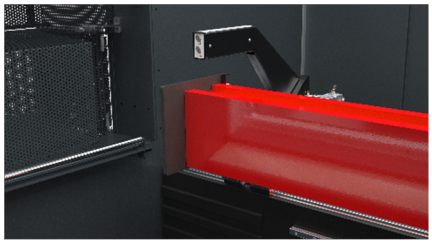
emmegi

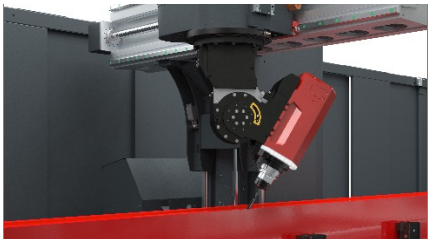
en

Aluminium

Steel

Pvc



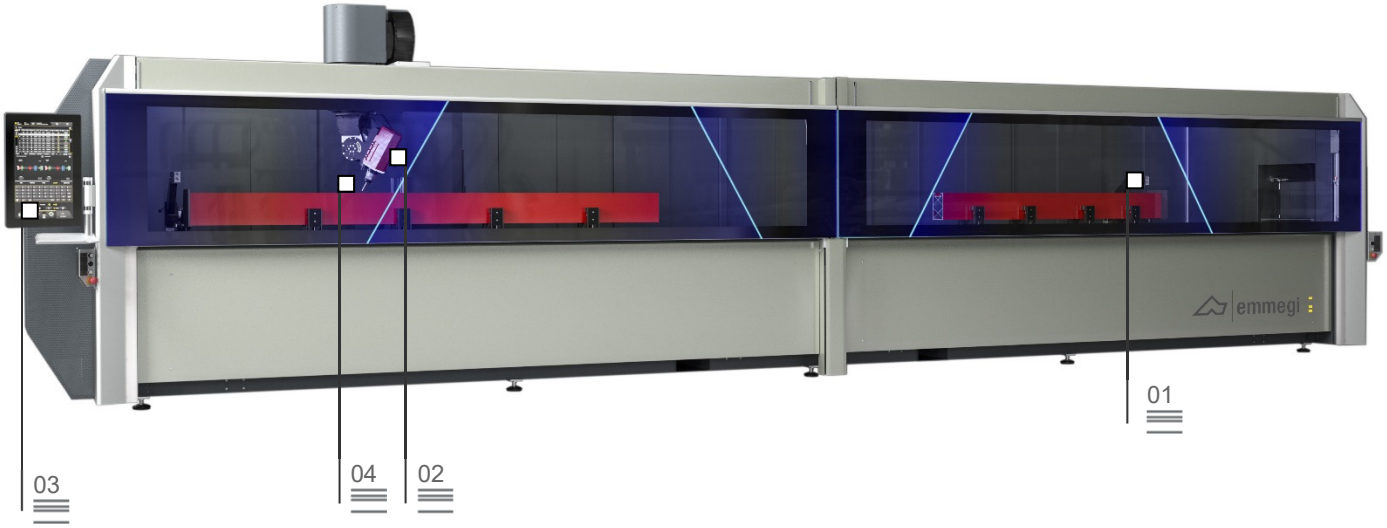


Comet R6 HP

5-axis machining centre

Vice positioner 01

Electrospindle 02

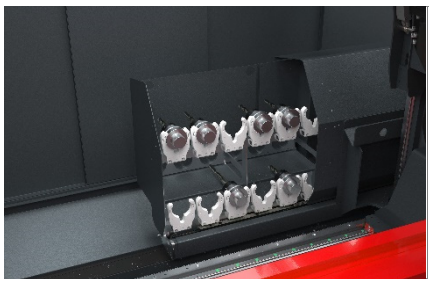


5-axis CNC machining centre used for the working of bars of aluminium, PVC, light alloys in general and steel pieces. It is provided with two operating modes: a single work area for bars up to 7 m length or two independent work areas in swing mode.
The machine in HP version is equipped with 2 additional axes for positioning of vices and reference stops, that allow positioning the vices while the machine is working in swing mode.
The 4th and 5th axis allow the electric spindle to continuously rotate to NC from -15° to 90° on horizontal axis and from 0° to 720° on continuous vertical axis, to perform the work on the upper side and on all the lateral sides of the profile.
It is provided with a 12-place tools magazine, on the X axis gantry, able to host also one milling disc.
It also has a mobile work surface that facilitates the piece loading/unloading operation and significantly increases the workable section.

Operator interface 03

Tool Storage 04

Double mode 05



The images are only given for illustrative purposes

Comet R6 HP

5-axis CNC machining centre

01
Vice positioner

Vice unit positioning is performed by two numerically controlled axes, parallel to X axis, with on-board reference stop.
This solution allows positioning stops all along the machine to work in multi-piece mode with one piece for each pair of vices.
Furthermore, vice positioning is provided independently from the operative status of X axis. In this way dynamic double operation mode is simultaneously possible with vice positioning during masked time.

02
Electrospindle

8.5 kW S1 high torque electrospindle also allows heavy duty machining, which is typical in industrial processing. As an option and for higher performances a 10.5 kW encoder equipped electrospindle is available for rigid tapping. Electrospindle rotation along B and C axes allows working on 5 sides of the profile, with no need of repositioning. It can be used for some types of steel extrusions as well as for aluminium profiles, thanks to the software-adjusted lubricating system. With its double tank it allows either minimum oil circulation or oil emulsion spray-mist.

03
Operator interface

Control new version with suspended interface allows the operator to look at the monitor from any position, as it can be rotated around the vertical axis. The operator interface is provided with a 24", 16:9 sized, portrait mode touchscreen, equipped with all necessary USB connections for PC and NC remote interfaces. It is also provided with keyboard and mouse and with barcode and remote keyboard connections. It is equipped with a front USB socket for data transfer.

04
Tool Storage

The tool store is built in X axis, in the lower part and behind the electrospindle. It allows great reduction of tool change times. This function is particularly useful in the extrusion head and tail machining, with no need to run to get to the store, as it moves simultaneously with the electrospindle and its positions. The store can contain up to 12 tool carriers with relevant tools, which can be set at the operator's discretion. Each position of the tool carrier is provided with a sensor detecting the correct cone position.

05
Double mode

The innovative machining system allows to minimise downtimes when loading and unloading the parts to be machined.
The system allows loading and consequent machining of pieces, with different lengths, codes and types of machining for the two working areas.
This is a very advantageous solution for the field of window/door frames and for small work orders, where machining is required for small lots of different pieces.

AXIS TRAVEL	
X AXIS (longitudinal) (mm)	**7.500**
Y AXIS (cross) (mm)	**1.000**
Z AXIS (vertical) (mm)	**450**
B AXIS (electrospindle rotation on the horizontal axis)	**– 15° ÷ 90°**
C AXIS (electrospindle rotation on the vertical axis)	**0° ÷ 720°**
AXIS H (right area vices positioner) (mm)	**3.300**
AXIS P (left area vices positioner) (mm)	**3.300**
ELECTRO SPINDLE	
Maximum power in S1 (kW)	**8,5**
Maximum power in S6 (60%) (kW)	**10**
Maximum speed (r/min)	**24.000**
Tool attachment cone	**HSK - 63F**
Automatic tools holder hook	●
Cooling through heat exchanger	●
Electrospindle controlled on 5 axes with possibility of simultaneous interpolation	●
Electrospindle with encoder for rigid tapping	○
AUTOMATIC TOOL MAGAZINE ON BOARD THE MACHINE	
Maximum Number of tools in tool magazine	**12**
Max. blade diameter loadable in magazine (mm)	**Ø = 250**
MODES OF OPERATION	
Multi-piece operation	●
Dynamic double mode operation	●
Extended machining, up to double nominal length on X axis	○
Basic multistep machining – up to 5 steps	●
Automatic managing of multistep machining	○
Multi-piece machining in Y	○
Workpiece rotation for machining on 4 sides	○
TAPPING CAPACITY (screw tap in aluminium, through hole)	
With length compensation	**M8**
Rigid tapping (optional)	**M10**
WORKPIECE CLAMPING	
Standard number of vices	**8**
Max. number of vices	**12**
Posizionamento automatico morse e battute riferimento pezzo tramite assi indipendenti H e P	●
Numero massimo morse per zona	**6**

● included
○ available