

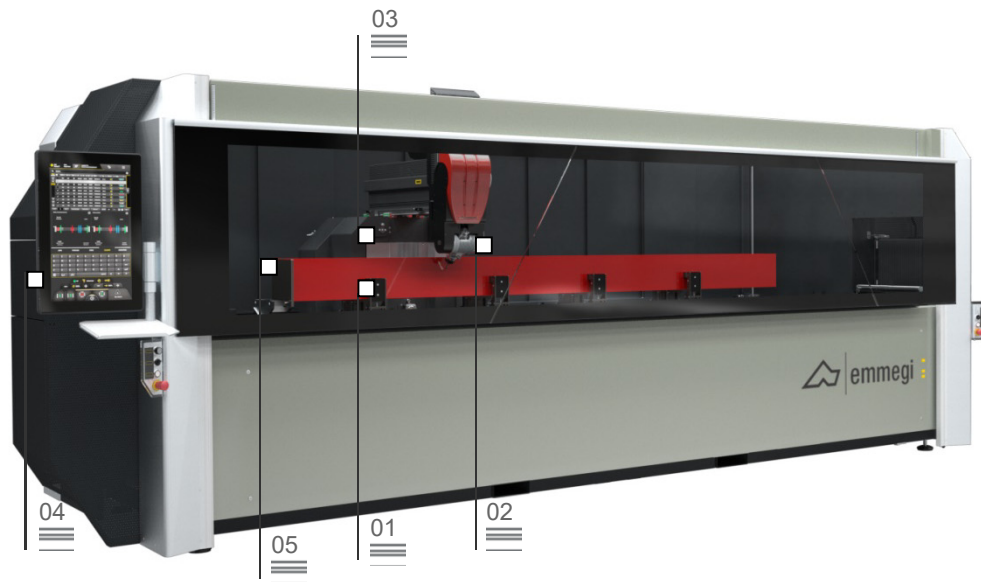
Vices 01



Electrospindle 02

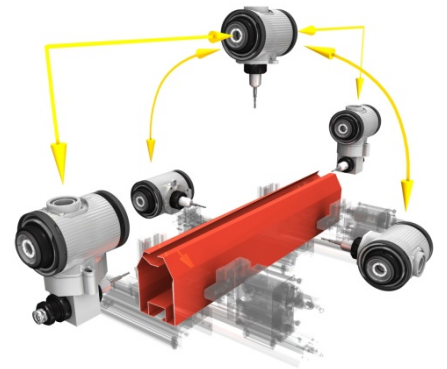
Comet X4

4-axis machining centre



4-axis CNC machining centre used for the working of bars or aluminium, PVC, light alloys in general and steel pieces up to 2 m. It is provided with a 10-place tools magazine, able to host one angular unit and one milling disc, to perform work on the 5 sides of the piece. It works bars up to 4 m length. The 4th NC axis allows the electric spindle to continuously rotate from 0° to 180° to perform the work on the profile edge. It also has a mobile work surface that facilitates the piece loading/unloading operation and significantly increases the workable section.

Campo di lavoro



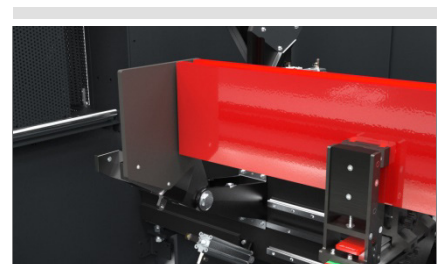
Tool Storage 03



Operator interface 04



Pneumatic Stops 05



The images are only given for illustrative purposes

Comet X4

4-axis machining centre

01

Vices

The machine software can calculate the correct positioning measure for each vice unit, according to the length of the part and to the type of machining to be performed. The automatic positioner allows picking all vice units and moving them by means of the gantry. This operation is performed at the highest speed and with great precision and spares longer time and collision risks, so that the machine can also be easily used by less experienced operators.

02

Electrospindle

7 kW S1 high torque electrospindle allows heavy duty machining. As an option, for higher performance an encoder-equipped electrospindle is available for rigid tapping. The electrospindle movement along A axis performs 0° to 180° rotation, allowing to work on 3 sides of the profile with no need to reposition it. 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

Tool Storage

The tool storage 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 storage, as it moves simultaneously with the electrospindle and its positions. The storage can contain up to 10 tool carriers with relevant tools, which can be set at the operator's discretion. A sensor detects correct cone positioning.

04

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.

05

Pneumatic Stops

The machine is equipped with strong stops allowing bar reference. One is positioned on the left side (standard) and the other on the right side (optional). Each stop is activated by a pneumatic cylinder, it is retractable type and is automatically selected by the machine software according to the machining to be performed. In short, double stop offers the advantage to load more profile pieces for multi-piece mode machining as well as the possibility to reposition the bar or the piece and perform machining on particularly long profiles.

AXIS TRAVEL

X AXIS (longitudinal) (mm)	4.000
Y AXIS (cross) (mm)	420
Z AXIS (vertical) (mm)	430
A AXIS (spindle rotation)	0 ÷ 180

ELECTROSPINDLE

Max. power rating in S1 (kW)	7
Max. speed (r.p.m.)	16.500
Toolholder taper	HSK – 50F
Automatic toolholder engagement	●
Cooling through heat exchanger	●
Electrospindle controlled on 4 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	10
Number of angle machining heads loadable in magazine	1
Max. blade diameter loadable in magazine (mm)	Ø = 180

MODES OF OPERATION

Multi-piece operation	●
Extended machining, up to double nominal length on X axis	○
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

PROFILE POSITIONING

Workpiece reference LH stop with pneumatic movement	●
Workpiece reference RH stop with pneumatic movement	○

WORKPIECE CLAMPING

Standard number of vices	4
Max. number of vices	6
Automatic vice positioning through X AXIS	●

SAFETY DEVICES AND GUARDS

Full guard cabin	●
Laminated protective glass	●
Fold-up side tunnels	●

- included
- available