



Double Mitre Saw MECAL SW 453 GARDA

GENERAL

The Mecal "SW 453 Reverse Garda" is a back stroke aluminum double mitre saw ideal for applications such as residential or commercial windows, storefronts, railings as well as industrial aluminum profile cutting. The saw can cut straight or mitre both on vinyl or aluminum extrusions.

The saw features a motorized right head positioning, while the left cutting unit is stationary. Blade feed direction is from back to forward. Cutting units tilt automatically at any angle between 22.5° and 135° by means of pneumatic cylinders even if the adjustment of the tilting angles must be done manually moving a mechanical reference stop.

Possibility to use both 450mm (17 3/4") and 500mm (19.7") saw blades.

Machine is 4m useful cutting length with double head simultaneously, nevertheless with a special function, it is possible to cut oversize lengths up to approximately twice the maximum cut length.

Machine interface features a Windows based Schneider Electric HMI MAGELIS 10" touch screen complete with an USB port and RJ45 Ethernet connection.

OPERATION

To perform the cut, the operator must hold simultaneously two pushbuttons with both hands. As soon as the cut is performed and one button is released, the blades retract in their housing. Hydro-pneumatic cylinders ensures the precise index of the blades.

SAFETIES

The Mecal "SW 453 Reverse Garda" double mitre saw is provided with two lifting covers (one each cutting head) as part of the standard safety features to provide full protection to the operator.

STANDARD ITEMS/FEATURES

- 2 x TCT saw blade Ø500
- Mobile roller conveyer
- Horizontal clamps
- Vertical Clamps
- Spray mist tool lubrication
- Safety guards
- Electronic profile height detecting device
- Automatic lifting of intermediate profile support
- Preparation kit for the use of a bar code printer
- Transformer to run with 600V-60Hz power supply

OPTIONAL CONFIGURATION

- Motorized tilting of the heads to stop at any angle

OPTIONALS

- Spare Ø 500mm (19.6") saw blade
- 20 litres (5.3 gal) pail of cutting fluid
- Set of drawers to collect chips and scrap pieces
- Motorized chip and scrap pieces conveyor
- Additional horizontal clamps
- Industrial dust collector
- Label printer
- MQL tool cooling system
- Bar code reader

The "SW 453 Reverse Garda" is one of the most flexible Mecal double mitre saw. The saw is equipped with 450mm (17 3/4") or 500mm (19.7") blades and the cutting heads are tilting automatically and independently both inward and outward. Left cutting unit is stationary, while the right one is motorized and moves along the whole length of the saw. Blade feed direction is from back to forward. The "SW 453 Reverse Garda" is available in 4000mm (13.1"), 5000mm (16.4") and 6000mm (20") lengths.

FEATURES

- Large cutting capacity with Ø 500mm (19.6") saw blade
- Electro-welded steel base is engineered for maximum rigidity and precision
- The mobile carriage moves automatically along the machine's longitudinal axis.
- Cutting units tilt pneumatically and a mechanical stop can be adjusted at any angle between 22.5° and 135°.
- The blade moves out towards the front on a straight path, driven by a hydro-pneumatic (oleo-pneumatic) actuator
- Blades feed speed can be adjusted infinitely.
- Dynamic protection guards for optimum coverage of the cutting area
- Software function for oversize and undersize cuts beyond the limits of the machine stroke (min & max)
- Automatic bar feeding function
- Pre-arranged for chips extraction unit
- Pre-arranged for chips collector drawers
- Pre-arranged for motorized chip conveyor
- Spray mist tool coolant system (Venturi type)

TECHNICAL DATA

- Large cutting capacity with Ø 500mm (19.6") saw blade
- Blade speed: 2800 RPM
- Cutting units tilt pneumatically and a mechanical stop can be adjusted at any angle between 22.5° and 135°.
- Available single stroke cutting lengths: 4000mm (13.1"), 5000mm (16.4"), 6000mm (20").
- Max cutting lengths with repeated strokes: 8m (26.2"), 10m (32.8"), 12m (40")
- Maximum longitudinal positioning speed is 25 m/min (82'/min)
- The system guarantees a positioning accuracy of ± 0.1mm (±0.004")
- 2 x 2.2 kW, 400V, 50/60Hz, 3 Phase Motor
- Min cutting length with both heads at 90°: 330mm (13")

STANDARD EQUIPMENT

- 2 x TCT Saw blades Ø 500mm (19.6")
- Cutting depth limiting device
- Profile height detection device
- Intermediate support for long extrusions
- Prepared for the addition of a bar code printer
- A Pair of horizontal pneumatic clamps
- A Pair of vertical pneumatic clamps
- Mobile roller conveyer with pneumatic clamp for work piece support