

# TKE 552

DOUBLE MITRE-SAWS



Electronic twin-head cutting-off machine with automatic traverse of the moving cutting head powered by brushless motor with numerical control system. Pneumatic tilting of cutting units from 90° to 22°30' (outward) in two fixed positions or with optional mechanical adjustment system for intermediate angles. Hydro-pneumatic blade feed.



### Profile clamping

The profile to be cut is clamped by two horizontal hold-down devices with extreme precision and in absolute safety. For vertical clamping, particularly for special cuts, the machine can be equipped with a patented system of horizontal hold-down devices. When two considerable lengths are cut, the profile is supported by a manually positioned intermediate support.



### Head guards

The machining zone is protected by two automatically positioned local guards installed on the cutting units. The guards are made of scratch-proof polycarbonate and they are opened/closed automatically by a pneumatic cylinder at the appropriate points of the cutting cycle.



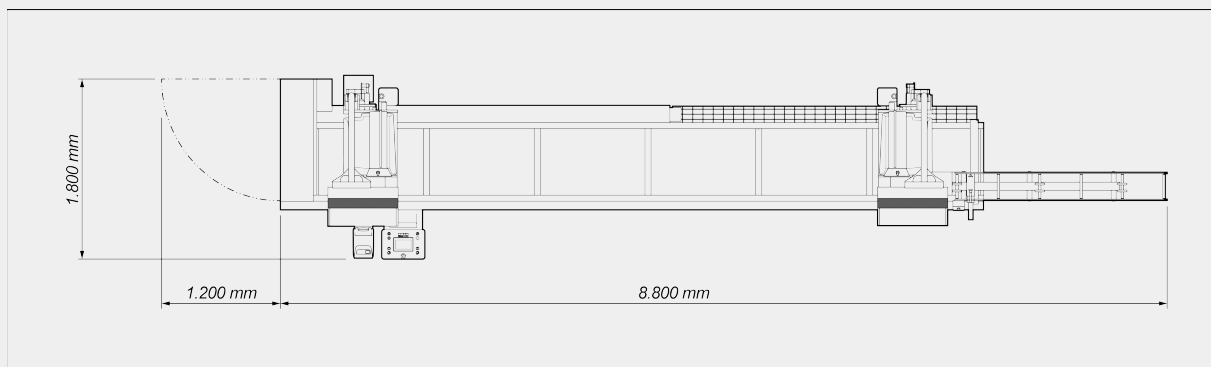
### Load and unload

The cutting-off machine is equipped with a roller conveyor on a mobile head for standard loading and unloading procedures. The roller conveyor can be optionally fitted with an extra vice to immobilise the residual profile and an electronic machined profile thickness meter for automatic cutting positions correction in accordance with the real profile dimensions, with the associated surface treatments tolerance.



### Control

The control panel, installed on a support sliding on bearings along the front side of the machine, allows correct mobile heads positioning in accordance with the required cutting schedule. The interface uses a 7" touch-screen and fully personalised software and is packed with bespoke functions that are unique to this machine. The machining cycle can be optimised by creating cutting lists, thereby reducing scrap and cycle times for parts loading-unloading.

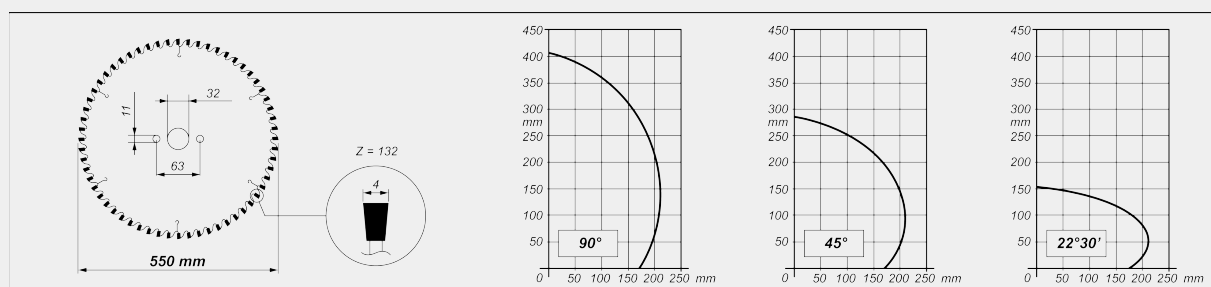
**TKE 552 / DOUBLE MITRE-SAWS**
**LAYOUT**


The overall dimensions may vary depending on the product configuration.

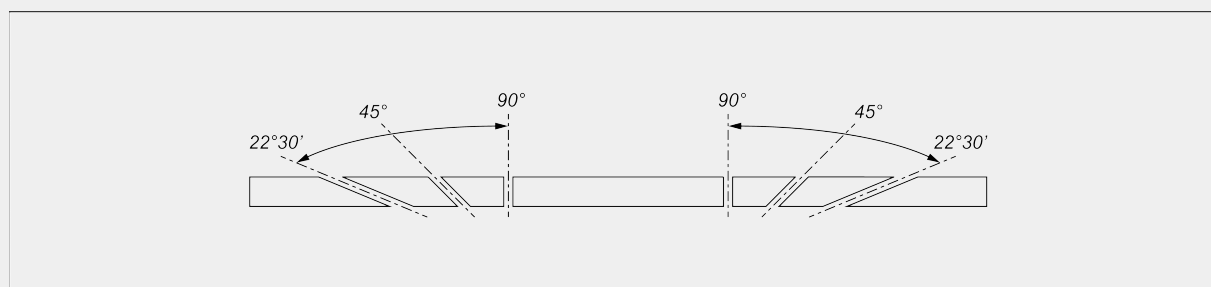
**MACHINE CHARACTERISTICS**

|                                                                                   |              |
|-----------------------------------------------------------------------------------|--------------|
| Electronic control of the X axis                                                  | ●            |
| X axis positioning speed (m/min)                                                  | 25           |
| Mobile head position reading with absolute magnetic strip direct measuring system | ●            |
| Pneumatic head tilting                                                            | ●            |
| External tilting                                                                  | 45° / 22°30' |
| Mechanic adjustment of intermediate angles with digital display of the position   | ○            |
| Hydropneumatic blade feed                                                         | ●            |
| Adjustable blade feed rate                                                        | ●            |
| Effective cut, according to model (mm)                                            | 5.000        |
| Cemented carbide blade                                                            | 2            |
| Blade diameter (mm)                                                               | 550          |
| Blade motor power (kW)                                                            | 2,2          |
| Electronic profile thickness gauge                                                | ○            |

## CUTTING DIAGRAM



## CUTTING UNIT TILTING



Mechanical adjustment of intermediate angles

## SAFETY DEVICES AND PROTECTIONS

Pneumatically-operated front local protection



## PROFILE POSITIONING AND CLAMPING

Pair of horizontal pneumatic vices with "low pressure" device



Pair of horizontal vertical vices



Pair of additional horizontal vices



Manually positioned profile intermediate supports

1

Roller conveyor on mobile head (mm)

2.000

Additional vice for profile support on roller conveyor



Optional support surface on fixed head



## LUBRICATION AND SUCTION

|                                                                                   |   |
|-----------------------------------------------------------------------------------|---|
| Micro-mist lubrication system with water and oil emulsion                         | ● |
| Preparation for automatic start-up of external exhauster                          | ● |
| Swarf and short cuts extractable drawers without scraper system for swarf removal | 6 |
| Dredging system for swarf discharge                                               | ○ |
| Swarf and short cuts extractable drawers with scraper system for swarf removal    | 2 |

## FUNCTIONS

|                                                                     |   |
|---------------------------------------------------------------------|---|
| Perform single cuts                                                 | ● |
| Execution of intermediate angles cuts                               | ○ |
| Execution of cyclical cuts from cutting lists                       | ○ |
| Special cut function PRO (longer, shorter, chamfered and wedge cut) | ○ |
| Semi-automatic cut function SLICE (thrust cut)                      | ○ |
| Cutting lists import                                                | ○ |

Included ● Available ○