5-AXIS CNC COMPOUND ANGLE DOUBLE HEAD CUTTING MACHINE MATRIX 650–L



MATRIX 650-L is a fully automatic CNC double-head cutting machine that uses a bottom-up cutting principle. Designed to cut large aluminum and PVC profiles with Ø650 mm saw blades on both heads, it delivers the fastest cutting speed and largest cutting capacity in its class. It performs straight, single-angle and compound-angle cuts.

The saw's linear movement along the Y-axis eliminates the dead zone between the blade and the miter fence caused by the blade's profile, enabling a greater cutting capacity.

General Features

- High cutting capacity with Ø650 mm saw blades
- 5.5 kW saw motors for cutting demanding profiles with ease
- Windows-based 15-inch industrial touchscreen PC with a user-friendly interface
- Cutting program system for creating cutting recipes, including slicing, angled slicing and part quantity entry
- Cutting list transfer via USB drive or network
- Two-hand safety operation
- Heavy-duty machine frame
- Servo-controlled movements for precise automatic cutting across all dimensions
- Ability to cut lengths exceeding the X-axis stroke
- Both heads miter from 22.5° inward to 140° outward
- Both heads tilt inward up to 45°
- Compound miter and bevel cuts up to 45° × 45° on both heads
- Arrow-cutting feature for mullion profiles
- Pneumatic profile support units for precise cutting of long profiles
- Profile support conveyor on the moving head
- Remote technical support via remote connection

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Standard Equipment

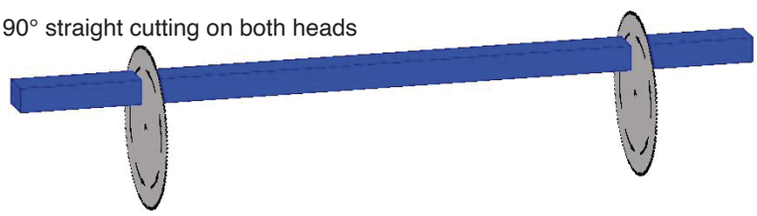
- 2 x Ø650 mm Saw Blades
- 4 x Vertical Clamps
- 2 x Horizontal Clamps
- 2 x Profile Support Units
- Saw Blade Lubrication System
- Profile Support Conveyor on the Moving Head
- Keyboard and Mouse Set
- Barcode Printer
- Air Blow Gun

Optional Equipment

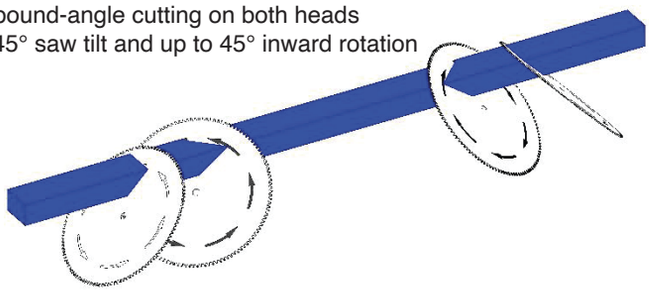
- Machine frame available in shorter or longer lengths to suit your profile cutting requirements (Please contact us for the maximum length.)
- Vacuum chip extraction system
- Profile lifting system
- Short-cut system

Cutting Mode

90° straight cutting on both heads



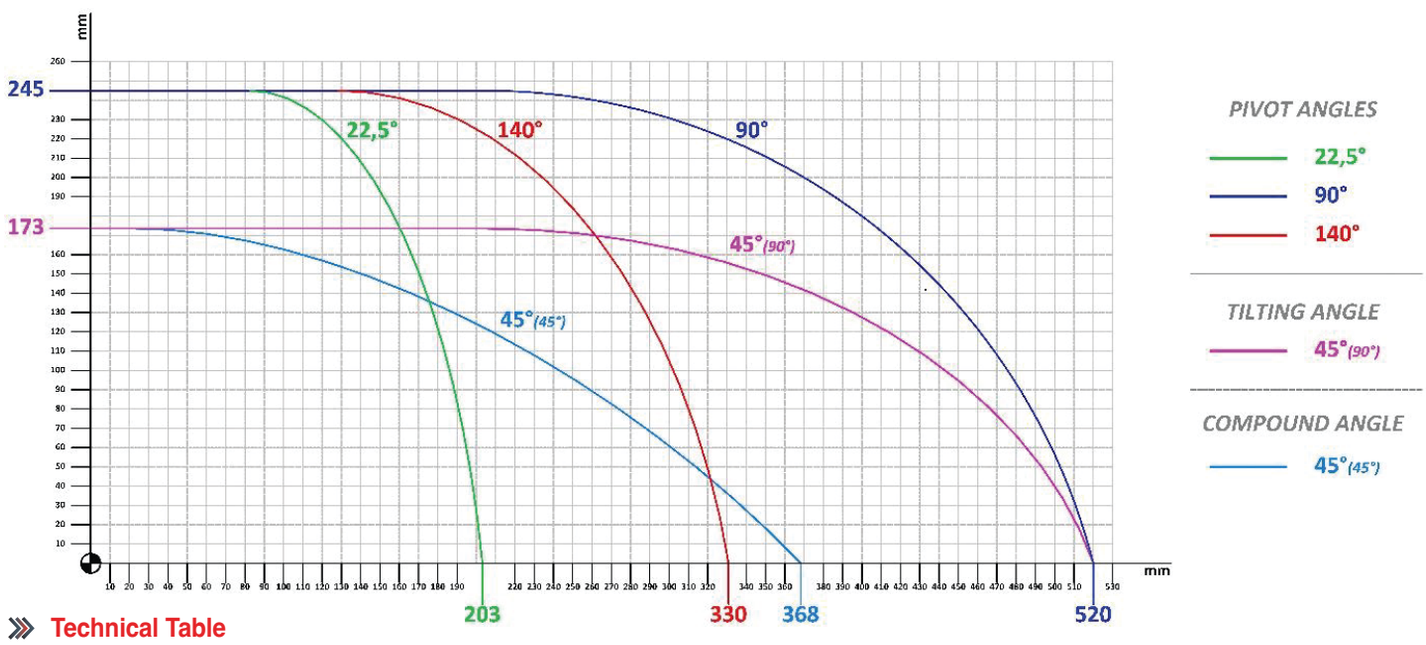
Compound-angle cutting on both heads
with 45° saw tilt and up to 45° inward rotation



Cutting at angles from 22.5° inward
to 140° outward on both heads



MATRIX 650 - L



Technical Table

Servo kW	Cutting Motor	Saw Dimension	Saw Revolution	Bar	Air Cons.	Packing Size	Machine Size	Machine Kg
9 x 1,0 kW	2 x 5,5 kW	D = Ø650 mm (x2) d = Ø30-Ø32 mm	2.500 RPM	6-8 Bar	170 lt/min	W x D x H (cm³) 898 x 228 x 195 cm³	W x D x H (cm³) 1052 x 234 x 243 cm³	4.850 kg