

Comet T4 Machining centre



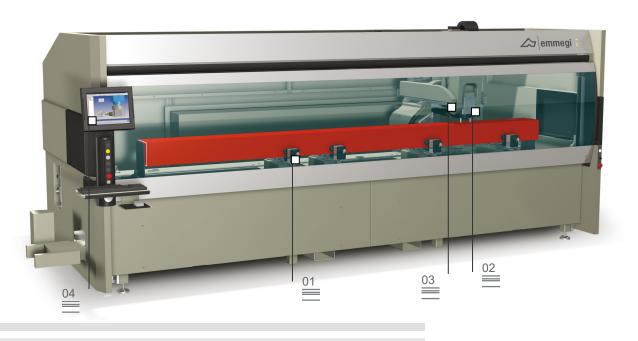
Vices positioner



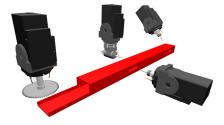
02

Electro spindle

01



Machining centre CNC with 4 controlled axes, used for the working of bars of aluminium, PVC, light alloys in general and steel pieces. Works bars up to d m long. The 4th axis allows the electro spindle to continuously rotate to CN from 0° to 180° to perform the work on the profile edge. It has an 8 place tools storage on board the X axis slide, able to host 2 angular units and one milling disc, to perform work on the 5 sides of the piece. It also has a mobile work surface that facilitates the piece loading/unloading operation and significantly increases the workable section.



**Operator interface** 





Tools storage

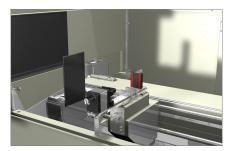


**Reference stop** 

05



The images are only given for illustrative purposes



## Comet T4 Machining centre

# 01

#### Vices positioner

The machine software, depending on the length of the piece and the work to be carried out, is able to safely determine the positioning quota of every vice unit. The automatic positioning allows to hook every vice unit and move it by moving the x axis slide. This operation happens with maximum speed and precision, avoiding long times and collision risks and making the machine easy to use, also by operators with less experience.

# 02

#### Electro spindle

The 8 kW electro spindle in S1 with high torque allows to perform heavy work also, typical of the industrial sector. The rotation of the electro spindle along axis A allows to perform rotations from  $0^{\circ} \pm 180^{\circ}$ , in order to perform work on 3 sides of the profile, without having to move it. It can be used on certain types of extruded steel and on aluminium profiles, thanks to the availability of a lubrication plant, settable by software, which twin tank allows the use of both minimal diffusion oil and of oil mist emulsion.

### **03** Operator interface

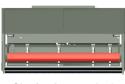
The new control version, with suspended interface, allows the operator to see the screen from any position, thanks to the possibility to rotate the monitor on the vertical axis. The operator interface has a 15" touch screen display with all USB connections necessary to remotely interface with PC and CN. It has a push button control unit, mouse and keyboard. It is also arranged for the connection of a barcode reader and remote push button control unit. A front USB socket, easy to access, replaced the floppy reader and the CD-Rom reader.

### 04 Tools storage

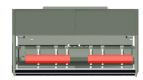
The tool holding storage is integrated on the X axis, placed lower and in backward position compared to the electro spindle, allows a drastic time reduction for the tools change operation. This function is particularly useful when working head and tail of the extruded material, allowing to avoid the run to reach the storage, in that the same moves together with the electro spindle, in the relative positionings. The storage is able to contain up to 8 tool holders with respective tools that can be configured at the discretion of the operator. Every position of the tool holder is supplied with a sensor that detects the cornect positioning of the cone.

## 05 Reference stop

Robust and stiff stops are present in the machine that enslave to bar reference, located one on the left side. Every stop, started by means of a pneumatic cylinder, is of removable type and is automatically selected, from machine software, in function of the work to be carried out. The advantages of the double reference stop can be summarised in the possibility to load more profile pieces for work in multipiece mode, as well as the possibility to carry out the repositioning of the bar or of the piece and carry out work on particularly long profiles.



#### Single piece method



Multipiece method

AXES RUNS	
AXIS X (longitudinal) (mm)	4.000
AXIS Y (transversal) (mm)	470
AXIS Z (vertical) (mm)	420
AXIS A (spindle rotation)	0° ÷ 180°
ELECTRO SPINDLE	
Maximum power in S1 (kW)	8
Maximum speed (revs/min)	24.000
Tool attachment cone	HSK - 63F
Automatic tools holder hook	٥
Cooling with heat exchanger	٠
AUTOMATIC TOOLS STORAGE ON BOARD THE X AXIS SLIDE	
Storage tools maximum number	8
Maximum number angular heads that can be inserted in tools storage	2
Maximum diameter blade that can be inserted in storage (mm)	Ø = 180
FUNCTIONALITY	
Multipiece functioning	0
WORKABLE SIDES	
With direct tool (upper side, lateral sides)	3
With angular unit (lateral sides, heads)	2 + 2
With blade tool (upper side, lateral sides and heads)	1 + 2 + 2
TAPPING CAPACITY	
With compensator	M8
Stiff (optional)	M10
PIECE LOCKING	
Vices standard number	4
Vices maximum number	6
Automatic vices positioning through axis X	٠

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