

MAESTRO 420T/ MAESTRO 520T/



Double Spindle Double Turret

Multi-Tasking Turning Center

Machine Highlights

Front Machining

- BMT45 12-Stations
- Up to 24 tools
- 7.5 / 11 kW Spindle Power
- 65 mm Through Hole

Back Machining

- VDI 25 8-Stations Sub-Turret
- 3.7 / 5.5 kW Spindle Power
- 32 mm Through Hole

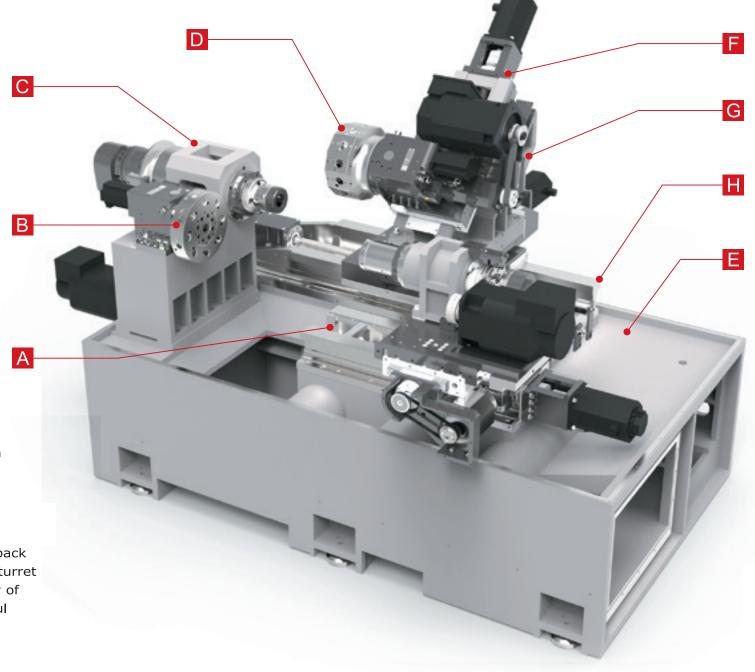
Capabilities

This multi-tasking turning center is an advanced machine designed for precision complex parts processed in one setup.

Power & Versatility

It has Double Spindles and Turrets with back machining provided by an 8-station sub-turret and sub-spindle with a total tool capacity of up to 32 tools. This solution is a powerful combination of power, precision and versatility.





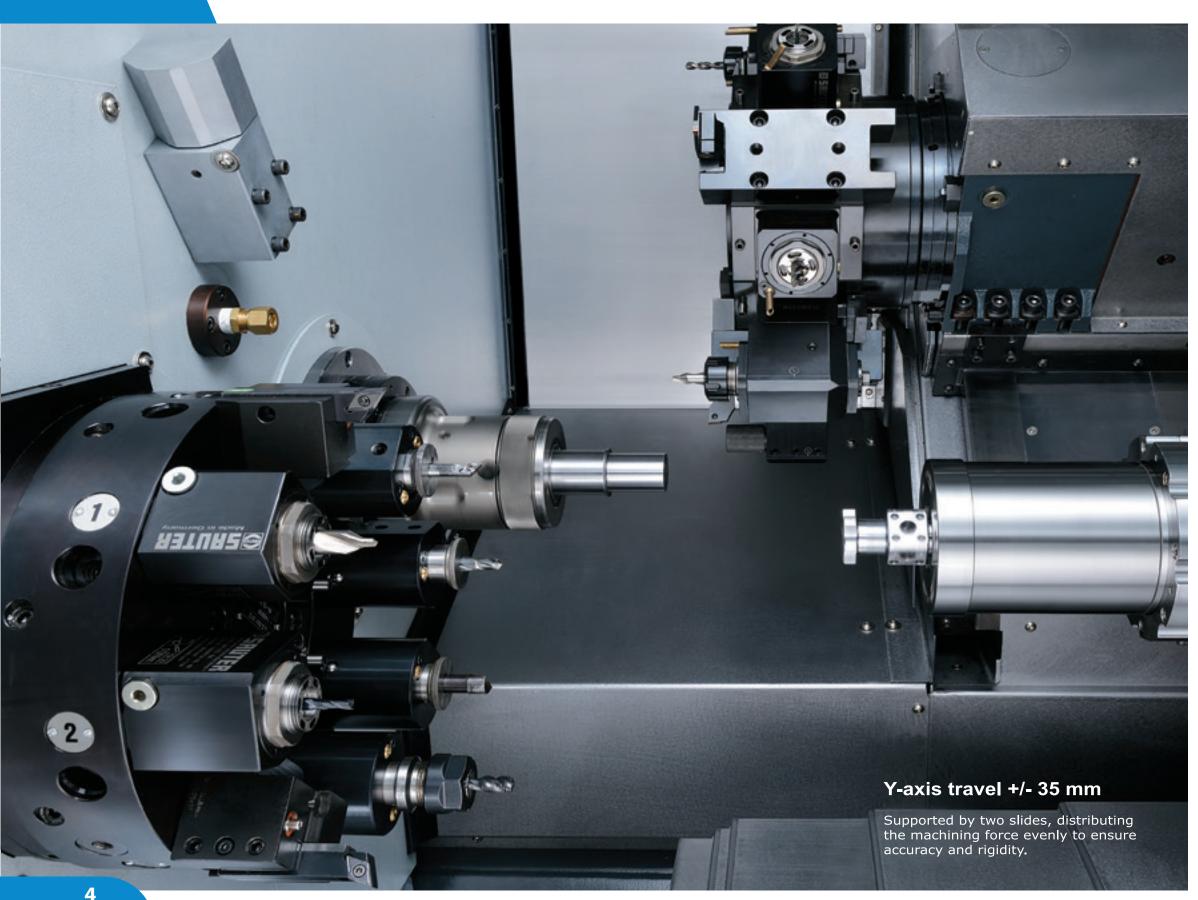
Key Features

- Boxways on all axes are oversized and precision ground to a near mirror finish for smooth, fast precision movements providing dynamic rigidity and heavy-duty cutting ability
- The sub-turret for back machining can reduce cycle times significantly with superimposed cutting to complete parts in one setup. Driven tools at all 8 stations are possible
- Heavy-duty precision spindle design for enhanced thermal stability & power
- The main turret has 12 stations and with multi-tool holders up to 24 tools can be equipped. Driven tools at all 12 stations are possible
- Meehanite cast material is used and stress relieved to provide the best possible rigidity and Vibration dampening base for machining parts with excellent surface finishes
- Y—axis travel +/— 35mm is supported by two slides, distributing the machining force evenly to ensure accuracy and rigidity
- G 45 degree wedge design for fast chip flow and removal from the machining area for a thermally stable work platform
- Z-axis is equipped with precision high-rigidity 32mm ball screws and all other axes use 28mm ball screws to ensure fast feed rates and extended long-term durability for trouble free machining



3

Turrets / Back Machining



Sauter VDI 30 I BMT 45-12 Stations Main Turret

The main turret has 12 stations but with multi-tool holders up to 24 tools are possible. Fanuc Alpha 2 motors provide driven tools up to 6000 rpm with high power and speed. Bidirectional turret indexing allows the shortest path to the next tool for faster cycle times. A 20 bar high pressure coolant system provides fast chip removal and longer tool life.

VDI 30 I BMT 45

- Fanuc Alpha 2 Motor-High torque, resolution & precision
- Driven tools: 2.2/3.75kW & 23.5 Nm
- Optional 50/100 bar High Pressure Coolant Systems

Sauter VDI 25-8 Stations Sub-turret

The sub-turret for back machining can help reduce idle time. Cycle times can also be significantly reduced with superimposed cutting utilizing the sub-spindle and sub-turret. Optional Sub Turret types: Power Turret, Servo Turret and Hydraulic Turret

VDI 25

- Fanuc Alpha 8 Motor-High torque, resolution & precision
- Driven tool power: 2.2 kW & 22 N.m | Turrets designed for faster indexing time and outstanding thermal stability

Workpiece Applications

Industry Aerospace

Material Aluminum 7005 Size 66 x 16 mm

240 sec Cycle time

Turning, Milling, Engraving, Back machining Operations



Industry Machinery SUS 340 Material Size 33 x 185 mm

Cycle time 720 sec

Operations Turning and Wrap Contour Milling



Industry Mechanical Parts

S45C Material Size 11 x 31 mm

Cycle time 300 sec

Operations Turning, Milling, Back machining



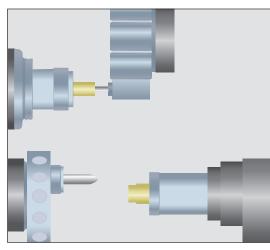
Automotive Industry Material Aluminum 7005 Size 45 x 16 mm

Cycle time 540 sec

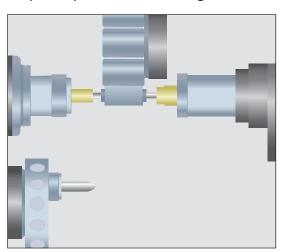
Operations Turning, Milling, Back machining

Machining Applications

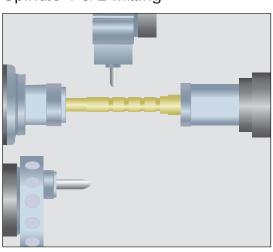
Spindle 1, Turret 1 ID Turning



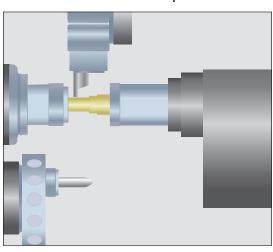
Superimposed Machining



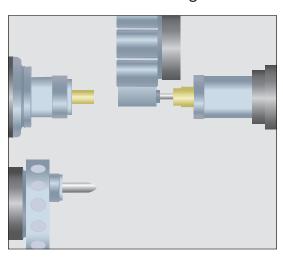
Spindle 1 & 2 Milling



Cutoff & Transfer to Spindle 2



Turret 1 Back Machining



Turret 1 OD Turning & Sub-turret **Back Machining**

