TKE 551

Twin Head Cutting-Off Machines

Electronic twin-head cutting-off machine with automatic traverse of the moving cutting head powered by brushless motor with numerical control system. Pneumatic control of the angular setting from 90° to 22°30' (external) with mechanic adjustment of intermediate angles. Hydro-pneumatic blade feed.

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.

Cutting units inclination virtual axis

Inclination of each head, up to 22°30' outwards for both the aluminium and PVC machine versions, is achieved on two circular guides mounted on four pairs of steel rollers. This patented solution makes it possible to eliminate obstructions in the cutting area, all to the benefit of profile positioning and clamping, while also offering greater rigidity than traditional systems.
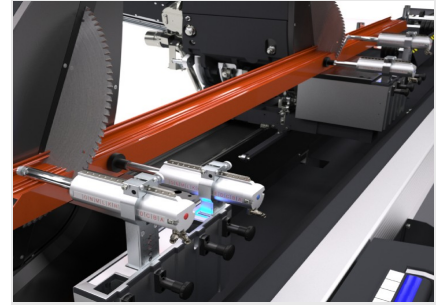
Profile clamping

Making use of the ample space provided by the use of the virtual axis, clamping of the profile to be cut is performed by two horizontal hold-down devices with extreme precision and in absolute safely. For vertical clamping, particularly for special cuts, the machine can be equipped with a patented system of horizontal hold-down devices.

Head protections

Automatic local head protections, made of scratch-resistant polycarbonate, are operated by a pneumatic cylinder with an anti-crushing device that resets the pneumatic load to zero when closing. They are mounted on a laterally sliding system to better shelter the operator in any cutting operation.

Control

The intuitively designed control panel allows correct mobile heads positioning in accordance with the required cutting schedule. The interface uses a 5.7" touch-screen and fully personalised software and is packed with bespoke functions that are unique to this machine. The control panel can be optionally installed on bearings sliding on a rail that spans the entire front of the machine.


Label printer (Optional)

The industrial label printer allows each cut profile to be identified with identifying features from the cutting list. In addition, barcode printing enables easy identification of the profile itself, which is particularly useful for subsequent machining steps on Machining Centres or assisted assembly lines.

TKE 551 / TWIN HEAD CUTTING-OFF MACHINES

LAYOUT
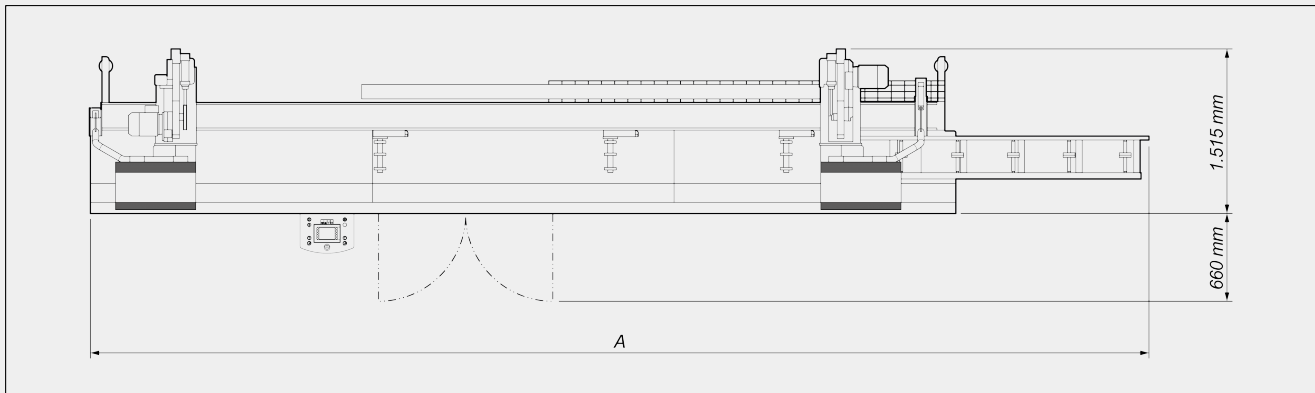
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TKE 551 - 4 m (mm)	7.140
TKE 551 - 5 m (mm)	8.140

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	●
Mechanical adjustment of intermediate angles	●
Maximum external inclination	22°30'
Hydropneumatic blade feed	●
Effective cut, according to model (mm)	4.000 / 5.000
Cemented carbide blade	2
Blade diameter (mm)	550
Blade motor power (kW)	2,2
Electronic profile thickness gauge	○

CUTTING DIAGRAM
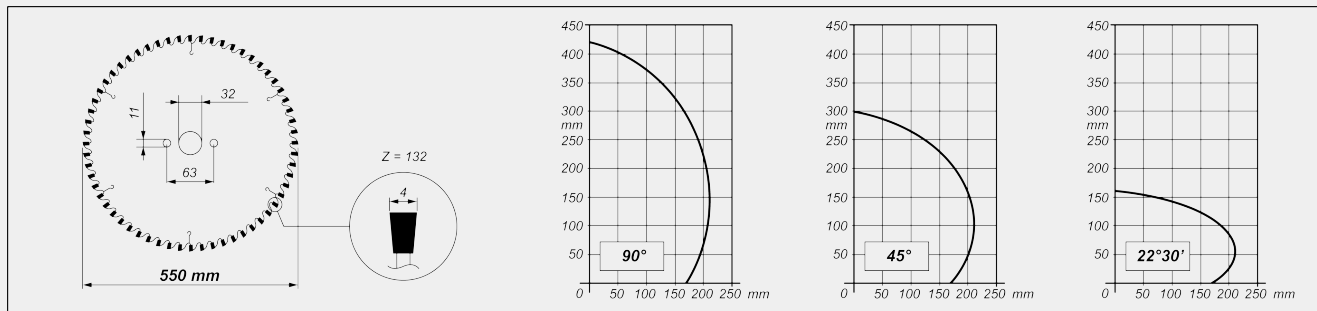
CUTTING UNIT TILTING
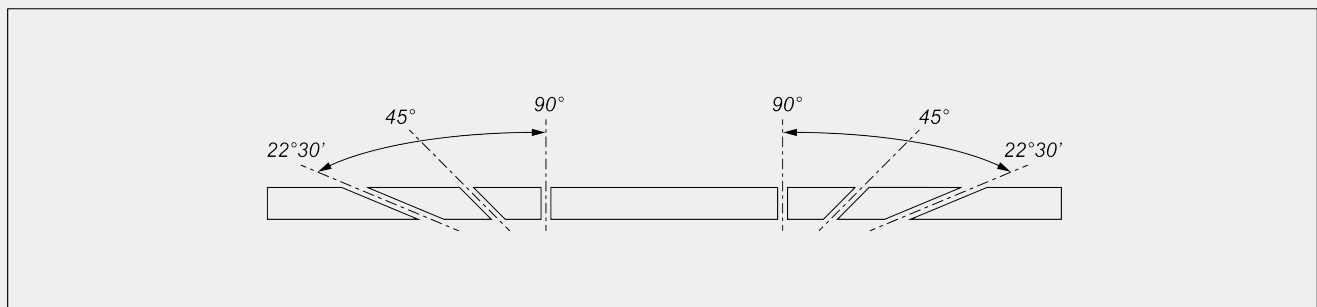
Mechanical adjustment of intermediate angles

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 horizontal offset vices for cut <45°	○
Intermediate mechanical profile supports	3
Roller conveyor on mobile head (mm)	1.850

LUBRICATION AND SUCTION

Micro-mist lubrication system with water and oil emulsion	●
Minimal oil diffusion lubrication system	○
Preparation for automatic start-up of external exhauster	●

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 ○

The right to make technical alterations is reserved.