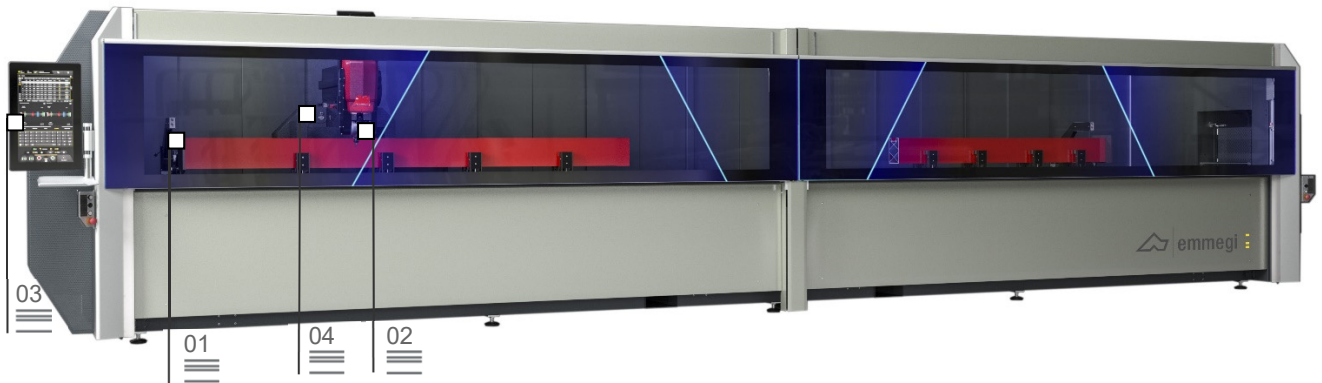


**Comet X6 HP**  
4-axis machining centre

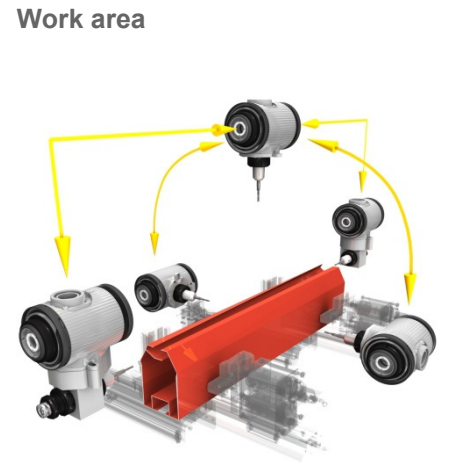
Vice positioner 01

Electrospindle 02



**Work area**

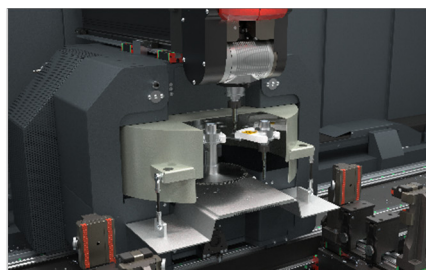
4-axis CNC machining centre used for the machining of bars of aluminium, PVC, light alloys in general and steel workpieces up to 2 mm.  
 The machine can operate in single-piece and multi-piece mode, with a single work area for bars up to 7 m in length. The COMET X6 HP version allows working in pendular mode, with two independent work areas and 2 supplementary axes to position the vices and the reference stops; it allows operation in dynamic pendular mode, carrying out vice positioning in concurrent operation time.  
 Each model has a 10-place tool magazine, on the X axis gantry, with the possibility of hosting an angle machining head and a milling disc, to perform machining on the 5 sides of the workpiece. The 4th NC axis allows the electrospindle to continuously rotate from 0° to 180° to perform the machining on the profile edge.  
 It also has a mobile work table that facilitates the workpiece loading/unloading operation and significantly increases the workable section.



Operator interface 03

Tool magazine 04

Pendular mode 05



The images are only given for illustrative purposes

# Comet X6 HP

## 4-axis 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 mode is simultaneously possible with vice positioning in concurrent operation time.

### 02

#### Electrospindle

7 kW S1 high torque electrospindle allows heavy duty machining. 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

#### Operator interface

The new control 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 port for exchanging data.

### 04

#### Tool magazine

The tool magazine is integrated on the 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, avoiding the travel to get to the magazine, as it moves simultaneously with the electrospindle and its positions. The magazine can contain up to 10 tool holders with relevant tools, which can be set at the operator's discretion. A sensor detects correct cone positioning.

### 05

#### Pendular mode

The innovative machining system allows to minimise downtimes when loading and unloading the workpieces to be machined. The system allows loading and consequent machining of workpieces, 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 workpieces.

#### AXES TRAVELS

X AXIS (longitudinal) (mm)	7,700
Y AXIS (transversal) (mm)	420
Z AXIS (vertical) (mm)	430
A AXIS (spindle rotation)	0 ÷ 180°
H AXIS (RH area vice positioner) (mm)	3,300
P AXIS (LH area vice positioner) (mm)	3,300

#### ELECTROSPINDLE

Maximum power in S1 (kW)	7
Maximum speed (rpm)	16,500
Tool holder cone	HSK - 50F
Automatic tool holder hook	•
Cooling with heat exchanger	•
Electrospindle with encoder for rigid tapping	○

#### AUTOMATIC TOOL MAGAZINE ON BOARD THE GANTRY

Maximum number of magazine tools	10
Number of angle machining heads that can be inserted in the magazine	1
Maximum diameter of the blade that can be inserted in the magazine (mm)	Ø = 180

#### FUNCTIONALITY

Multi-piece operation	•
Dynamic pendular operation	•
Extended machining, up to twice the maximum nominal length in X	○
Multi-step mode machining up to 5 steps	•
Automatic management of multi-step mode machining	○
Multi-piece mode machining in Y	○
Workpiece rotation for machining on 4 sides	○

#### TAPPING CAPACITY

With compensator	M8
Stiff (optional)	M10

#### WORKPIECE LOCKING

Standard number of vices	8
Maximum number of vices	12
Automatic vice positioning through H and P axes	•

#### TAPPING CAPACITY

Machine integral protection booth	•
Laminated protection glass	•
Retractable side protection tunnels	•

- included
- available