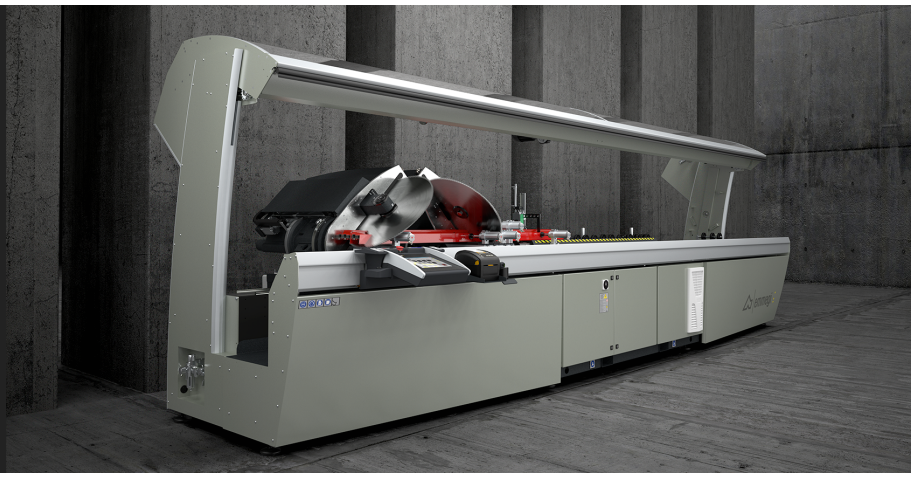
Precision RS

Double-head cutting-off machines

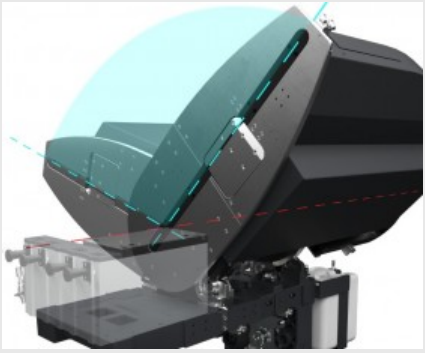


Twin head cutting-off machine with 5 NC axes for aluminium and lightweight alloys, with automatic mobile head movement and electronic management of all angles from 22°30’ (internal) to 45° (external) with a resolution of 280 positions per degree. The 600 mm cemented carbide blades have two different feed modes. Standard feed optimises the cutting chart in the vertical direction for cutting profiles of more than 450 mm in height. The radial mode takes advantage of a wide stroke that exceeds the vertical reference plate and generates a large diagram in the horizontal direction, for profiles up to 240 mm wide. The machine is supplied in two versions: PRECISION RS L for cutting light profiles with large section and ordinary thickness; PRECISION RS H for heavy profiles with high cut resistance and high thickness, or design that requires a large contact arc with the blade. The blade feed is controled by two NC axis, assuring the best adjustement of the blade feeding speed and travel.

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Virtual axis for cutting units inclination

Inclination of each head of up to 22°30’ inwards is provided by 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.



Radial cut

With suitable adjustments, the blade exit stroke can be extended beyond the front surface thus greatly increasing the horizontal axis of the cutting angle chart. Protected by another Emmegi Patent, the radial operating mode enables cutting of large section extrusions or simultaneous cutting of multiple profiles. The optimised geometrical design of the new cutting units makes it possible to obtain a cutting angle chart with generous dimensions also in terms of height.



Control

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 workpieces loading-unloading.



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.



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.



Electric panel air conditioner (Optional)

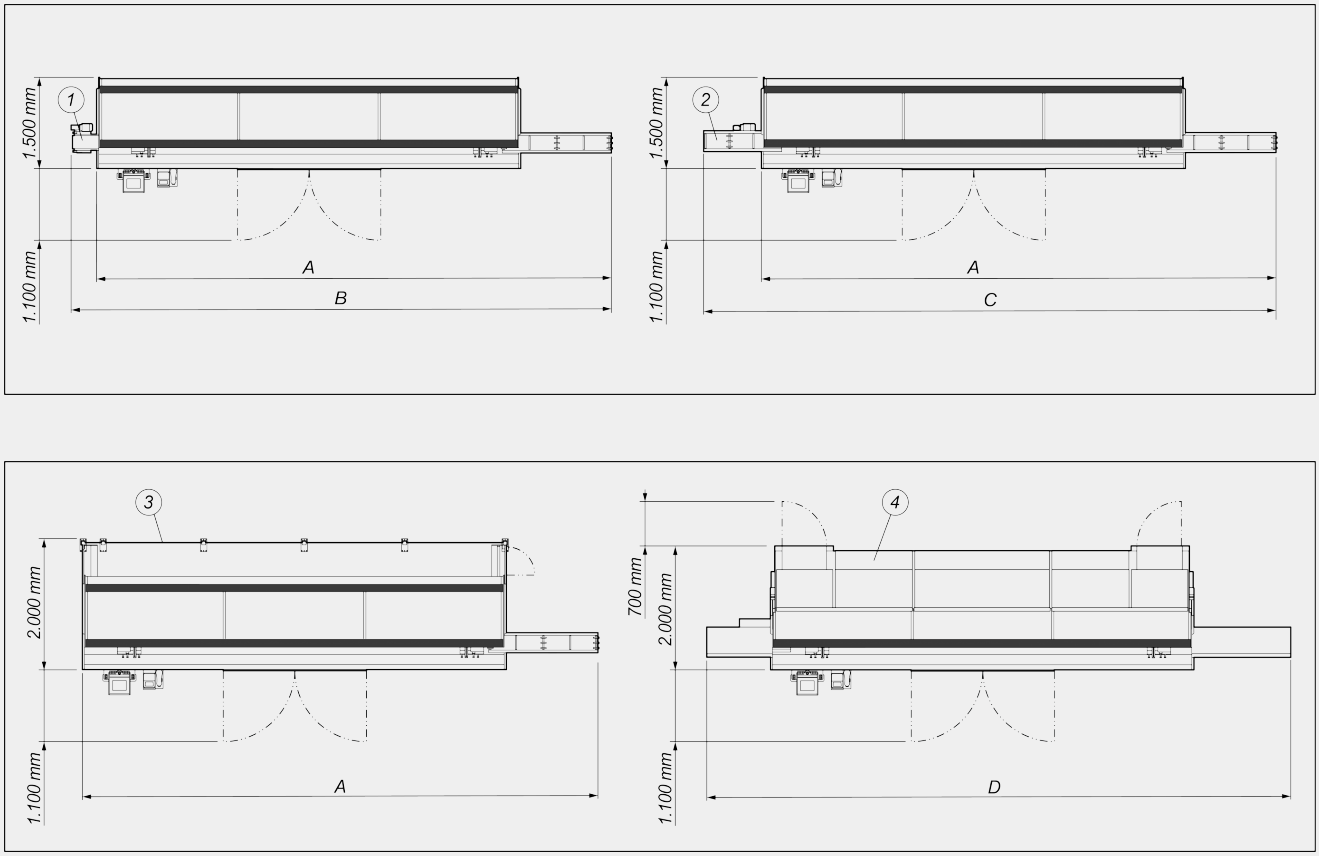
The electric panel air conditioner is the solution for all applications where the environmental conditions require a higher cooling level to preserve the efficiency and durability of the machine electrical and electronic components. A dedicated, carefully sized equipment allows to maintain the correct temperature and humidity inside the electric panel even under unfavourable climatic conditions and extreme workloads.

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LAYOUT



	A	B	C	D
Precision RS - 5m (mm)	8.100	8.500	9.000	9.100
Precision RS - 6m (mm)	9.100	9.500	10.000	10.100

1. Chip conveyor with rubber belt (optional)
2. Profile support roller conveyor on fixed head for profile infeed from left (optional)
3. Enclosure guard of the 4th side (optional)
4. Soundproofed integral protection cabin with internal lighting (optional)

The overall dimensions may vary depending on the product configuration.

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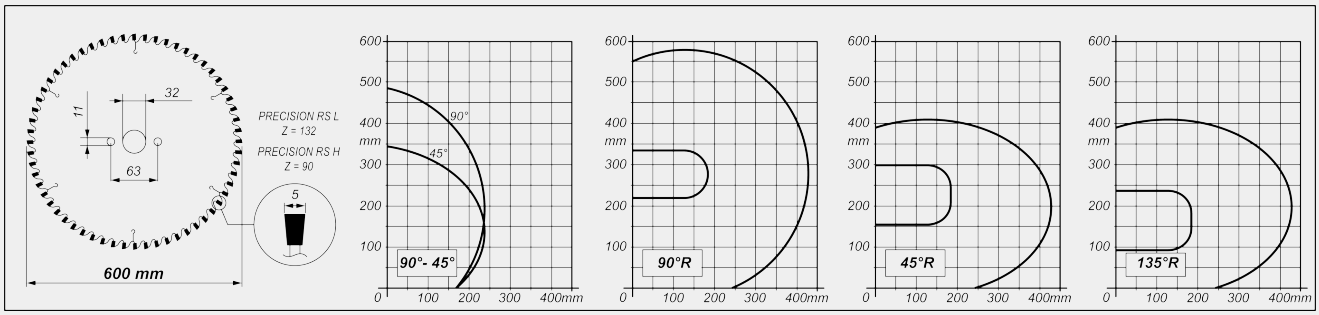
MACHINE CHARACTERISTICS

Electronic control of the X axis	●
Standard X axis positioning speed (m/min)	25
Mobile head position reading with absolute magnetic strip direct measuring system	●
Detection of cutting unit tilting through direct measurement system with absolute magnetic strip	●
Electronic control of intermediate angles	●
Maximum internal inclination	22°30'
Maximum external inclination	45°
CN electronic axis of the blade feed	●
Electronic profile thickness gauge	○

CUTTING UNIT

Cemented carbide blade	2
Brushless blade motor rated power - L version (kW)	1,5
Brushless blade motor peak power - L version (kW)	4,5
Brushless blade motor rated power - H version (kW)	2,5
Brushless blade motor peak power - H version (kW)	7,5

CUTTING DIAGRAM

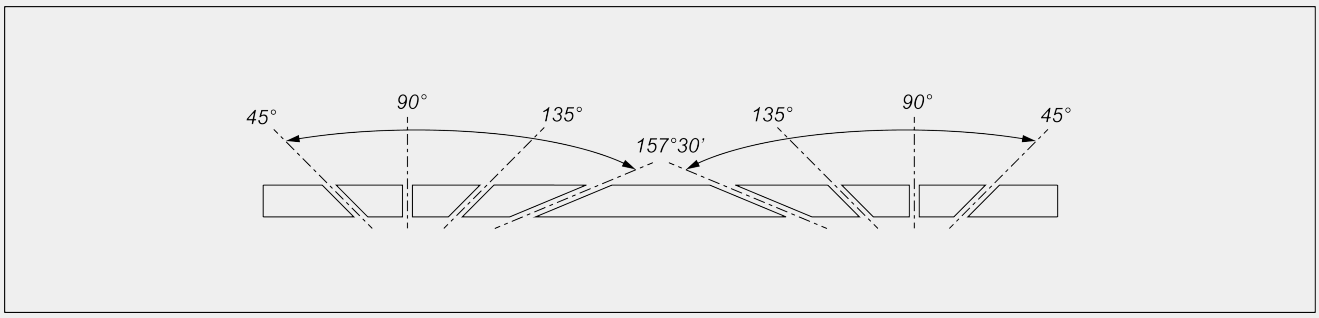


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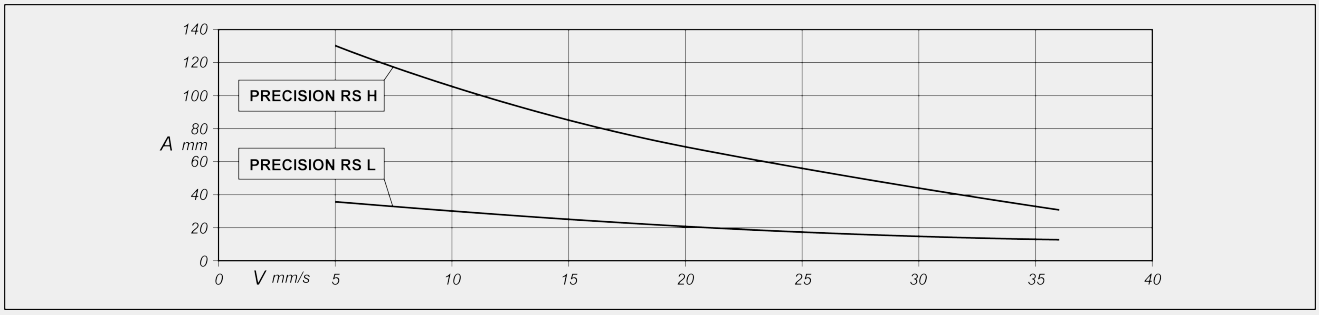
CUTTING UNIT TILTING



Electronic adjustment of intermediate angles

CONTACT ARC LENGTH

Maximum contact arc length to cut aluminium (mm) (L version)	35 (*)
Maximum contact arc length to cut aluminium (mm) (H version)	130 (*)



A = contact arc (mm) V = blade feed rate (mm/s)

(*) Data measured with a blade feed rate of 5 mm/s. Performances close to the limit must be verified by analyzing specific profiles

WORK AREA

Effective cut, according to model (mm)	5.000 / 6.000
Standard minimum cut with 2 heads at 90° (mm)	390
Minimum cut with PRO software with 2 heads at 90° (mm)	280
Minimum cut with PRO software with 2 heads at 45° internal (mm)	520
Minimum push feed cut with SLICE software (mm)	0
Maximum profile width with standard cut (mm)	167
Maximum profile height with 90° radial cut (mm)	215
Maximum profile height with external 45° radial cut (mm)	90
Maximum profile height with internal 45° radial cut (mm)	150
Maximum profile width with radial cut (mm)	240

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SAFETY DEVICES AND PROTECTIONS

Electrically operated fully enclosed front guarding	●
Soundproofed integral protection cabin with internal lighting	○

PROFILE POSITIONING AND CLAMPING

Pair of horizontal pneumatic vices with "low pressure" device	●
Pair of horizontal vertical vices	○
Pair of additional horizontal vices	○
Manual vices position adjustment on graphic interface	○
DIGICLAMP - digital vices supervision and positioning control system	○
Intermediate pneumatic profile support	●
Roller conveyor on the mobile head with servo-controlled pneumatically operated profile supports	●

Included ● Available ○

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