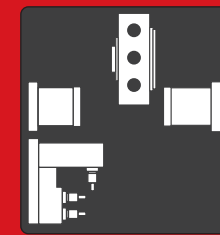


-  Aerospace
-  Automotive
-  Electronics
-  Hydraulics
-  Medical
-  Pneumatics

Double Spindle  
Double Y-Axes  
Turret + Gang Tools  
Multi-Tasking Turning Center



2 Y-Axes

DY42  
DY52  
DY60



TEL: +886-4-2537-7564 FAX: +886-4-2537-1959  
[www.mylascnc.com](http://www.mylascnc.com) [sales@mym.com.tw](mailto:sales@mym.com.tw)

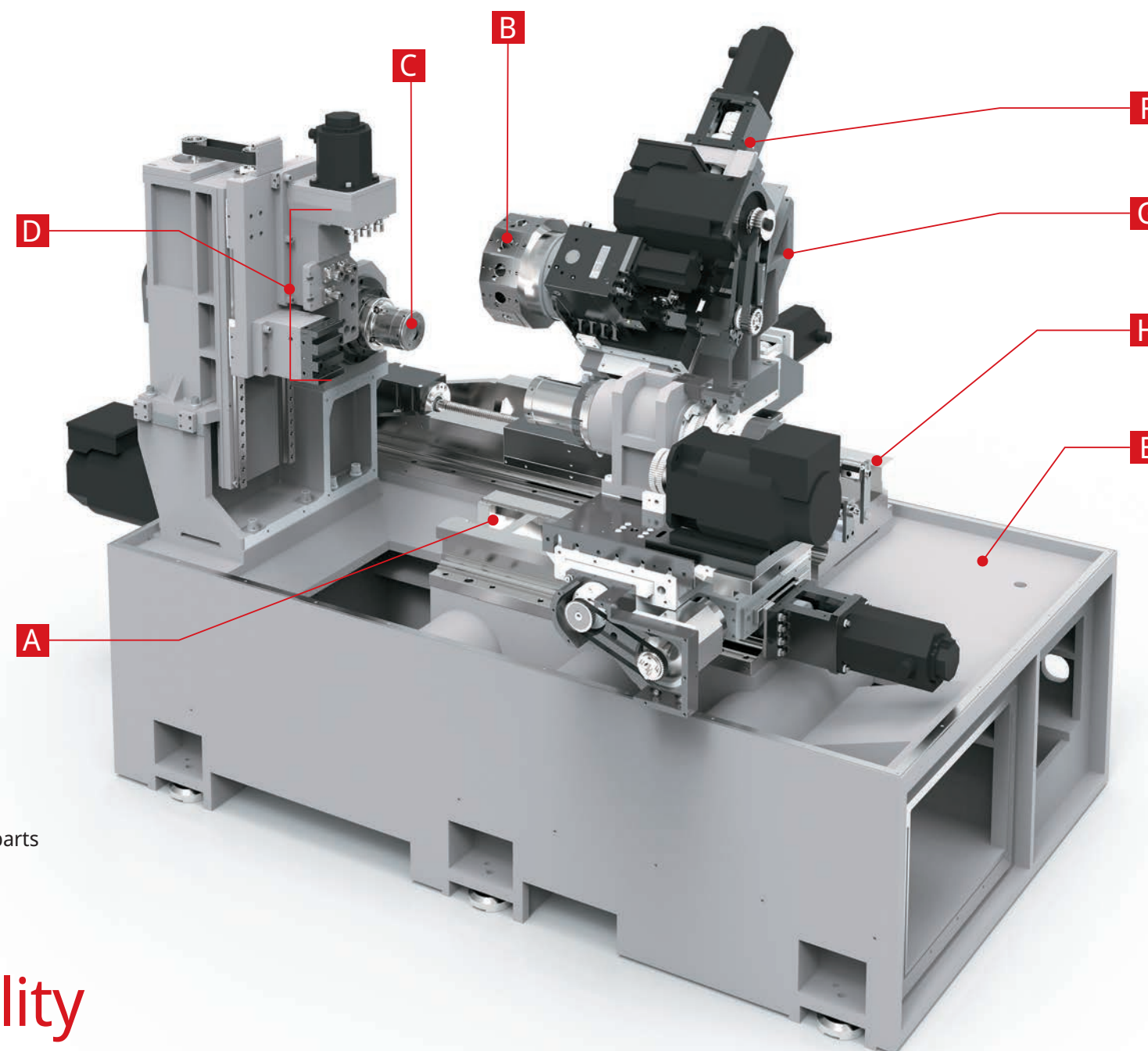
Renewed Partnerships  
Refined Machines

## Front Machining

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

## Back Machining

- Gang Tools Slide: 14 Tools
- 3 Cross Live Tools
- 3 Face Live Tools
- 3 OD & 5 ID Tools



## Key Features

- A** Boxways on all axes are oversized and precision ground to a near mirror finish for smooth, fast precision movements providing dynamic rigidity & heavy-duty cutting ability
- B** The main turret has 12 stations. With multi-tool holders up to 24 tools can be equipped. Driven tools at all 12 stations are possible.
- C** Heavy-duty precision spindle design for enhanced thermal stability & power
- D** Y2-Axis gang tool slide 14 tools: 3 Cross, 3 Face live tools, 3 OD & 5 ID tools for complex back machining & superimposed cutting that reduces cycle times. The slide is on precision linear guides for fast & accurate machining
- E** 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
- F** Y1-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
- H** Z-axis is equipped with precision high-rigidity 32mm ball screws & all other axes use 28mm ball screws to ensure fast feed rates and extended long-term durability for trouble free machining

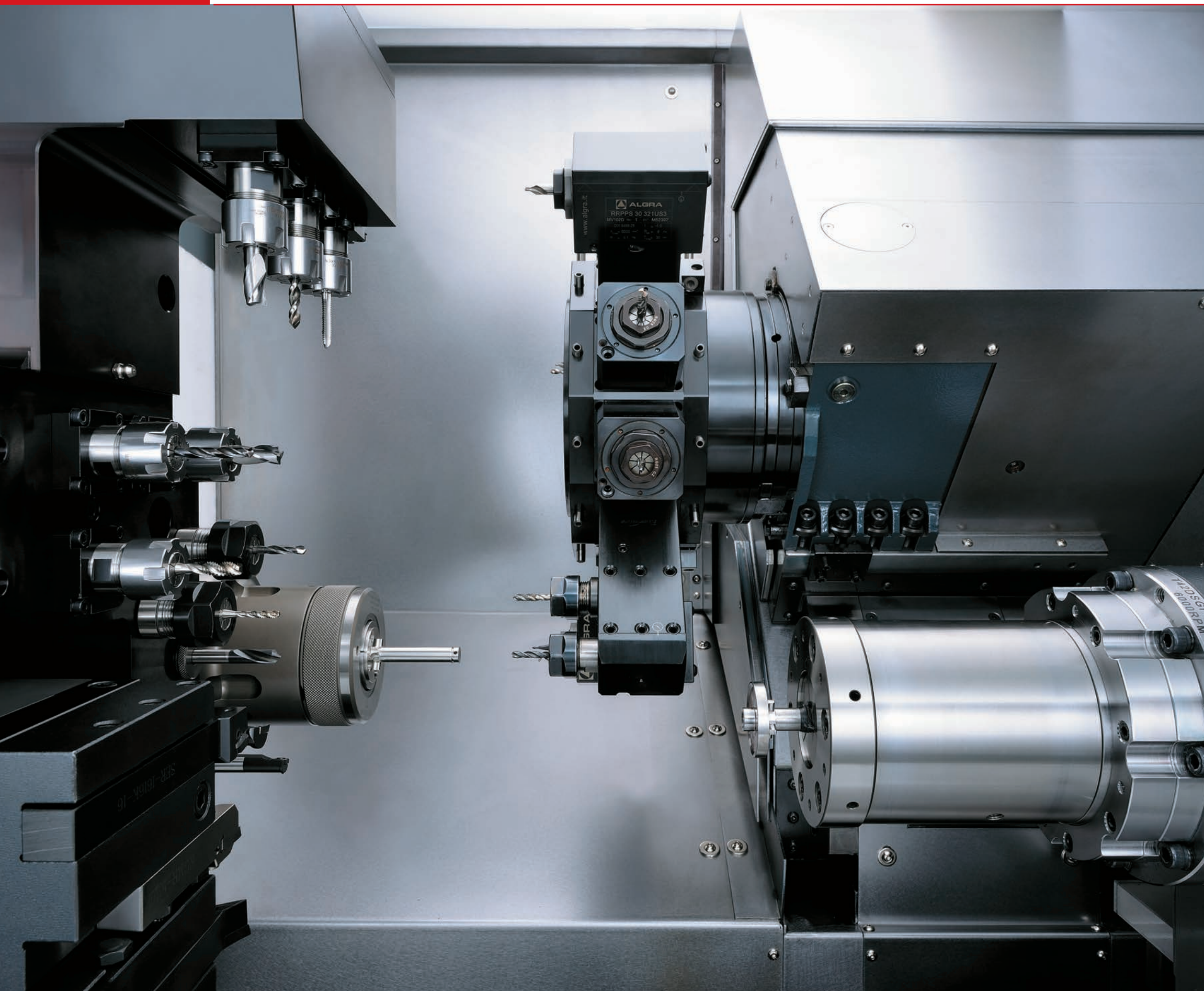
## Capabilities

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

## Power &amp; Versatility

It has Double Spindles, a BMT 12 station Turret and a 2<sup>nd</sup> Y-Axis for back machining with 14 tools for a total capacity of up to 38 tools. This solution with superimposed cutting is a powerful combination of precision and two Y-axes for machining of complex workpieces with extremely fast cycle times.





### BMT45-12 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.

#### BMT45

- Fanuc Alpha 2 Motor-High torque, resolution & precision
- Driven tools: 2.2/3.75 kW & 23.5 N.m
- Optional 70 bar High Pressure Coolant Systems

### Gang Tool Slide & Driven Tools

The Y2 gang tool slide with a total of 14 tools can shorten machining times while also allowing for unparalleled back machining of complex workpieces. Cycle times can also be significantly reduced with superimposed cutting. High power and torque Fanuc Alpha 8 6000rpm servo motors can power through the most demanding parts.

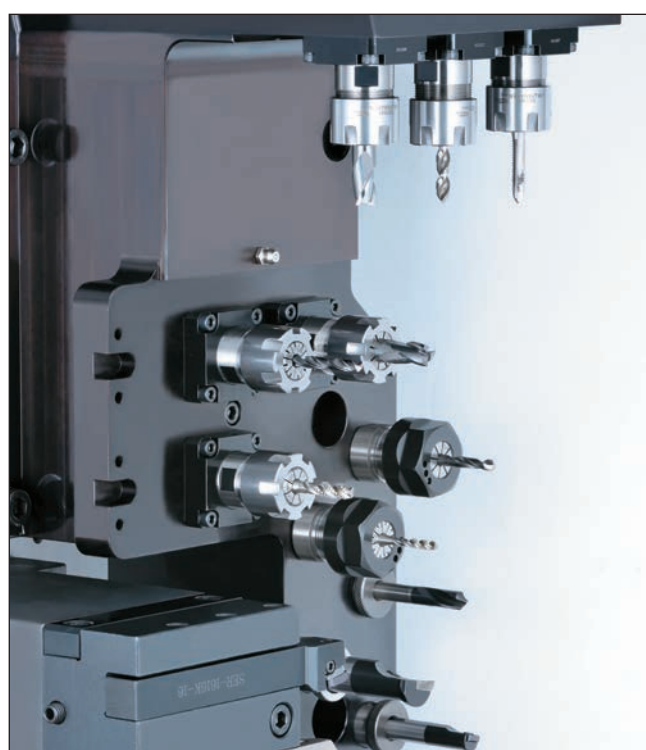
- Fanuc Alpha 8 Motor-High torque, resolution & precision
- Driven tool power: 2.2kW & 22Nm
- 3 Cross & 3 Face live tools
- 3 OD & 5 ID tools

## Y-Axis Enhanced Machining Capability in One Setup Speed, Precision & Complex Parts



### BMT45 Turret (Y1-Axis)

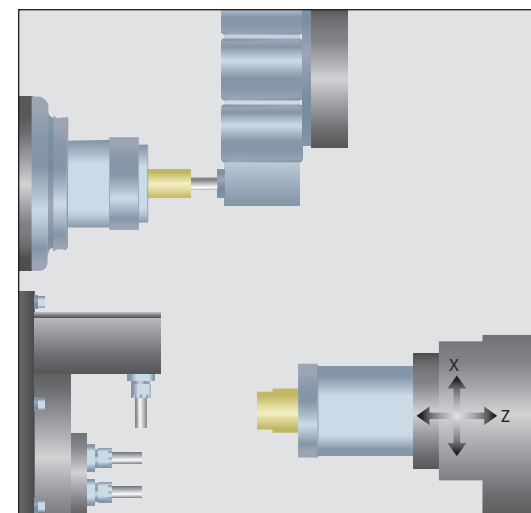
- 24 Tools Possible-12 station German branded turret for reliable heavy-duty cutting for non-stop production is equipped with half-indexing and fast tool changes of only 0.2 sec.
- Fanuc Alpha 2 servos for driven tools up to 6000rpm for powerful high-performance cutting of the most difficult materials with ease and speed
- 20 Bar High Pressure Coolant systems also provides fast chip removal and longer tool life necessary in for prolonged serial production. (Optional 50/100 bar)
- Y1-axis Travel +/- 35mm



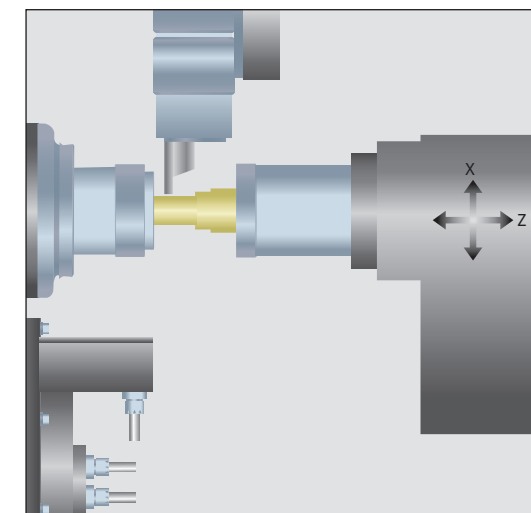
### Back Machining Gang Tool Slide (Y2-Axis)

- 14 tools-For back machining or complex workpieces, the added capability will shorten cycle time significantly.
- 6 Live Tools-Live tools for Cross and Face milling
- High Precision & Resolution Fanuc Alpha 8 6000rpm servo motors can power through the most demanding parts with precision and high resolution.
- Superimposed Cutting for High Productivity-Cycle times can be significantly reduced with superimposed cutting & high power and torque
- Y2-axis Travel 266mm

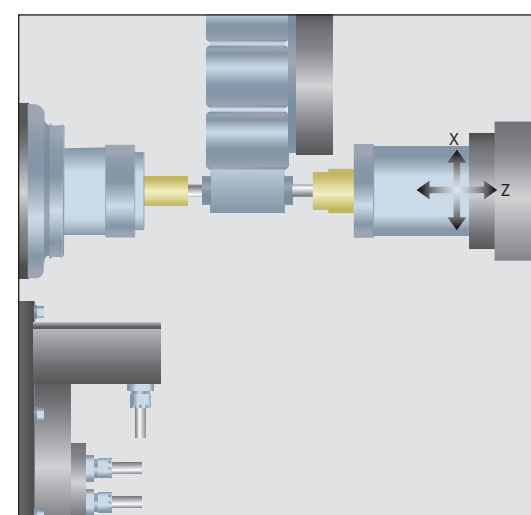
Spindle 1, Turret 1 ID Turning



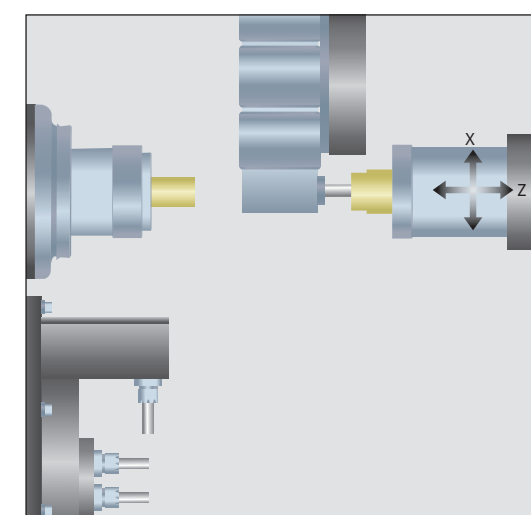
Transfer & Cutoff to Spindle 2



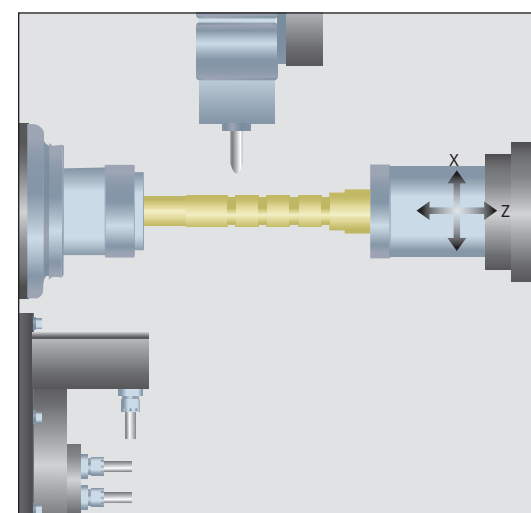
Superimposed Machining



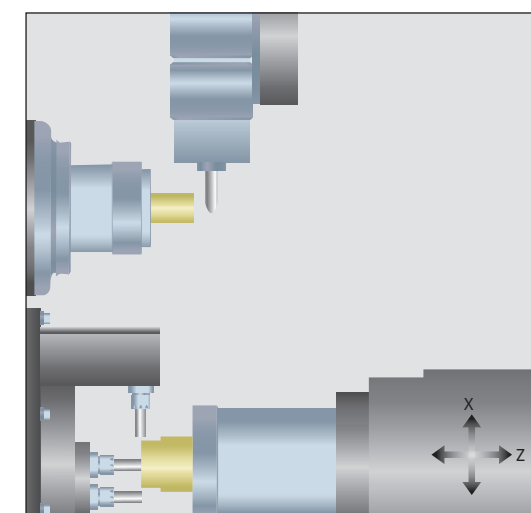
Turret 1 Back Machining



Spindle 1 & 2 Milling

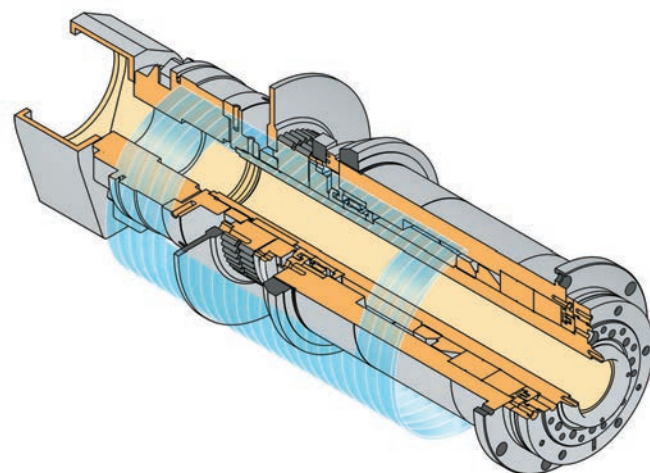


Turret 1 Milling & Y2 ID Turning

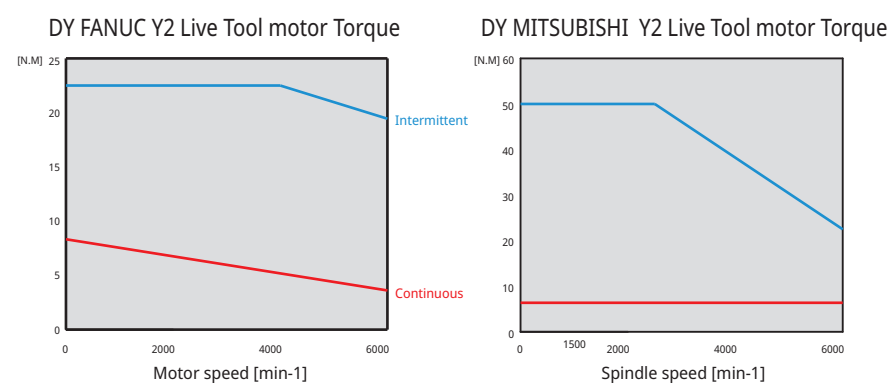
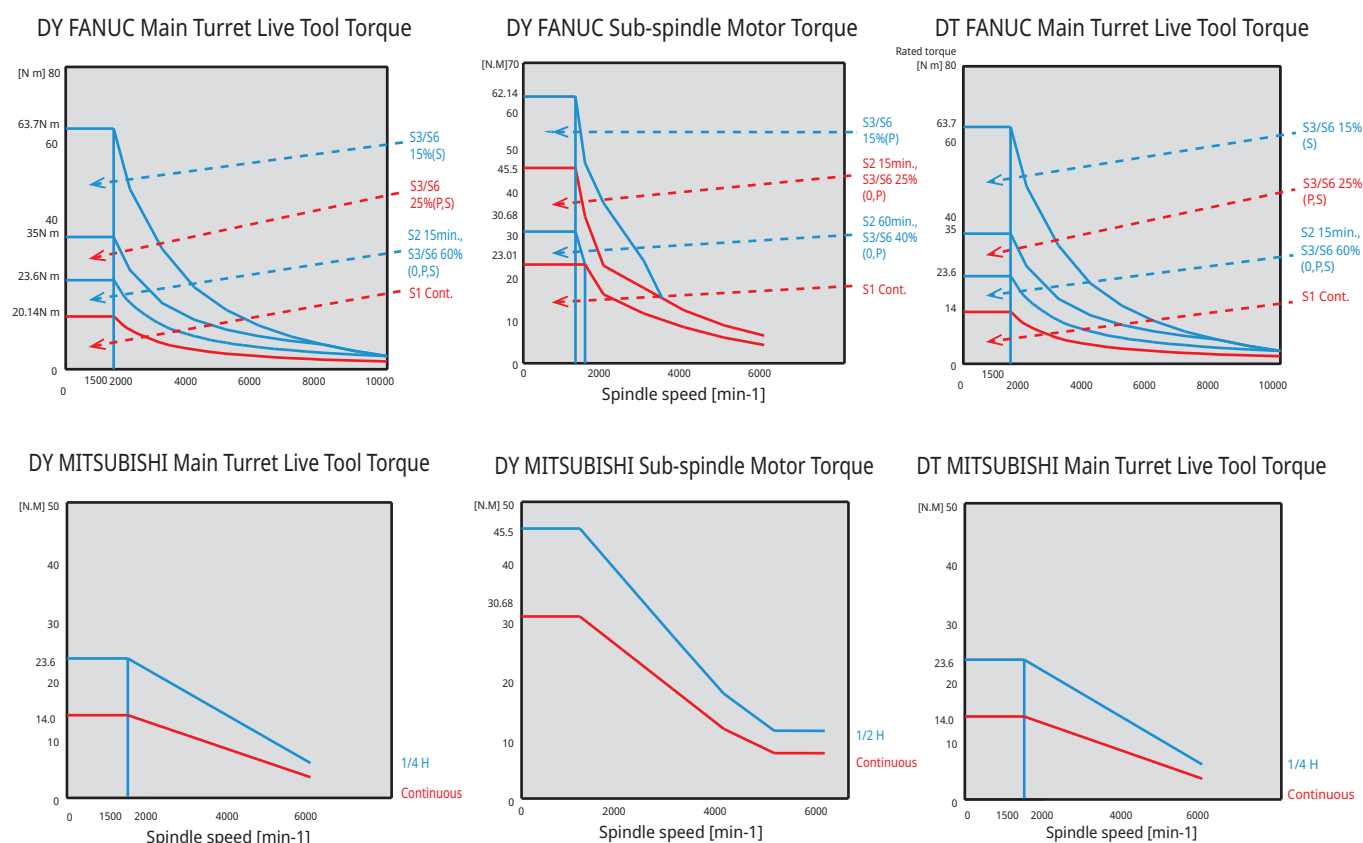
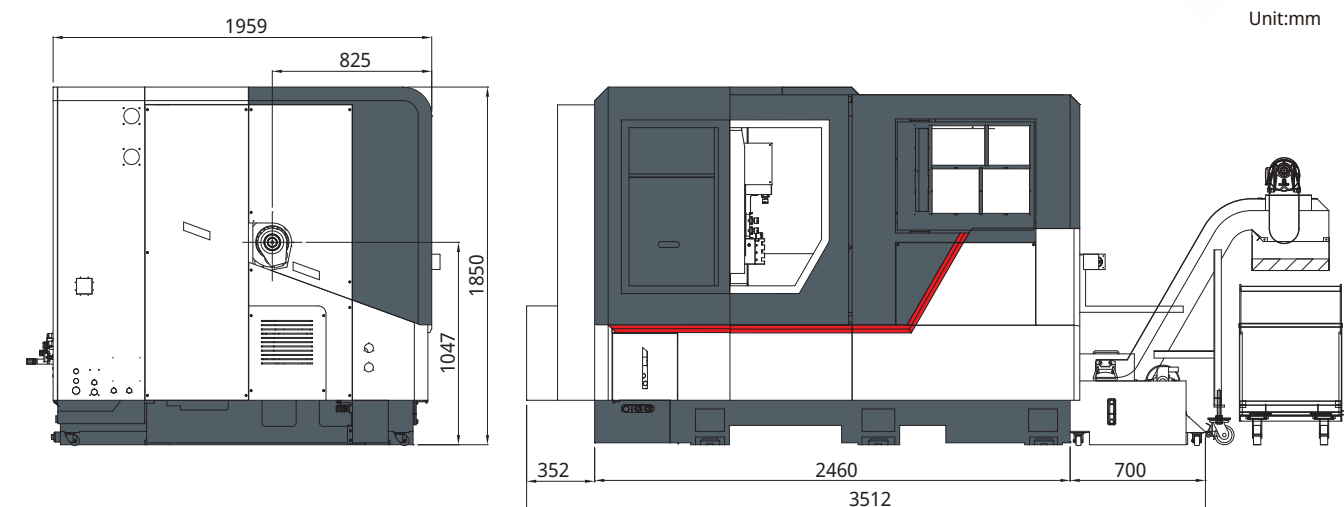


# Precision Spindles

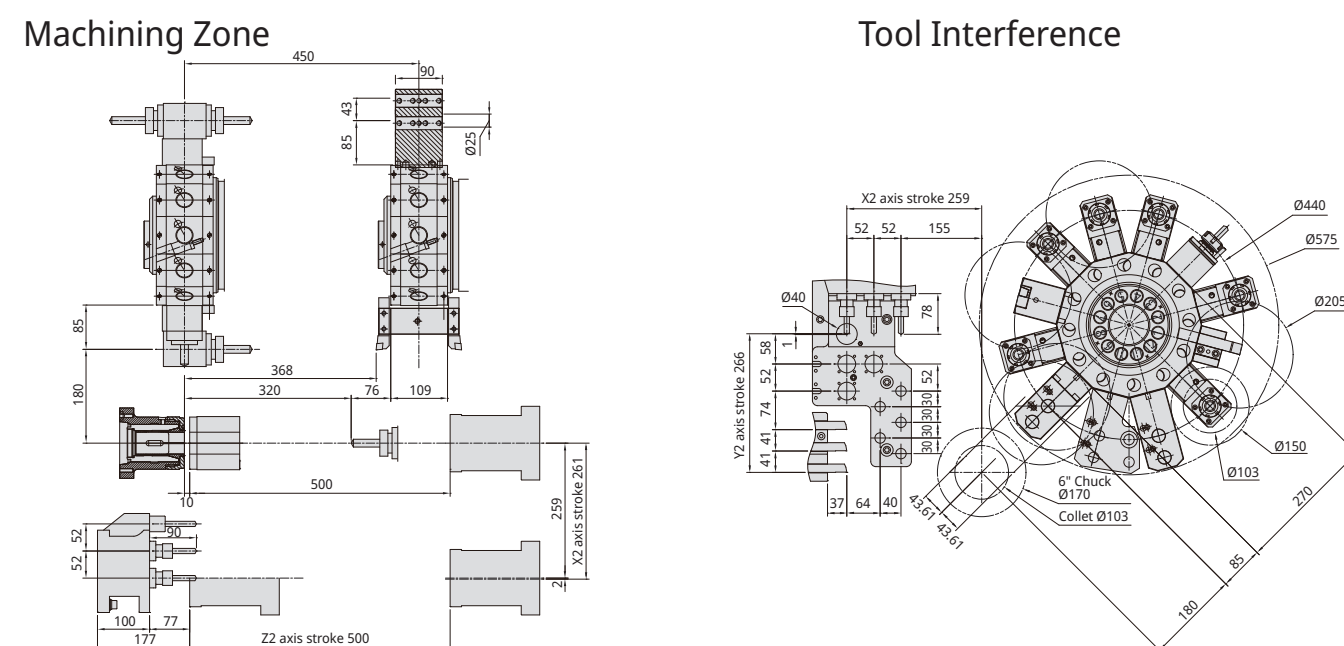
- Extremely rigid main and sub-spindles with purpose built roller bearings on the front and rear to concentrate power directly to the cutting surface and resist axial and radial forces
- Higher speeds and heavy-cuts are possible with this bearing arrangement
- Simultaneous independent machining of the front and back of the workpiece and C-axis with resolution of 0.001 degrees allows for complex contouring of parts



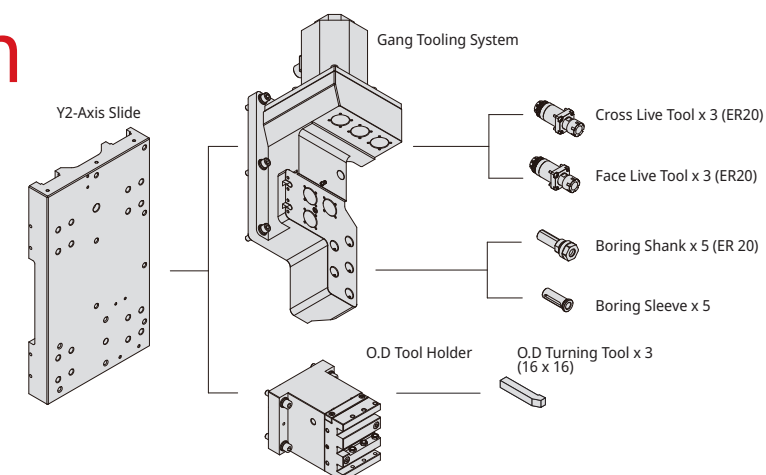
# Machine Dimensions



# Tool Interference Diagrams

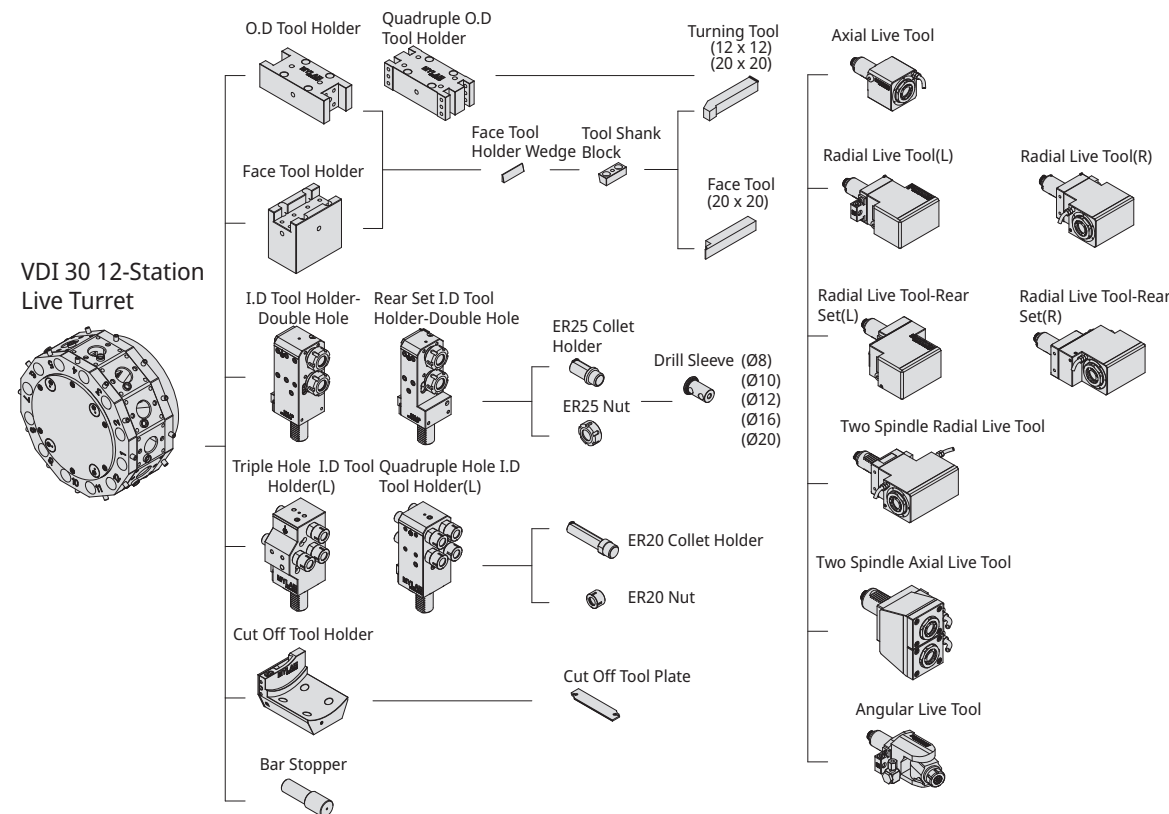


# Tooling System

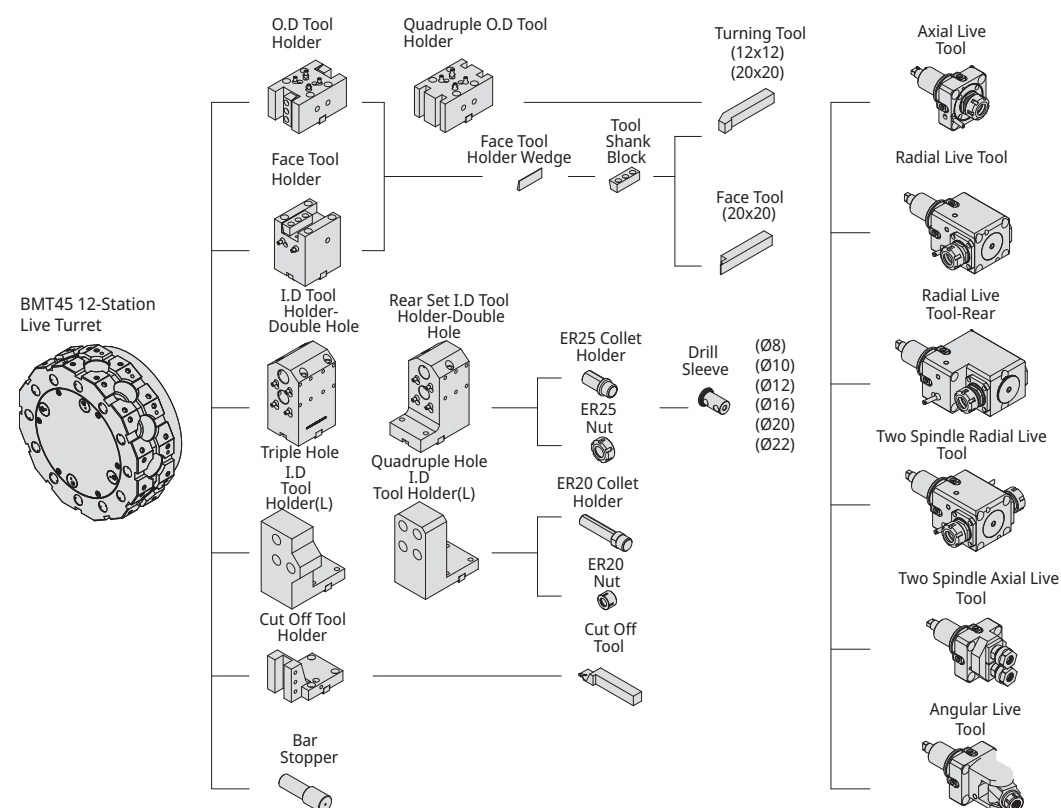


## VDI 30.12 Tooling System

Unit:mm



## BMT45. 12 Tooling System



|                   | Item                                           | Unit  | DY42              | DY52              | DY60              |
|-------------------|------------------------------------------------|-------|-------------------|-------------------|-------------------|
| Capacity          | Chuck Type (Main / Sub Spindle)                | type  | DIN173E / DIN173E | DIN177E / DIN173E | DIN185E / DIN173E |
|                   | Max. Bar Turning Length (Main / Sub Spindle)   | mm    | 135 / 60          | 135 / 60          | 135 / 60          |
|                   | Max. Turning Length                            | mm    | 350               | 350               | 350               |
|                   | Max. Turning Diameter (Main / Sub Spindle)     | mm    | Ø42 / 42          | Ø51 / 42          | Ø60 / 42          |
|                   | Max. Turning Bar Diameter (Main / Sub Spindle) | mm    | 150 / 135         | 150 / 135         | 150 / 135         |
| Travel            | X1 / X2 Axis Travel                            | mm    | 190 / 260         | 190 / 260         | 190 / 260         |
|                   | Z1 / Z2 Axis Travel                            | mm    | 450 / 500         | 450 / 500         | 450 / 500         |
|                   | Y1 Axis Travel                                 | mm    | ±35 / 266         | ±35 / 266         | ±35 / 266         |
|                   | X1 / X2 Axis Rapid Traverse                    | M/min | 18 / 18           | 18 / 18           | 18 / 18           |
|                   | Z1 / Z2 Axis Rapid Traverse                    | M/min | 24 / 24           | 24 / 24           | 24 / 24           |
|                   | Y1 Axis Rapid Traverse                         | M/min | 18 / 18           | 18 / 18           | 18 / 18           |
| Main Spindle      | Spindle Nose                                   | type  | A2-5              | A2-6              | A2-6              |
|                   | Spindle Speed                                  | rpm   | 50 - 5000         | 50 - 4500         | 50 - 5000         |
|                   | Spindle Motor (Cont./30mins)                   | kW    | 7.5 / 11          | 7.5 / 11          | 7.5 / 11          |
| Sub Spindle       | Spindle Nose                                   | type  | A2-4              | A2-4              | A2-4              |
|                   | Spindle Speed                                  | rpm   | 50 - 5500         | 50 - 5500         | 50 - 5500         |
|                   | Spindle Motor (Cont./30mins)                   | kW    | 3.7 / 5.5         | 3.7 / 5.5         | 3.7 / 5.5         |
| Turret            | No.of Tool Stations                            | set   | 12                | 12                | 12                |
|                   | O.D. Tool Size                                 | mm    | 20                | 20                | 20                |
|                   | I.D. of Boring Bar Holder                      | mm    | 25                | 25                | 25                |
|                   | Turret Indexing                                | sec   | 0.1 - 0.3         | 0.1 - 0.3         | 0.1 - 0.3         |
|                   | Tool Spindle Speed                             | rpm   | 6000              | 6000              | 6000              |
|                   | Tool Spindle Motor (Cont./30mins)              | kW    | 2.2 / 3.7         | 2.2 / 3.7         | 2.2 / 3.7         |
|                   | Tool Spindle Torque (Cont./30mins)             | NM    | 14 / 23.5         | 14 / 23.5         | 14 / 23.5         |
| Sub-Turret        | No.of Tool Stations                            | set   | 14                | 14                | 14                |
|                   | O.D. Tool Size                                 | mm    | 16                | 16                | 16                |
|                   | I.D. of Boring Bar Holder                      | mm    | 20                | 20                | 20                |
|                   | Tool Spindle Speed                             | rpm   | 5000              | 5000              | 5000              |
|                   | Tool Spindle Motor (Cont./30mins)              | kW    | 2.2               | 2.2               | 2.2               |
|                   | Tool Spindle Torque (Cont./30mins)             | NM    | 22                | 22                | 22                |
|                   | Coolant Tank Capacity                          | Liter | 250               | 250               | 250               |
| Machine Dimension | Machine Width                                  | mm    | 2910              | 3020              | 3020              |
|                   | Machine Depth                                  | mm    | 2015              | 2015              | 2015              |
|                   | Machine Height                                 | mm    | 2065              | 2065              | 2065              |
|                   | Machine Weight                                 | kg    | 5350              | 5350              | 5350              |
|                   | Foundation Plan                                | mm    | 4070 x 3530       | 4180 x 3530       | 4180 x 3530       |
|                   | Power Supply                                   | Kva   | 53                | 53                | 53                |

## Standard Accessories:

- Fanuc Controller
- Collet Chuck
- Workpiece Ejector
- 12-Station Power Turret
- Gang Tool System
- Auto Lubrication System
- Coolant System
- Sub-Spindle Inner Coolant & Air Blow
- Coolant Level Sensor
- Auto Power Shut-Off
- Signal Tower
- Parts Catcher
- Parts Conveyor
- High Pressure Coolant System (20 Bar)

## Optional Accessories:

- Live Tool Holder
- Static Tool Holder
- 6" Power Chuck for SP1
- 5" Power Chuck for SP2
- Air Blow for SP1/SP2
- High Pressure Coolant System (70 Bar)
- Chip Conveyor
- Oil Mist Collector
- Bar Feeder
- Transformer
- Regulator
- Mitsubishi Controller

We reserve the right to modify the above specifications without notice.