WITH 2 SPINDLES

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Designed for Small Aluminum Parts production one Drilling Head, one Tapping Head and also Cutting Saw Blade unit

MDK300E/2 performs tapping after drilling and finally cut to lencth operations for small size aluminum profile parts.

Profile Feeding is done by a servo-motor.

### **Options:**

Automatic Profile Loading Conveyor 7m: Automatic Cut Pieces Unloading Table: Clean Cut - Suction unit for aluminum chips:







# MDK300E/3: INDUSTRIAL PROFILE DRILLING, MILLING, TAPPING AND CUTTING MACHINE WITH 6 SPINDLES



Designed for Small Aluminum Parts production with holes at 3 sides and tapping operation and Cutting them. Machine has 12 axis system which let driling and also making slots avaliable.

MDK can perform tapping after drilling and then cutting.

Multiple bars can be loaded side by side also.

#### **Options:**

Automatic Profile Loading Conveyor 7m:
Automatic Cut Pieces Unloading Table:
Clean Cut - Suction unit for aluminum chips:







### MAK 550 AUTOMATIC NOTCHING SAW FOR ALUMINUM PROFILES

#### **Automatic Notching Machine for Aluminum Facade Profiles.**

2 Angular Axis and 2 Linear Axis manually controlled by Encoder and Digital Readout and fully automatic working cycle. Material fixed on feeding table & Saw blades moving on linear guides with linear ball bearings.

- Notching dimension: W:185mm x H: 215mm vertical at (90°)
- Swiveling range vertical saw blade 30°-90°-30° manual setup
- Swiveling range horizontal saw blade, 30°-90°-30°, manual setup
- Profile support bar rotary: left / right 30°-90°-30°, manual setup
- Notching Depth Adjustment by hand Wheel: 0 185mm
- Notching Heigth Adjustment by Motor: 0 - 215 mm
- Notching Height Adjustment –Z Axis- by means of Asencron Motor
- Main Carriage travels on Linear Guides by Linear Bearings
- Carriage movent by motor and Rack&Pignion System
- All Manual Axis Setup parameters controlled by Encoder & Digital
- Laser Light Guided Cutting operations botf Vertical & Horizontal Saw
- Blade Cooling System with mineral Cutting Oil





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#### **MAK 500 MANUAL NOTCHING SAW**

Manual Notching Saw Machine for aluminum Mullion and Transom Facade Profiles used especially for the production of curtain walls and greenhouses.

Manual operation with slidable supporting table. Both Vertical and Horizontal Saw Blades are fixed and the Profiles are movable by the support table that is movable from left to right.

Saw blades fixed & Material moving on feeding table with circular ball bearings. Feeding Table can be tilted manually, both left and right from +30°, 90°, -30° for making Compound Cuts

\* Notching dimension: W:185mm x H: 185mm vertical at (90°)

Notching Height djustable manually by hand Wheel by Meter Scale Notching Depth djustable manually by hand Wheel by Meter Scale











#### MGR450 SINGLE HEAD CROSS CUT SAW

Designed for cutting Large aluminum profiles sections, MGR450 is single head cross cut saw with inverter driven cutting head movement on linear guides by a feeding motor with speed adjustment, ensures the highest cutting quality of profiles up to 600mm wide.

Cutting Capacity: W:600mm x H:175mm (both axes at 90°)

Cutting Capacity: W:420mm x H:175mm (Vertical axis at 45° and Horizontal axis 90°)

Cutting Capacity: W:600mm x H:120mm (Vertical axis at 90° and Horizontal axis 45°)

Cutting Capacity: W:450mm x H:120mm (Vertical axis at 45° and Horizontal axis 45°)

Cutting Saw Motor Power: 3kW

Saw Blade Diameter: Ø:450mm

Feeding Motor Power: 0,75kW

Digital Read Out for Cutting Head Rotational Axis

Digital Read Out for Cutting Head Inclination Axis

Changable Table Top made of Plywood

Vertical Pneumatic Clamps with Adjustable Arms



# **Options:**

LH - 4m loading roller conveyor - heavy duty

RH - 4m unloading roller conveyor with digital read out— **heavy duty** 







#### MPR 3000/4 4 HEAD CNC CONTROLLED ALUMINIUM CORNER CRIMPING MACHINE

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Specially designed for Aluminum Doors &Windows systems, MPR3000/4 is able to crimp aluminum profile frames 4 Corners simultaneously. It enables to produce perfect and stiff frame corners thanks to its 23 Axis CNC controlled and pressure adjustable hydraulic crimping blocks together with inner supporting unit of the frames



Max. Frame Size: 2.200mm x 3.000mm

Min Frame Size: 490mm x 700mm

In feed Table Size: 2.900mm x 3.300mm

Out Feed Table Size: 2.900mm x 3.300mm

Overall Dimension (L\*W\*H): 11.900mm x3.800mm x 2600mm



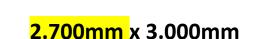






#### MPR 3000/4XL 4 HEAD CNC CONTROLLED ALUMINIUM CORNER CRIMPING MACHINE

Specially designed for Aluminum Doors &Windows systems, MPR3000/4XL is able to crimp aluminum profile frames 4 Corners simultaneously. It enables to produce perfect and stiff frame corners thanks to its **23 Axis CNC control**led and pressure adjustable hydraulic crimping blocks together with inner supporting unit of the frames



Min Frame Size: 490mm x 700mm

In feed Table Size: 2.900mm x 3.300mm

Out Feed Table Size: 2.900mm x 3.300mm

Overall Dimension (L\*W\*H): 11.900mm x4.300mm x

2600mm







Max. Frame Size:







#### MPR 10000 ALUMINIUM CORNER CRIMPING MACHINE

Specially designed for modular aluminum panel profile series, (unitised facades) large sectioned sliding doors and windows systems, MPR is able to crimp high aluminum profile frames up to 30cm. It enables to produce perfect and stiff frame corners thanks to its PLC controlled and pressure adjustable hydraulic crimping blocks together with inner supporting unit of the frames

- Max. Frame Height inside the machine: 300mm
- Max. upper Crimping Knife height: 250mm
- Double food pedal supplying simultaneous and perfect crimping quality
- Pressing Power: Standard: 100 Bar (Adjustable between 0 − 100 Bar max)
- -Crimping Heads adjustable between: 25-60mm according to Corner Cleats' Grove size
- -Easliy adjustable crimping heads with milimetric scale
- 4 sets (8 pieces) crimping knives(thickness: 3, 5, 7, 10mm)
- 2 pcs sviwelling support arms for aluminum frames







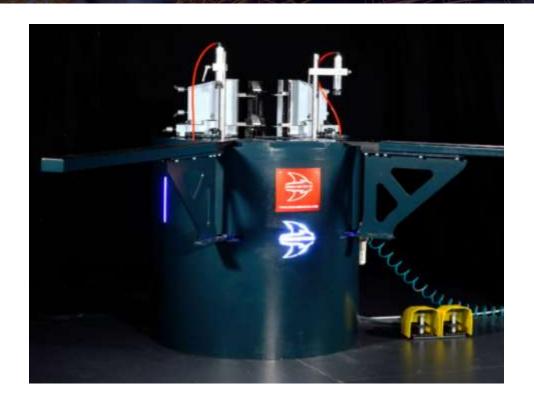




#### MPR 7000 ALUMINIUM CORNER CRIMPING MACHINE

MPR 7000 is able to crimp high aluminum profile frames up to 18cm. It enables to produce perfect and stiff frame corners thanks to its PLC controlled and pressure adjustable hydraulic crimping blocks together with inner supporting unit of the frames

- Max. Frame Height inside the machine: 250mm
- Max. upper Crimping Knife height: 180mm
- Double food pedal supplying simultaneous and perfect crimping quality
- Pressing Power: Standard: 70 Bar (Adjustable between 0 70 Bar max.)
- Crimping Heads adjustable between: 25-60mm according to Corner Cleats' Grove size
- Easily adjustable crimping heads with millimetric scale
- 4 set (8 pieces) crimping knives(thickness: 3, 5, 7, 10mm)
- Sviwelling support arms for aluminum frames









#### MFT6000 AUTOMATIC GASKET INSERTING MACHINE

MFT6000 is a machine designed for eliminating lost time for gasket insertion process and also for increasing the quality of this process for aluminum curtain wall and doors-windows production. Aluminum profiles with W:200mm x H200mm cross section, cut in to any length, are passed through the machine by the control of a single operator and thus the insertion is accomplished automatically and in a faster and proper way.

This machine is able to insert gaskets to the profiles and also to profile bars in total length but not able to insert gaskets to the finished aluminum frames. Profiles with multi gasket chambers on the same side of the profiles especially like curtain walls mullion and transom profiles; the machine is able to perform the insertion of gaskets more than one, simultaneously and thus performing the insertion even in shorter times. As a result, labor cost is decreased while increasing the quality of the work.











#### MFT7000K AUTOMATIC BRUSH WICK INSERTING & FIXING MACHINE

MFT7000 is a single axis servo controlled machine, designed for eliminating lost time for brush type gasket insertion process and also for increasing the quality of this process for aluminum sliding doors and windows production. Aluminum profiles with max. Size upto **W:85mm x H200mm** are placed into the machine by the operatör and by the servomatic movement of the insertion head, brush type wick is insertied and fixed in the channels automatically. Finally, ater the insertion finished, machine unloads profiles automatically to stacking conveyors on the right side in a fast and proper way.

This machine is able to insert gaskets to the profiles and also to profile bars in total length up to **7meter** long but not able to insert gaskets to the finished aluminum frames. Profiles with multi gasket chambers on the same side of the profiles especially like sliding doors profiles. Machine is able to perform the insertion of gaskets of 2 profiles simultaneouslymore than one, simultaneously and thus performing the insertion even in shorter times. As a result, labor cost is decreased while increasing the quality of the work.











# MPM300/4F SEMI AUTOMATIC PROTECTION TAPE APPLICATION MACHINE FOR ALU. PROFILES

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MPM300/4F Packaging machine for Aluminum facade, window and door profiles with apolyethylene nylon film lamination on the 4 sides simultaneously. Machine can apply protective film up to 300mm x 300mm sized profiles

Machine is easy to set up and operate by 2 workers. It includes loading and unloading roller conveyors for profiles up to 7 meter long..

- •Working capacity (Profile dimensions):
- •Profile Cross Section Siz: 300 mm x 300mm
- Profile Length: Limitless (Normally 7 meters)
- •Profile Feeding speed: 0-30m/min.
- •Profile Faces to be Laminated by Protective Film: 4 sides











#### MPM500 SEMIAUTOMATIC WRAPPING MACHINE W&D FRAMES

MPM500 Packaging machine for window and door frames wraps door and window frame profiles with a polyethylene air bubble or nylon film, wrapping the nylon along the profile edges of the frame. It is used only for wrapping the frames without glass inside. Thanks to its practical design, big sized frames can be packed with one or two workers only without any limitaion on the size of the frames within a very short time depending on how many layers of wrapping you want to make and what is the size of overlapping.

Rotary opening plate allows to bypass transom profiles inside the frames to be able to easily wrap the frames. At the end of the wrapping cycle, a cutting unit cuts the nylon film used.

Working capacity (Frame dimensions):

•Min. inner size 350 mm x 350mm

•Max. inner size: Limitless

Max. Frame Thickness: 250mm









# MAF500/3 3 HEAD ALUMINIUM COPY ROUTER MACHINE

Aluminum copy router with horizontal two spindle and vertical one spindle that can has machining aluminium profiles. Wide machining area and movable profile cylinder can give more capability on z axis and has ability to machining small pieces. After aluminium profile clamped to the machine, it has ability to machining upside- backside and frontside at once.

3 milling Motors: 0.75 kW each Motor Speed: 12.000 rpm

Horizontal and vertical pneumatic clamps.

Tool Cooling with Venturi Oil Coolant System on each head

Vertical Head Machining Size: X:365 x Y:230 x Z:150 mm

Horizontal Heads Mc. Size: X: 250 x Z:100 mm

Rear motor stroke: 70 mm

Frontalmotor stroke: 90 mm

2 standard templates:

1 for Vertical Head, 1 for Horizontal Heads





# **Options:**

LH -Manual Profile Conveyor 2m RH- Manual Profile Conveyor 2m







#### MAF500/1 SINGLE HEAD ALUMINIUM COPY ROUTER MACHINE WITH ROTATING TABLE

Single head copy router with rotating beam for milling Aluminum Profiles on 3 faces, with pneumatic lubrication, 3 pneumatic tracer points. Turning table at can be positioned at - 90°/0°/+90°. Also machining at any intermediate angle is possible. Quick and easy adjustment of the tracer points. Machine is equipped with variable speed spindle adjusted by inverter and potentiometer (from 2800 to 12000rpm) with Threephase motor 1,5HP. With 4 movable pneumatic clamps. Specially adressed for working on aluminium and steel Doors&Windows Profiles.

Collet Ø 8 mm

4x pneumatic clamps

3x tracer points with 3 diameters: 5/8/10 mm

5x manual stops

1x copy template for standard executions

Pneumatic spray mist lubrication

Air filter - Air gun





# **Options:**

LH -Manual Profile Conveyor 2m RH- Manual Profile Conveyor 2m





#### MFR700 END MILLING MACHINE FOR ALU. WINDOW PROFILES

Single head End Milling Machine for aluminium and PVC Doors & Windows Profiles. Machine performs 90° end milling applications and ideal for the small fabricator or secondary operations in larger producers. Mainly used to prepare transom connections on aluminium, pvc window and door products. Also suitable for some limited curtain wall applications.

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Routing capacity	250×130 mm
Vertical stroke	130 mm
Speed of rotating tool	4850 rpm
Power of the motor	2,2 kW









#### MAS450 SINGLE HEAD RISING BLADE ALUMINUM CUTTING MACHINE

Manual Cutting Angles (90° - 45° - 30° left and right)

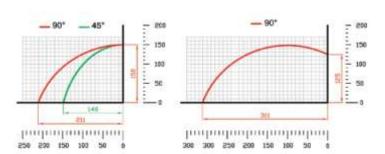
For manual cutting angles

Mechanical stops for intermedite angles

Automatic blade rising with two hand safety systems

Saw Blade Motor Power: 3 kW

Saw Blade Speed: 3. 000rpm
Saw Blade Diameter: Ø:450mm
Venturi Blade Cooling System with Oil





Loading Roller Conveyor 4m:

Unloading Roller Conveyor 4m with (Digital Readout and Encoder): HMI Control Unit with Touch Screen and 1 axis Servo Motor:







#### MAS350 RISING BLADE ALUMINIUM GLAZING BEAD CUTTING MACHINE

Designed to cut aluminum glazing bead profiles and all other small size aluminium profiles. With simple and practical usage of the machine, it is core of all aluminium doors and window makers

Saw Blade Motor Power: 1,5 kW

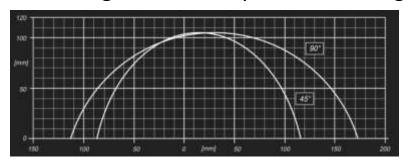
Saw Blade Speed: 3. 000rpm

Saw Blade Diameter: Ø:350mm

Venturi Blade Cooling System with Oil

Loading Roller Conveyor 6m. – Optional

Unloading Roller Conveyor 4m. With Digital Readout and Encoder - Optional





#### **Options:**

Loading Roller Conveyor 6m: Unloading Roller Conveyor 4m: (Digital Readout and Encoder)







### **MOS6000 P.V. Solar Panel Aluminum Frame Profile Cutting Line**

Designed and engineered for full automatic cutting of the aluminum frame profiles of Solar pannels.

The line consists of a double head aluminum profiles cutting machine, working with fully automatic loading and unloading conveyors.

Frame profiles are cut in long and short sizes in automatic cycle. Long cut pieces are unloaded onto the long conveyor and short cut pieces are unloaded onto short conveyors.

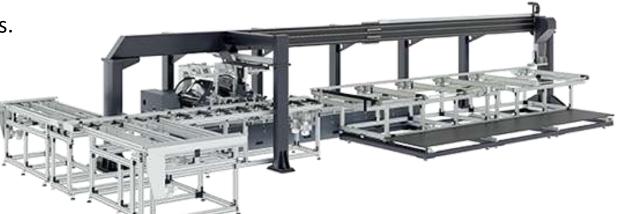
1 complete frame (4 profile pieces) are cut within 20 seconds.

4 profiles can be cut simultaneously side by side.













### MOS6000CP: P.V. Solar Panel Aluminum Frame Profile Cutting & Processing Line

Mos6000CP has produced for solar panel Aluminium frame long and short parts 6 pcs 45 degree cutting, drilling, punching and also corner cleat inserting and punching operation.

Complete Solar panel aluminium frame production line has two main sections:

- Short profiles production line
- Long profiles production line

**Hourly Frame Production: 450-500 /set** (Finished Frames)









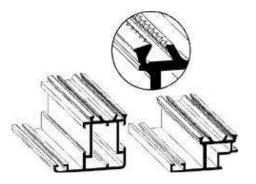


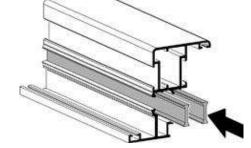


### MTB 06: 6 AXIS CNC CONTROLLED THERMAL BRAKE PROFILES KNURLING MACHINE

Designed for full automatic knurling of thermally insulated aluminum profiles for Doors, Windows and Facade Systems. MTB-06 Knurling machine has 6 CNC Controlled and servo motor driven independent axis for easy operation and fast set up time.

It has also optional BarCode device and Full automatic Profile Loading and Unloading Roller Conveyors.









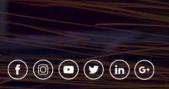
**Knurling** 



**Poliyamid Insertion** 







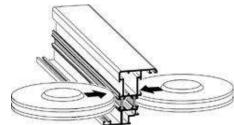


### MTB 14: 14 AXIS CNC CONTROLLED THERMAL BRAKE PROFILES ASSEMBLY MACHINE

Designed for full automatic assembly of thermally insulated aluminum profiles Doors, Windows and Facade Systems. MTB-14 has 14 CNC Cotrolled and Servo driv independent Axis for Easy handling and fast machine set up time.

It has optional Load Cell Devices for measuring thecrimping/assembly force, BarCo device and Full automatic Profile Loading and Unloading Roller Conveyors.

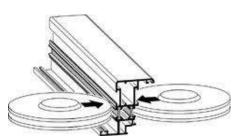
Nominal Production Capacity: 100 Bars / Hour (6 meter each in Length)



**Profile Assembly Process by Rolling** 



Video2









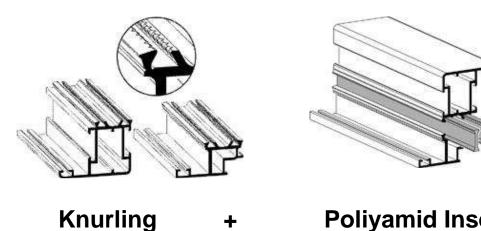




### MTB 06 UNICA/K: 6 AXIS SEMI AUTOMATIC THERMAL BRAKE PROFILES KNURLING MACHINE

Designed for semi automatic knurling of thermally insulated aluminum profiles for Doors, Windows and Facade Systems. MTB-06 Knurling machine has 6 independent manually adjustable axis for easy operation and fast set up time. Machine can make the knurling and poliamide bars insertion simultaneously.

It has optional Profile Loading and Unloading Roller Conveyors.







**Poliyamid Insertion** 







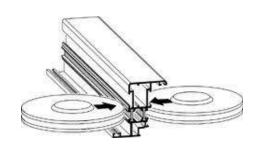
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### MTB 06 UNICA-M: SEMI AUTOMATIC THERMAL BRAKE PROFILES ASSEMBLY MACHINE

Designed for semi automatic assembly of thermally insulated aluminum profiles for Doors, Windows and Facade Systems. Machine is easy to set up and operate for the production of Thermally insulated Aluminum Profiles. Manual hand wheels and analog read outs make it fast to set up the machine.

It has optional 3 Sets of Load Cell devices for measuring crimping / assembly force and Profile Loading and Unloading Roller Conveyors.

Nominal Production Capacity: 80 Bars / Hour (6 meter each in Length)



### **Profile Assembly Process by Rolling**









### MBD1300 CNC ALUMINIUM BUMPER PROFILE PRODUCTION LINE

3 Axes servo controlled production line for aluminum bumper profiles for automative

Precise and fast production with 100% Quality Control at 3 stations in total

- 1. Station: 7 axis Servo controlled profile bending and reference hole drilling
- 2. Station: 6 axis Servo controlled profile multiple drilling and net (precise ) size cut
- 3. Station: 100% quality control and marking of parts produced with 5 High Definition Cameras

Fully quality checked and branded in 60 seconds



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### MDT-2000: Telescopic Assembly Bench for Aluminium Door and Window Frames:

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Assembly bench for aluminium doors and windows frames

Standing surfaces coated in EPDM,
Support feet for transport built into the base,
3 Pieces telescopic support arms
Epdm gasket rolls on both sides





### MTA-01: Trolley for Transporting and Storing Aluminium Doors and Frames:



Trolley for transporting and storing aluminium doors and windows frames

Standing surfaces coated in EPDM, Support feet for transport built into the base, 4 Pieces swivel castors, 150 mm with brake,



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### MTA-02: Trolley for Transporting and Storing Cut Profiles



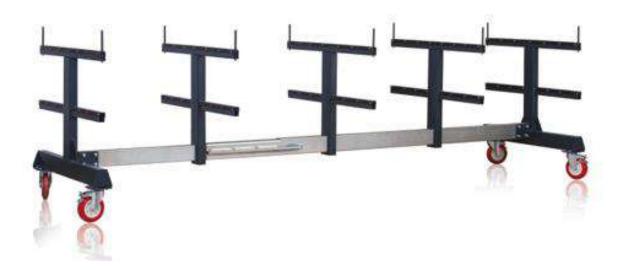
Suitable every kind of cutted aluminium,pvc etc. profiles.

5 vertical compartments,
Surfaces coated in epdm,
Adjustable central supports,
Operator protection shields,
4 pieces swivel castors, 150 mm,
2 pieces with brake



## mecanica 19

### MTA-03: Trolley for Handling&Storage of Extruded Profiles



Trolley for handling and storage of extruded profiles

2 vertical compartments,Surface of contact covered with EPDM,Adjustable central uprights,4 Swivel castor with brake,





### MTA-04: Trolley for Transporting and Storing Frames



Trolley for transporting and storing frames designed specially for integration in assembly.

Width of compartments: 100,130,160mm,
Number of compartments: 5 -10 stand,
With a nominal width of 1000 mm fitted with rollers contact
surfaces coated in MDF,
4 pieces swivel castors, 150mm tube ( 2 pieces swivel
castors with brake),
Handle for moving,





### MTA-05: Trolley for Transporting and Storing Heavy Frames



Trolley for transporting and storing frames designed specially for integration in assembly.

Width of compartments: 175mm

Number of compartments: 5

Number of roller support: 10

With a nominal width of 1000 mm fitted with rollers contact surfaces

coated in MDF

4 pieces swivel castors, 150mm tube (2 pieces swivel castors with brake)

Handle for moving





### **MFA-06: Trolley for Transporting and Storing Gaskets**



Trolley for transporting and storing EPDM and TPE Gaskets

Number of compartments: 6
Adjustable Roll diameter and With
4 pieces swivel castor wheels with brake
Handle for moving



### MTA-06: Trolley for Transporting and Storing Accessories

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Trolley suitable for carrying and storing accessories.

2 horizontal compartments,4pieces wheel castos 125mm (2 pieces with brake)3 compartments coated with nylon film for reduce the worn.





### **CONDITIONS OF SUPPLY**

- E.X.W. BURSA/TÜRKİYE
- Delivery Time: Contact your sales representative
- Packaging with nylon included
- Special packaging with wooden crate: Ask for price
- Payment.: Contact your sales representative
- Training in our factory free of charge.
- Training at site ask for price
- Installation not included, if needed ask for price
- Warranty: 2 years for mechanical parts, 1 year for electronical parts starting from the invoice date of the machines; damages due to faulty usage of the machines or consumable parts (such as blades, oil, milling tools, rollers, etc) are not covered under the warranty terms.

Mecanica CNC reserves its right to change prices and conditions according to cost and technical changes

### MECANICA CNC MAKINE VE SERVIS LTD. STI.

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