

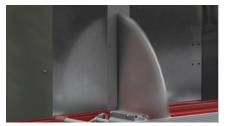
Compound Cut

electronic twin-head cutting-off machine with horizontal blade for compound cut



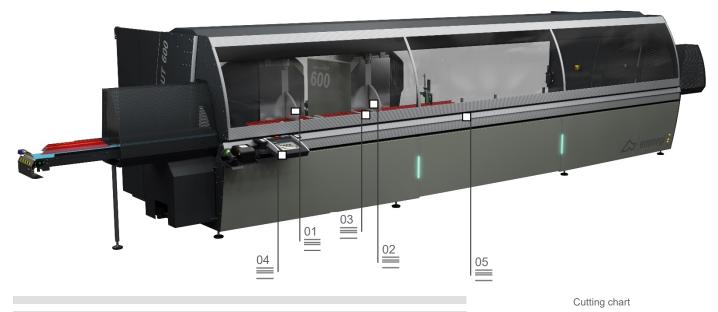
Combined cut

01 BI



Blade feed on 2 axes

02



Twin-head cutting-off machine with 9 controlled axes which include the automatic movement of the mobile head, electronic management of two rotation axes of the cutting units, blade feed and vertical translation of the cutting units to maximise the work area.

It allows reaching angles from 45° (internally) to 22°30' (externally) on horizontal axis and from 0 to 45° on vertical axis with decimal cutting precision.

The feed of 600 mm widia blades can be carried out on two axes, optimising the cutting chart in the vertical direction, to cut profiles more than 500 mm in height and ensure an optimal adjustment of blade exit speed and stroke.

The HS (High Speed) version has a higher speed X axis and all the protections required for automatic machining operations, also with the machine unattended.



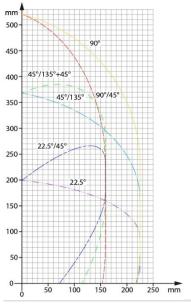
03

Control





The images are only given for illustrative purposes



HS – High Speed

04





Compound Cut

electronic twin-head cutting-off machine with horizontal blade for compound cut

| 01 Combined cut | 02 Blade feed on 2 axes | 03 Profile clamping | 04 Control | 05 HS – High Speed |
|---|---|---|--|---|
| The inclination of each head, up to 22°30' outwards, is obtained by means of a mechanical transmission with high- precision gear motor and brushless motor with absolute encoder. The tilting is performed by means of an electric actuator with recirculating ball screw and brushless motor. To ensure an optimal positioning, the positioning accuracy is checked upstream of the kinematic transmission chain, through a rotary absolute encoder. | The blade feed is carried out on two axes. The vertical translation, associated with the blade exit movement, increases the cutting chart height dimension significantly, allowing for maximum use of the large diameter of the blade. The tool trajectory is managed by the software based on the cutting program, on the profile and on the head inclination. | The machine is equipped with a system with clamps that swings horizontally and, by means of horizontal hold- down devices, clamps the profile for an extremely precise cut. For vertical clamping, particularly for special cuts, the machine can be equipped with a patented system of horizontal hold- down devices. Compound Cut is equipped with a roller conveyor on the mobile head, for standard loading and unloading and intermediate pneumatic supports of the bar. | The ergonomic state-of- the-art control panel features a 10.4" touchscreen display and fully customised software and is packed with functions developed in the Microsoft Windows® environment specifically for this machine. The machining cycle can be optimised by creating cutting lists, thereby reducing scrap and cycle times for parts loading- unloading. | The HS – High Speed version is equipped with a faster X axis (mobile head positioning), and features an integral protection on the sides and at the back, to operate in complete safety, increasing productivity. The safety characteristics of this version, fully inaccessible during operation, allow using automatic cutting cycles, even not supervised, at maximum operational performance. |

| MACHINE CHARACTERISTICS | |
|--|--------|
| Electronic control of the X axis | • |
| Standard X axis positioning speed (m/min) | 20 |
| HS version X axis positioning speed (standard) (m/min) | 30 |
| Mobile head position reading with absolute magnetic strip direct measuring system | • |
| Cutting unit inclination detection with absolute encoder | • |
| Electronic control of intermediate angles | • |
| Maximum internal inclination | 45° |
| Maximum external inclination | 22°30' |
| Max internal tilting angle | 45° |
| Effective cut, according to model (m) | 5/6 |
| Maximum profile width that can be clamped (mm) | 225 |
| Maximum profile height that can be clamped (mm) | 180 |
| Standard minimum cut with 2 heads at 90° (mm) | 530 |
| Standard minimum cut with 2 heads at 45° internally (mm) | 1,270 |
| Standard minimum cut with 2 heads at 45° externally (mm) | 560 |
| Standard minimum cut with 2 heads at 22°30' externally (mm) | 640 |
| Minimum cut with PRO software with 2 heads at 90° (mm) | 340 |
| Minimum cut with PRO software with 2 heads at 45° internal (mm) | 1,130 |
| Minimum cut with PRO software with 2 heads at 45° externally (mm) | 370 |
| Minimum cut with PRO software with 2 heads at 22°30' externally (mm) | 450 |
| Maximum theoretical profile height with 90° standard cut (mm) | 520 |
| Maximum theoretical profile height with 45° standard cut (mm) | 365 |
| Cemented carbide blade | 2 |
| Blade diameter | 600 |
| Blade motor power (kW) | 3.6 |
| Electronic profile thickness gauge | 0 |
| SAFETY DEVICES AND PROTECTIONS | |
| Electrically operated fully enclosed front guarding | • |
| PROFILE POSITIONING AND CLAMPING | |
| Pair of horizontal pneumatic clamps with "low pressure" device | 3 |
| Pair of horizontal vertical clamps | 0 |
| Pair of additional horizontal clamps | 0 |
| Pair of horizontal offset clamps for cut <45° | • |
| Stop blade on fixed head for minimum cut | • |
| Additional clamp for profile support on roller conveyor | O |
| Roller conveyor on the mobile head with servo-controlled pneumatically operated profile supports | • |
| Conveyor belt for step-by-step or automatic cut (HS version only) | • |
| Auxiliary support surface on mobile head | • |
| Auxiliary support surface on fixed head | • |

• included o available