



TECHNICAL DATA

TRAVEL

| | |
|-----------------|---------------|
| X Axis (mm) | 620 |
| Y Axis (mm) | 520 |
| Z Axis (mm) | 460 |
| B Axis (degree) | -110° / +110° |
| C Axis (degree) | 360° |

TABLE DIMENSIONS

| | |
|----------------------|------|
| Max. table load (kg) | 300 |
| Table diameter (mm) | Ø650 |

SPINDLE

| | |
|----------------------------------|--------|
| Standard Speed (RPM) | 14000 |
| Drive power rating (40/100 % DC) | 21/15 |
| Toque (40/100 % DC) | 112/80 |

PRECISION VALUES

| | |
|---------------------------------|----------|
| Positioning Accuracy | ±0,004mm |
| Repeatability Accuracy | ±0,002mm |
| Positioning Accuracy (C Axis) | 7" |
| Positioning Accuracy (B Axis) | 12" |
| Repeatability Accuracy (C Axis) | 4" |
| Repeatability Accuracy (B Axis) | 8" |

TOOL MAGAZINE

| | |
|---------------------------|--------------|
| Capacity/Tool Holder Type | 30 / HSK-A63 |
|---------------------------|--------------|

RAPID TRAVERSE

| | |
|----------------|-----|
| X Axis (m/min) | 40 |
| Y Axis (m/min) | 40 |
| Z Axis (m/min) | 40 |
| B Axis (rpm) | 120 |
| C Axis (rpm) | 210 |



TMU 500

5 AXIS MACHINING CENTER

TMU 500 is a 5-Axis CNC Machining Center with metalworking technology, consisting of a combination of three linear axes and two rotary axes.



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ADVANTAGES

In a 5 axis machining center, the cutting tool moves on the X, Y and Z linear axes and rotates in the C and B axes to approach the workpiece from any direction.



5-axis Machining Center makes it possible to machine highly complex shapes with a single CNC program in a single set-up – which ultimately increases productivity by reducing machining and cycle time maintaining high accuracy, more safety and energy efficient operations as turning, milling, grinding etc.

SPINDLE



ELECTRO SPINDLE

- High performance with 14000 rpm speed and 112 nm (%40 DC) Electro spindle
- Efficient cutting performance with CTS
- High performance with spindle cooling system

MAGAZINE



TOOL MAGAZINE

- Fast and automatic tool change reduces machining times and increases productivity while maintaining quality
- 30 tool capacity
- HSK-A 63 tool holder
- Automatic fast tool change system

CONVEYOR



MODULAR CONVEYOR SYSTEM

- Independent conveyor and water tank for more effective use
 - Ease of cleaning thanks to the modular pallet
- CHIP BUCKET**
- Convertible and braking features provides easy storage and discharge of any kinds of chips

ADVANTAGES

5 Axis CNC Machining Center has three linear axes (X-, Y-, and Z-axis) and two additional axes (swivel-rotary axis) to ensure a higher level of flexibility in machining. Additional rotary axes can help reduce sequence of setup work and machining times, and increase machining accuracy and quality as multiple areas can be machinable in one setup. The machine is mostly considered for special-shaped parts for aircrafts, but it actually brings more advantages than a 3-axis machine in machining of dies and molds which requires high-quality surfaces, and workpieces of general shapes.

TMU-500, 5-axis machining center provides to World class productivity and precision for simultaneous 5-axis machining operations. It's stable machining performance and compact structure is ideal for production of small to medium size work pieces with complex shapes.



5 AXIS



5-axis machining provides unlimited possibilities in terms of part sizes and shapes that you can efficiently process. The term "5-axis refers to the number of directions the cutting tool can move. In other words, you can machine all five sides of a part with one setting.

EQUIPMENT



- Multi-axis machining minimises repositioning errors and ensures precision.
- Direct-Drive servo motors
- Precision positioning and repeatability capability
- Real position measurement with linear

CONTROL



Machine Control Unit involves several actions to perform in a CNC machine and it helps to send the proper instruction to every part of the machine. It can recognize interpolations to form axis transfer commands.