



## ***Norma E***

Double-head cutting-off machines



Double head cutting-off machine with manual movement of the mobile head and position detection by means of an absolute magnetic band. The rotation of the cutting units on the vertical axis (45° to the left and right) and the inclination on the horizontal axis (45° internal), with manual adjustment, allow combined cuts even at intermediate angles.



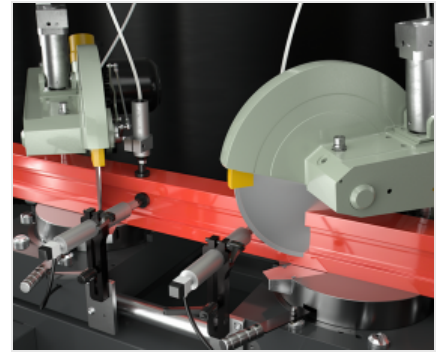
### Mobile unit positioning

Positioning of the mobile unit is done manually by turning the handling handwheel, and position detection is done by the direct measuring system with absolute magnetic strip. When the mobile head reaches the correct position for the cut to be made, the operator is notified by a green warning light located next to the handwheel.



### 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.



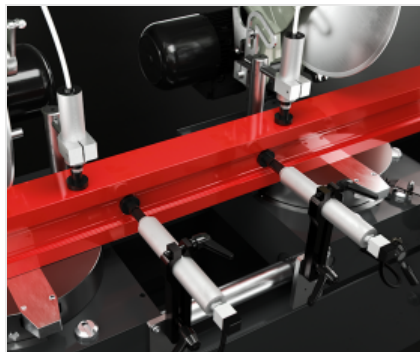
### Heads rotation

In addition to tilting with respect to the horizontal plane, the two cutting units rotate with respect to the profile support square. This movement allows positioning from  $-45^\circ$  LH to  $+45^\circ$  on the vertical axis in relation to the  $90^\circ$  cutting position, including intermediate angles. This allows compound cuts to be made by combining tilting and rotation of the cutting unit.



### Heads tilting

The two cutting units, assembled on the relevant carriages, consist of a blade holder unit that can be positioned, with respect to the profile support surface, with  $90^\circ$  to  $45^\circ$  tilting towards the inside. The intermediate tilting angles can be set by means of a manual adjustment system, which allows a wide range of compound cuts to be performed in combination with the rotation of the cutting units. The two cutting units are equipped with mechanically-controlled local protections of the machining area.



### Horizontal and vertical vices

The machine has pneumatically controlled horizontal and vertical vices, equipped with a low-pressure device that eliminates risks to the operator by allowing high-pressure clamping only when in a safe condition. Vice position can be manually adjusted to ensure that the profile is correctly clamped in the machine.



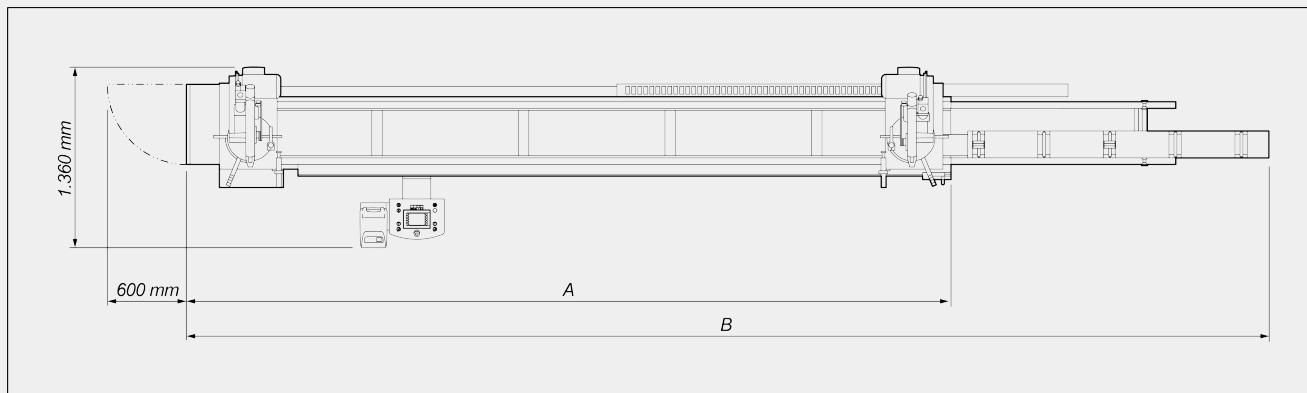
### Manual intermediate support

The manually adjustable intermediate support is extremely useful for loading and unloading workpieces; it also provides support for the bar, preventing it from deforming when cutting particularly long workpieces with very flexible profiles. A plastic roller is mounted on the intermediate support which, properly positioned, provides perfect support for the profile. The intermediate support can be removed when not needed.



**NORMA E / DOUBLE-HEAD CUTTING-OFF MACHINES**

**LAYOUT**



|                           | <b>A</b> | <b>B</b> |
|---------------------------|----------|----------|
| <b>Norma E - 4 m (mm)</b> | 4.800    | 7.300    |
| <b>Norma E - 5 m (mm)</b> | 5.800    | 8.300    |

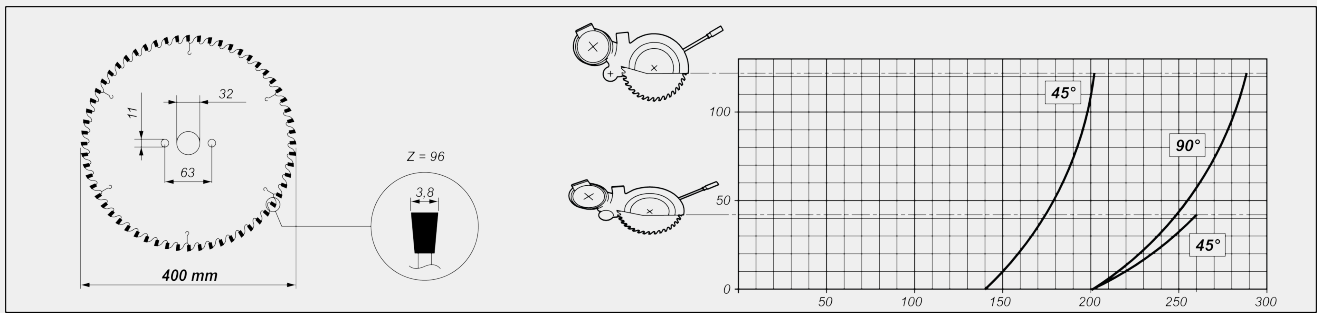
The overall dimensions may vary depending on the product configuration.

**MACHINE CHARACTERISTICS**

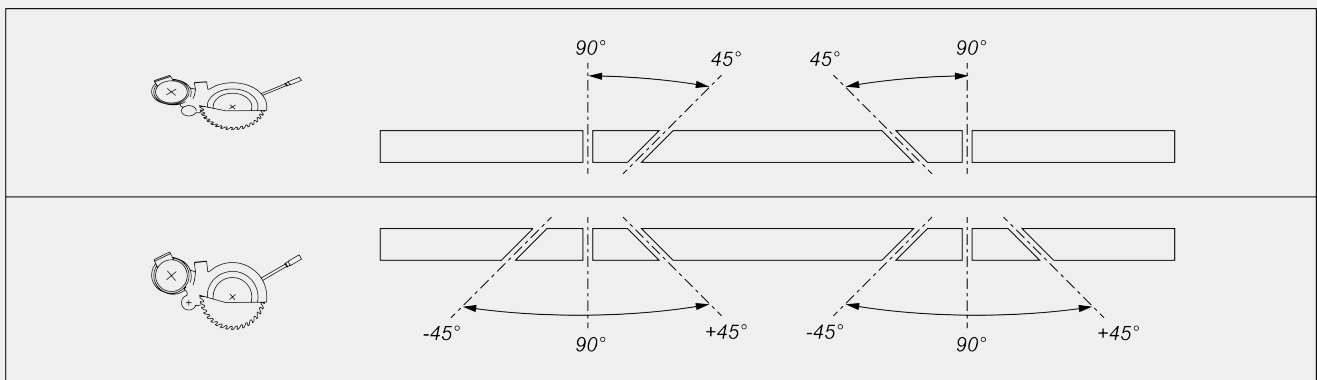
|   |               |
|---|---------------|
| Mobile head position reading with absolute magnetic strip direct measuring system | ●             |
| Manual head tilting (internal)  | 45°           |
| Manual head rotation on vertical axis   | -45° ÷ +45°   |
| Mechanical adjustment of intermediate angles                                      | ●             |
| Hydropneumatic blade feed   | ●             |
| Adjustable blade feed speed   | ●             |
| Effective cut, according to model (mm)  | 4.000 / 5.000 |
| 2 heads minimum 90° cutting length (mm)   | 485           |
| Cemented carbide blade  | 2             |
| Blade diameter (mm)   | 400           |
| Blade motor power (kW)  | 2,2           |
| Self-braking motor  | ●             |
| Brake intervention time (s)   | 10            |



**CUTTING DIAGRAM**



**CUTTING UNIT TILTING**



Mechanical adjustment of intermediate angles

**SAFETY DEVICES AND PROTECTIONS**

Cut-off area mechanically-controlled local protection ●

**PROFILE POSITIONING AND CLAMPING**

Pair of horizontal and vertical pneumatic vices with "low pressure" device ●

Intermediate profile supports with manual positioning 1

Roller conveyor on mobile head ○

**LUBRICATION AND SUCTION**

Micro-mist lubrication system with water and oil emulsion ●

Preparation for automatic start-up of external exhauster ●

**FUNCTIONS**

Perform single cuts ●

Execution of intermediate angles cuts ○

Cutting lists import ○

Execution of cyclical cuts from cutting lists ○

Included ● Available ○