

# **EVO 450** LARGE CAPACITY CUTTING MACHINE

<image>

A cutting machine dedicated to oversized work-pieces. A machine to exceed your expectations.





## **FUNCTIONALITIES**

### 🔵 REF. 50800

#### Width

1 660mm
<b>Depth</b> 1 815mm
Height closed lid 1 955mm
Height opened lid 2430mm
Weight 1 100kg
Conformity EC

#### **Cutting machine EVO 450**

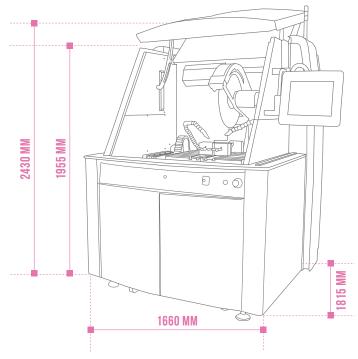
Equipped with the latest technologies EVO 450 can accept work pieces up to 200kg in weight and up to 250mm in height on its 600mm x 600mm cutting table. Perfect for cutting very large pieces, EVO 450 has the benefit of a very powerful cutting motor coupled with feed rate sensors and exceptional control software to ensure optimal operation.

Designed with even the smallest details in mind, the operator will benefit from a number of ease-of-use ergonomic features such as: motorised hood lift, automated wash down cycle for cleaning and easy access of large parts to the cutting table.

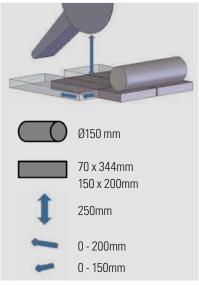


**Top of the range, EVO 450** delivers all the benefits, options and innovations of the series such as detection of work piece and automated cleaning cycle. Cooling during the cut is assured with two alignable nozzles and numerous ports in the wheel guard.





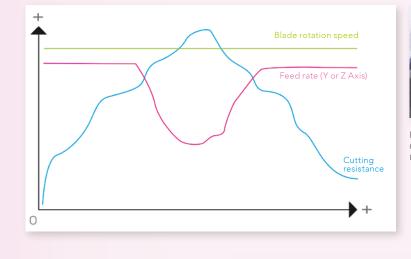
CUTTING ENVELOPE\*



\* This illustration of the cutting envelope of the EV0450 is to show the maximum theoretical capacity only. The actual capacity in practice will depend on the sample geometry and its physical properties.

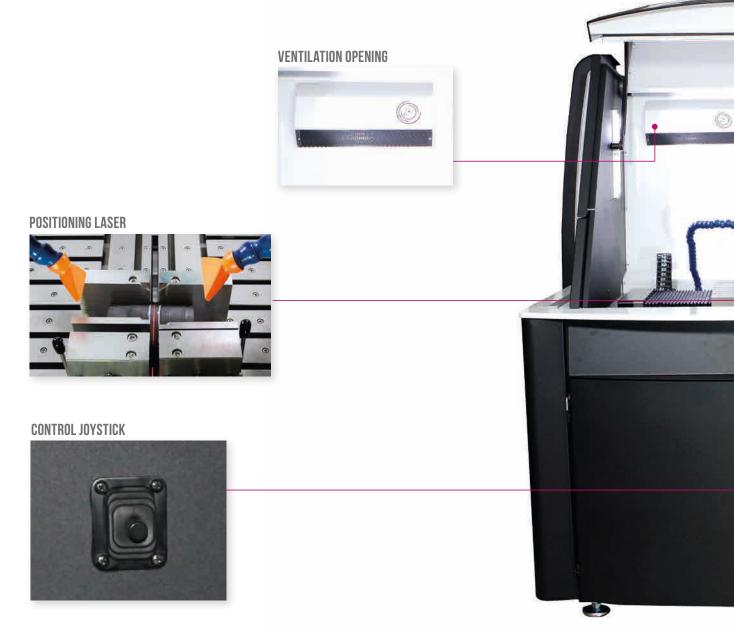
# FUNCTIONING

### SIMULATION OF A CUTTING CYCLE





Cooling capacities are such that it allows exceptional cutting speeds without risk of burning.





## **FUNCTIONING**

### EFFICIENT



Efficient, the EVO 450 provides different options to facilitate cutting. The rotational speed of the blade is held constant. When needed the frequency inverter provides extra power to the cutting motor to slice through the toughest materials.

The cutting speed is regulated according to cut resistance and is equally possible to engage pulse cutting.

Possibility to combine Z and Y axis to facilitate the cut.

### ERGONOMIC



Ergonomically designed, the EVO 450 features a spacious cutting chamber easily accessed with a motor assisted hood lift to reveal a large table.

### PRECISE



Thanks to the positioning laser, the cuts are even more under control.

### INTUITIVE



The EVO 450 is also intuitive thanks to its colour touch screen and multilingual functions. The screen is equipped with two USB ports for service.

### **600 X 600MM STAGE**

### FULL EQUIPPED



With a large recirculating coolant system of 300L capacity with control of levels. To enable easy installation, the machine is designed to be movable with a pallet truck.



Equipped with a 600 x 600mm stage, this machine is capable of accepting work-pieces of up to 250mm in height and up to 200kg. The T-slot (12 mm) bed accepts all existing clamping devices on the market.

## **CHARACTERISTICS**

1000			
HOOD Type	PETG enclosure with metal hinges and motorised opening and closing		
Safety	Interlock switch keeps hood locked during cutting		
MOTOR-POWER	Interlock switch keeps hood locked during catting		
	11000 W / 21000 W (via variator)		
Power Electrical cumply	380 V / 3 phases / 50 Hz		
Electrical supply Motor control	Frequency inverter		
CUT-OFF WHEELS			
Type of cut-off wheels	Resin bonded and metal bonded		
Wheel diameter	Up to 450mm		
Rotational speed	From 1.000 to 3.000 RPM		
Arbor size	32mm		
CONTROL AND SETTING OF PARAMETERS			
Interface	LCD		
Security Access	Can activate password protection		
Programmability	100 programs protected by password		
CUTTING			
Cutting modes	Assisted, Automatic, Programmability, Pulsed		
Work piece feed	Y axis table feed and Z axis wheel feed		
Feed rate	From 0.01mm/sec to 3mm/sec		
Cutting control	Feed speed according to the motor load. Movement of the arm according to the motor load. Feed of the table and movement of the arm according to the contact force cut off wheel / workpiece to cut. Rotation speed of the cut off wheel.		
Cutting length Y Axis	200mm		
Cutting length X Axis	150mm		
Cutting length Z Axis	400mm		
Serial cutting	Serial cutting 2 modes: Y Axis cut and Z Axis cut		
Cutting table dimensions	Left table: 295 x 600mm-Right table: 295 x 600mm		
Laser to locate the cut	Yes		
Table type	Treated aluminium table with interchangeable stainless steel "T" slot plates		
Holders	Any sample fixturing system compatible with a 12mm "T" slot bed		
LUBRICATION- COOLING SYSTEM			
Pump and tank	External-300 L		
Type of lubrication	By Pump		
Position of lubrication-Cooling	2 ports in the wheel guard		
3	2 alignable nozzles mounted on the wheel assembly		
Automatic filling	Yes with control of levels		
USER-FRIENDLINESS			
Lighting in the cutting compartment	LED		
Spray nozzle for inside cleaning	Integrated		
CONFORMITY			
Conformity	EC		
	20		

## **ACCESSORIES**

#### **Vices and Holders**

50510

Left and right quick clamping vices Height 70mm

50911 Left and right quick clamping vices Height 90mm 50906

Left and right quick clamping vices Height 45mm

50905 Left quick clamping vice Height 45mm

50909 Right quick clamping vice Height 45mm

50617 Chain clamp 50613 Box of Kopal holders

50616 Kopal holding

50902 Left and right screw clamping vices Height 45mm

50901 Left screw clamping vice Height 45mm

50903 Right screw clamping vice Height 45mm







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REF. 50613



REF. 50616





REF. 50903

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# **CONSUMABLES**

#### STANDARD RESINOÏD CUT-OFF WHEELS

REF.	DESIGNATION	DIAMETER	HARDNESS	MATERIALS		
01029	- iyho n	Ø 400 x 3 x 32mm	— 100 - 350 Hv	Low carbon, mild and extra mild and treated steels with medium cross-sections		
01038		Ø <b>450</b> x 3,5 x 32mm				
01027	<b>Type AO</b> abrasive Al <sub>2</sub> O <sub>3</sub> (ferrous materials)	Ø 400 x 3 x 32mm	— 300 - 500 Hv	Treated steels, stainless steels, refractory metals, alloyed cast irons		
01036		Ø 450 x 3.5 x 32mm				
01028	Type MNF abrasive SiC (non ferrous materials)	Ø 400 x 3 x 32mm	- 30 - 350 Hv	Aluminium, copper and alloys, non ferrous metals, titanium and alloys		
01037		Ø 450 x 3 x 32mm				
01034	Type S abrasive Al <sub>2</sub> 0, (ferrous materials)	Ø 400 x 3 x 32mm	— 450 - 700 Hv	Treated steels, with fragile coatings, difficult materials		
01039		Ø 450 x 3.5 x 32mm				

## PRESI IS ALSO ...

CUTTING



Mecatome ST 310



Poly'Vac

POLISHING



Mecatech 334

HARDNESS TESTING





Resins

**CONSUMABLES** 



