Comet T6 HP
Machining centre

Machining centre CNC with 4 controlled axes, used for the working of bars of aluminium, PVC, light alloys in general and steel pieces. It has two functioning methods: only one work area for bars up to 7 m long or two independent work areas. Two additional axes with numerical control Ha and P allow the positioning of the reference bars and of the vices units on the entire length of the machine, allowing to work in dynamic swing mode and in multipiece mode. 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.
The positioning of the vice units is entrusted to two axes with numerical control parallel to axis X, with on board reference stop. This solution allows to position the stops along the entire length of the machine to work in multipiece mode with one piece for every couple of vices. Furthermore, the positioning of the vices happens independently from the operational condition of axis X, allowing the working in dynamic swing mode with vices positioning while machine is working.

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° – 180°, 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.

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 10" 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.

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 correct positioning of the cone.

New work system that allows reducing machine stand-still times to a minimum during the loading and unloading of the pieces to be worked. The system allows both the loading and the consequent working of the pieces with lengths, codes and different working, between the two work areas. This solution makes the machine advantageous in the metal fittings sector and in small job orders, where the working of small batches of different pieces is requested.

**AXES RUNS**
- **AXIS X** (longitudinal) (mm): 7,700
- **AXIS Y** (transversal) (mm): 470
- **AXIS Z** (vertical) (mm): 420
- **AXIS A** (spindle rotation): 0° – 180°
- **AXIS H** (right area vices positioner) (mm): 3,800
- **AXIS P** (left area vices positioner) (mm): 3,800

**ELECTRO SPINDLE**
- Maximum power in S1 (kW): 8
- Maximum speed (r/min): 24,000
- Tool attachment cone: HSK - 63F
- Automatic tools holder hook: *
- Air cooling with electric fan: *

**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: *
- Dynamic swing functioning: *

**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: 8
- Vices maximum number: 12
- Automatic vices positioning through axes H and P: *
- Maximum number of vice per area: 6