

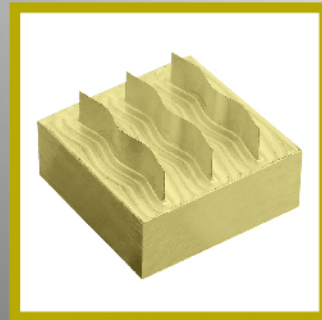
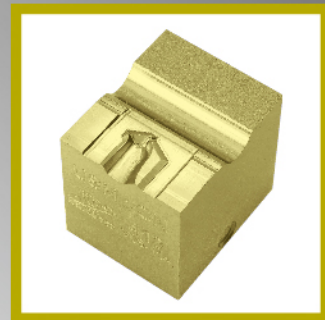
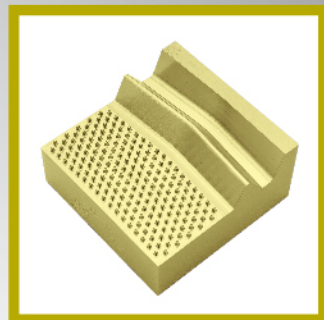
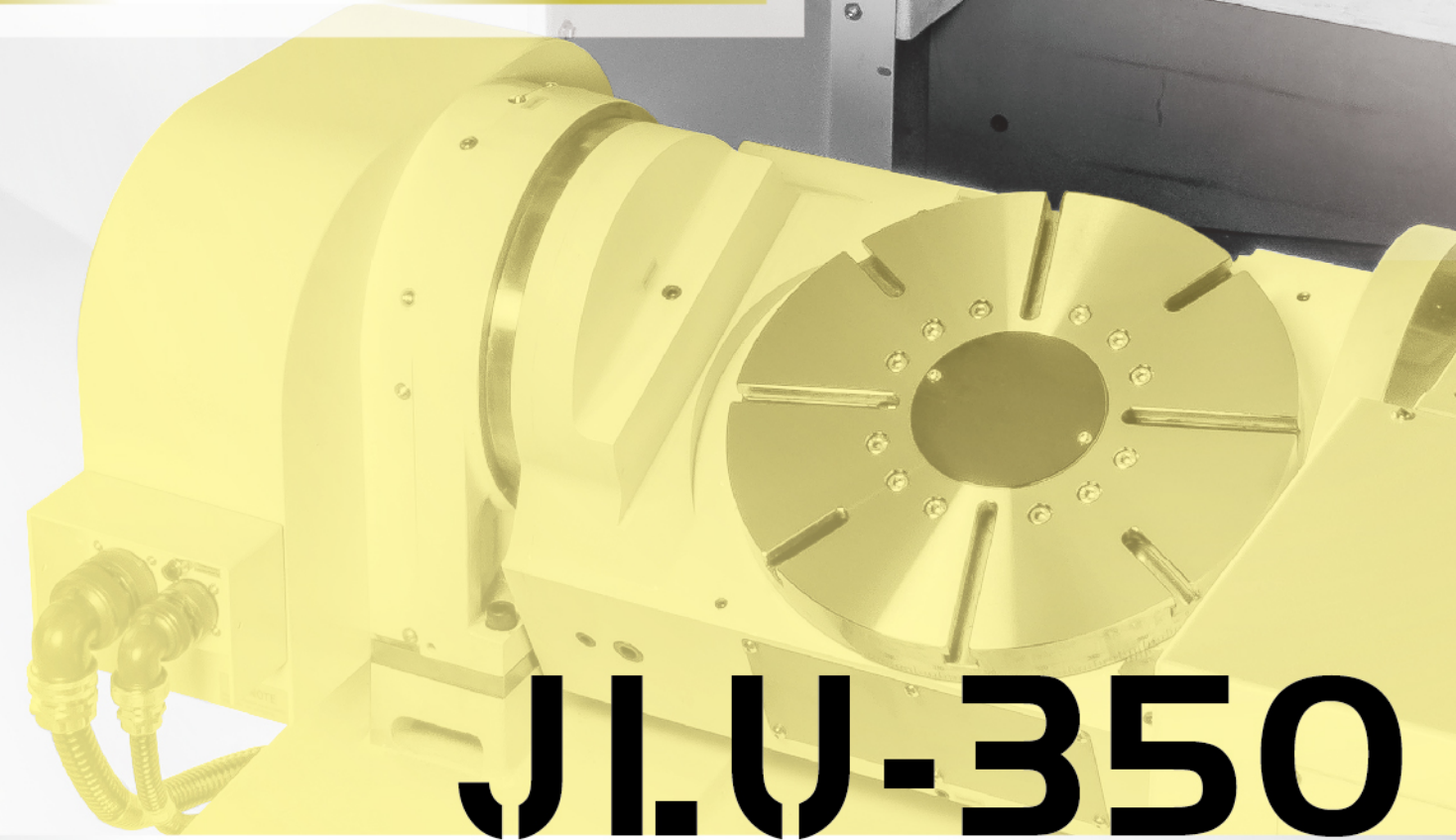
MILLSTAR

FIVE AXIS MACHINING CENTER



TILTING ROTARY TABLE (A axes / C axes)

- A axis tilting angle: $-120^{\circ} \sim +30^{\circ}$
- C axis rotating angle: 360°
- Driven by servomotors
- High indexing accuracy



OUTSTANDING FEATURES

- Compact construction with high stability.
- Heavy-duty roller type linear guide ways on X / Y / Z axes.
- Equipped with a high-precision tilting rotary table (A / C axis).
- 5 axis simultaneous machining allows for machining complex parts with high efficiency and high accuracy.
- 12,000 rpm direct drive spindle features low vibration, low noise, and low thermal growth.
- BT-40 spindle taper.
- Rapid traverse rates on X / Y / Z axes 36 m/min.
- Equipped with a 24-tool magazine.

FIVE AXIS MACHINING CENTER

TILTING ROTARY TABLE

B axes
C axes

The tilting rotary table can tilt $-40^{\circ} \sim +110^{\circ}$ along B axis and rotate 360° along C axis.

The table tilting and rotating motions are driven by servomotors.

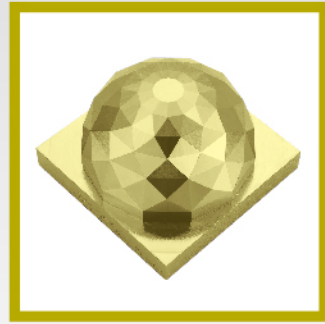
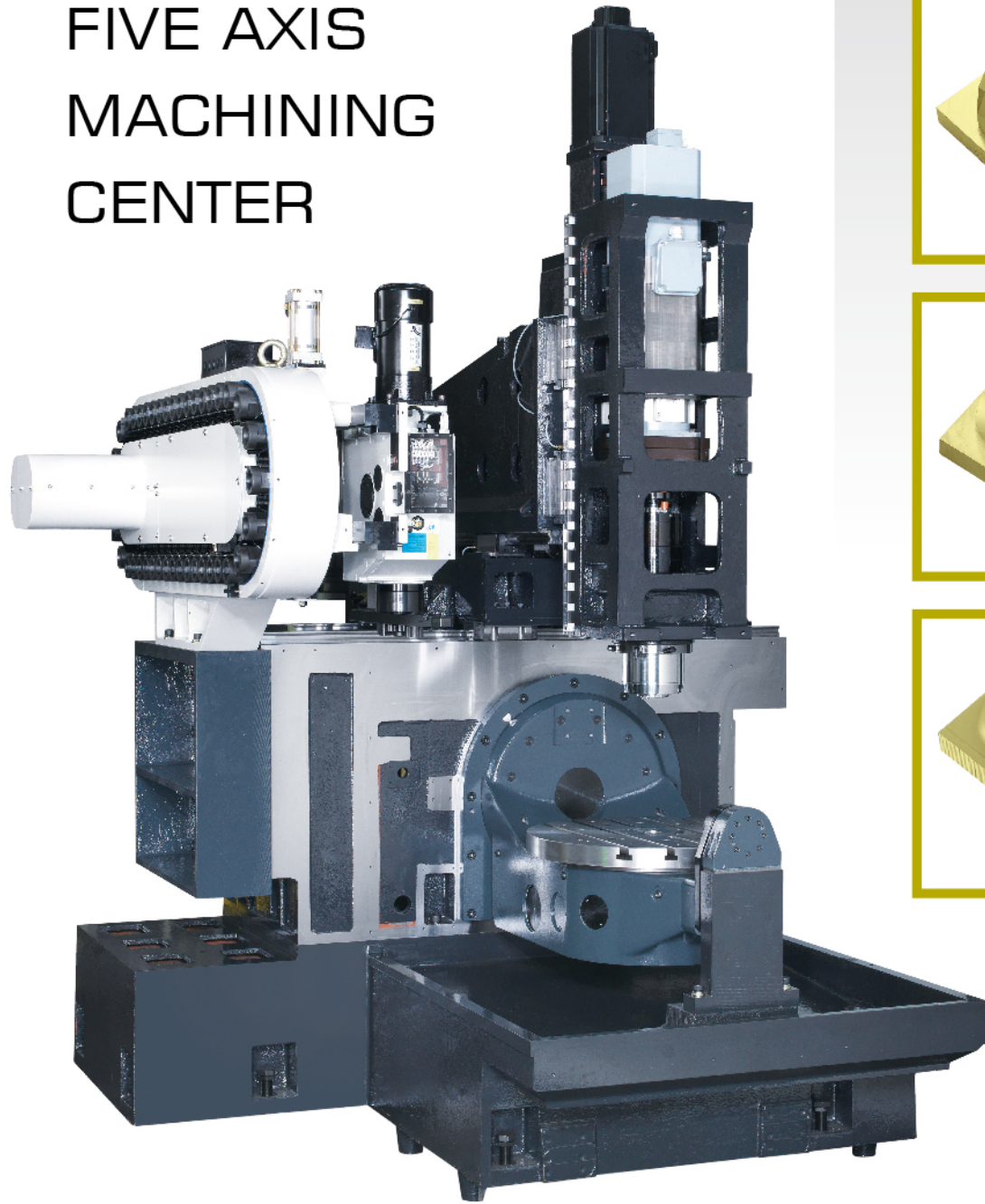
OUTSTANDING FEATURES

- Traveling column structure for increased efficiency.
- X / Y / Z axes are mounted with heavy duty roller type linear guide ways.
- Tilting rotary table.
- 12,000 rpm direct drive spindle.
- #40 spindle taper (DIN / BT / CAT / HSK-63A).
- Optical encoders for B / C axes (optional).
- Table tilting angle (B axis): $-40^{\circ} \sim +110^{\circ}$.
- Table rotating angle (C axis): 360° continuous rotation.
- B / C axes are driven by servomotors.
- Rapid traverse rates on X / Y / Z axes: 36 m/min.

MILLSTAR

ON-STAR

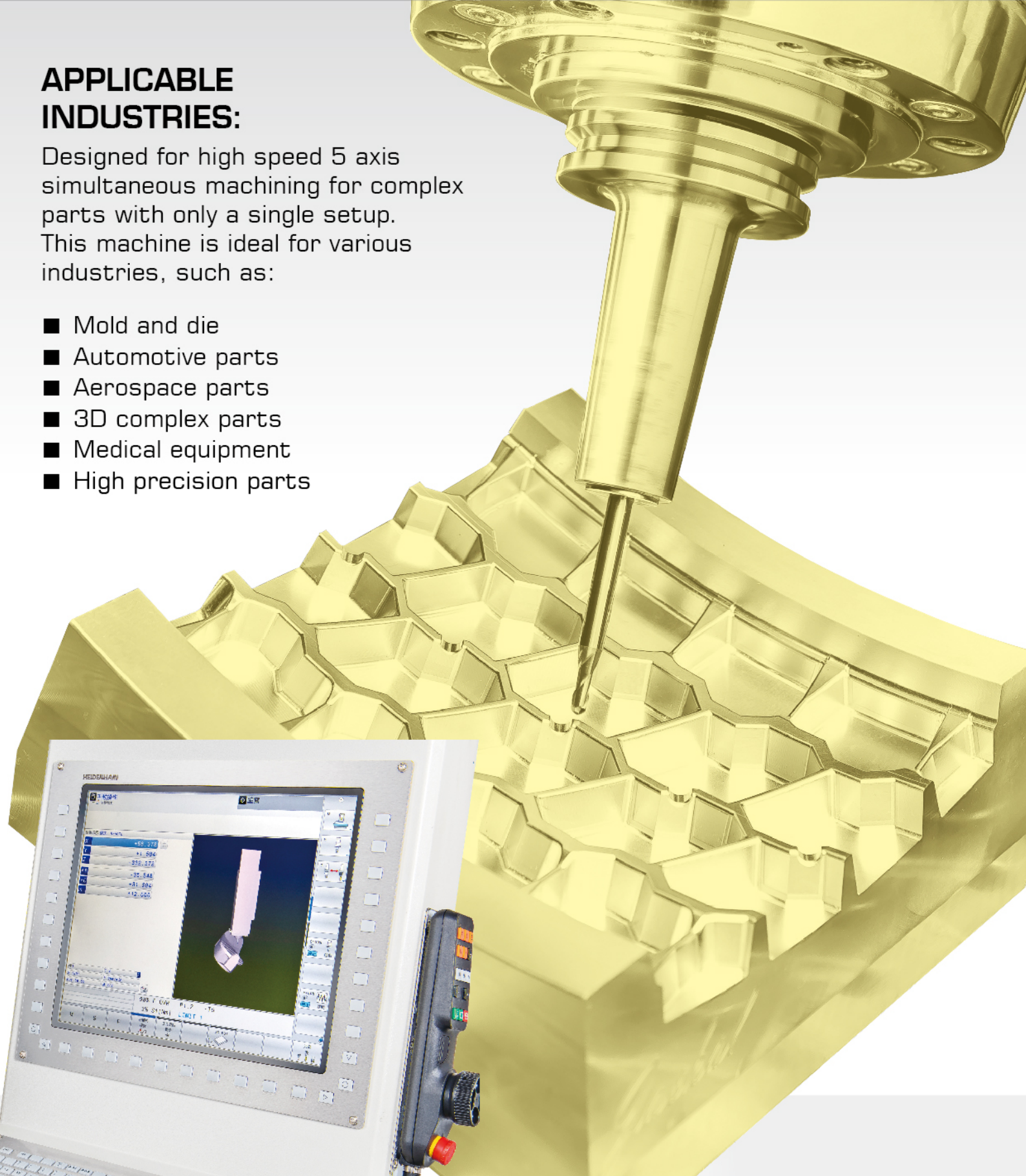
FIVE AXIS MACHINING CENTER



APPLICABLE INDUSTRIES:

Designed for high speed 5 axis simultaneous machining for complex parts with only a single setup. This machine is ideal for various industries, such as:

- Mold and die
- Automotive parts
- Aerospace parts
- 3D complex parts
- Medical equipment
- High precision parts



TILTING ROTARY TABLE (B/C AXES)

The tilting rotary table can tilt $-40^{\circ} \sim +110^{\circ}$ along B axis and rotate 360° along C axis.

The table tilting and rotating motions are driven by servomotors.

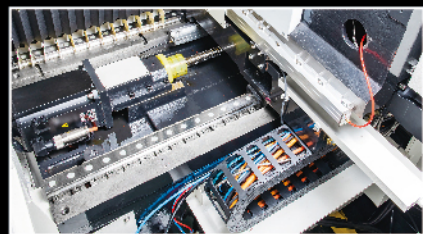
ROLLER TYPE LINEAR WAYS

X/Y/Z axes are all mounted with heavy duty roller type linear guide ways, featuring heavy load resistance, high positioning accuracy, and low friction coefficient.

SELECTION OF VARIOUS CONTROLLERS

The machine comes equipped with a Heidenhain ITNC 640 CNC controller.

Siemens or Fanuc controllers are available upon request.



ROLLER TYPE LINEAR WAYS

X/Y/Z axes are all mounted with heavy duty roller type linear guide ways, featuring heavy load resistance, high positioning accuracy, and low friction coefficient.

SELECTION OF VARIOUS CONTROLLERS

The machine comes equipped with a Heidenhain ITNC 640 CNC controller.

Siemens or Fanuc controllers are available upon request.

JLU-800

MILLSTAR GANTRY TYPE 5 AXIS MACHINING CENTER

OUTSTANDING FEATURES

- Gantry-type machine structure allows large workpieces to be machined with high accuracy and smoothness.
- 5 axis simultaneous machining makes the machine excellent for complex workpiece machining with only one setup.
- High speed tilting rotary table.
- 15,000 rpm built-in type high speed spindle.
- Heavy duty roller type linear guideways on X / Y / Z axes.
- Rapid traverse rates on 3 axes can reach 48 m/min for reducing non-cutting time while increasing productivity.
- Equipped with a 64-tool magazine.
- Heidenhain TNC 640 CNC controller.

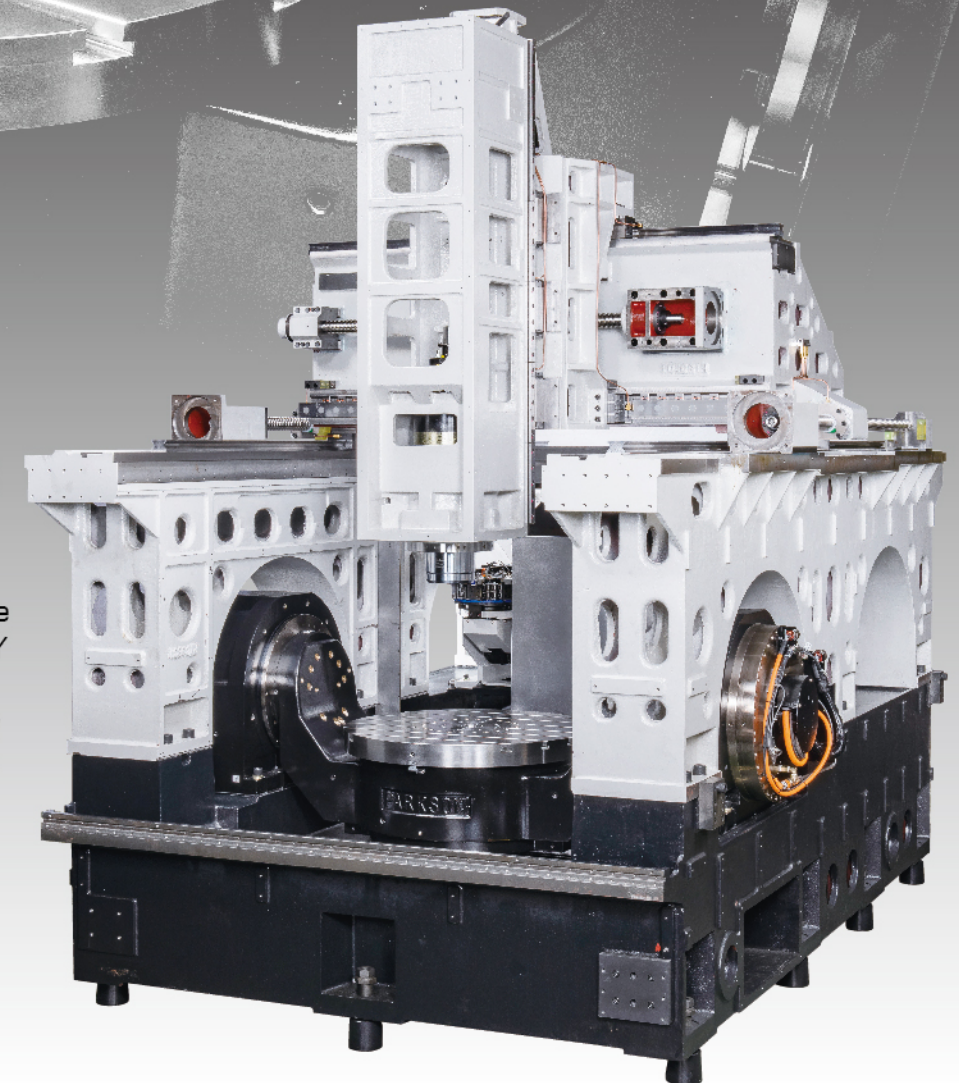


TILTING ROTARY TABLE (B axes / C axes)

- The tilting rotary table can tilt $-120^{\circ} \sim +30^{\circ}$ along B axis and rotate 360° along C axis.
- Its high positioning accuracy makes the machine excellent for precision machining of complex parts.

GANTRY TYPE STRUCTURE

The workpiece is fixed, and the spindle head moves on X & Y axes, so that the positioning accuracy on the X & Y axes is not affected by the workpiece weight. This also eliminates table overhang problems.



JLU-350 SPECIFICATIONS

| MODEL | JLU-350 | |
|---------------------|-------------------------------------|--------------------|
| Travel | X axis Travel | 1020 mm |
| | Y axis Travel | 610 mm |
| | Z axis Travel | 510 mm |
| | Distance from Spindle Nose to Table | 100 ~ 610 mm |
| Table | Table Diameter | 350 mm |
| | Max. Table Load | 200 kg |
| | T-slot Size (No x Size x Pitch) | 8 x 12 x 45° mm |
| Spindle | Spindle Speed | 12,000 rpm |
| | Drive Method | Direct Drive |
| | Spindle Taper | #40 |
| A axis | TILTING AXIS (A axis) | |
| | Tilting Angle | -120° ~ +30° |
| | Max. Speed | 40 rpm |
| | Minimum Split Angle | 0.001° |
| C axis Rotary Table | C axis | |
| | C axis Rotating Angle | 360° |
| | Max. Speed | 33.3 rpm |
| | Minimum Split Angle | 0.001° |
| ATC | TOOL MAGAZING LOADING | |
| | Tool Shank | #40 |
| | Tool Magazine Loading Capacity | 24 pcs |
| | Rapid Feed Rates (X / Y / Z) | 36 / 36 / 36 m/min |
| | Cutting Feed Rate | 1 ~ 20,000 mm/min |

STANDARD ACCESSORIES

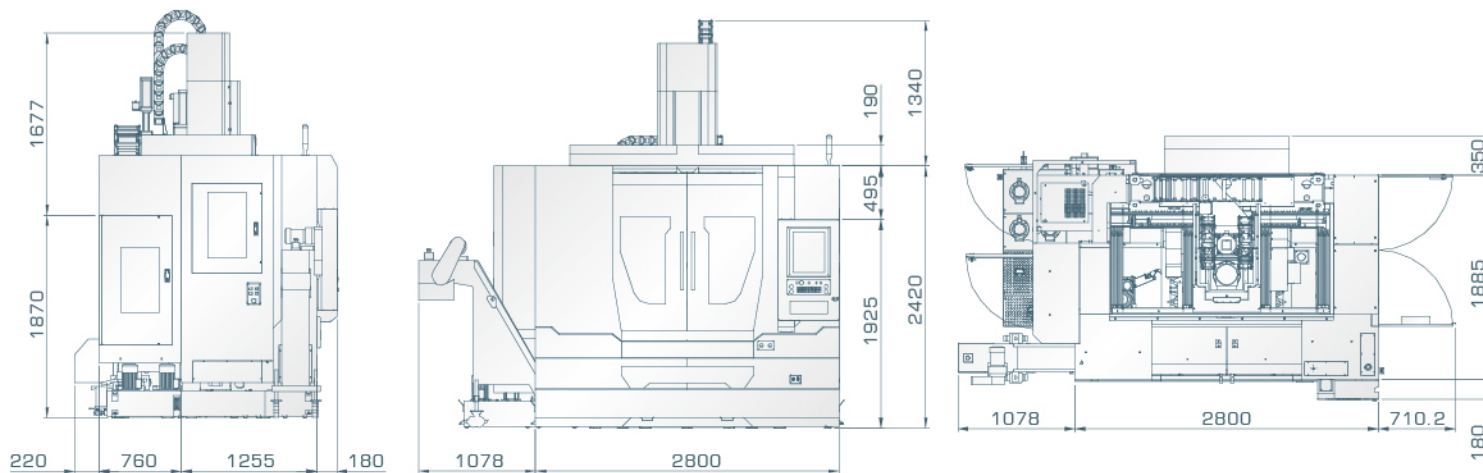
- Lubrication system
- Fully enclosed splashguard
- Manual roof splashguard
- Spindle / AC axis coolant system
- Chip cart
- Chip conveyor
- Air conditioner for electrical cabinet
- LED working lamp
- USB
- Ethernet
- Air gun
- Water gun
- Spindle ring spray, Spindle outside air spray 2 output

OPTIONAL ACCESSORIES

- Linear scale
- Tool length measurement
- Workpiece measurement
- Oil mist collector
- Auto front door
- Auto roof splashguard
- CE certified
- Coolant through spindle (CTS)
- Spindle thermal displacement compensation
- Whole structure thermal displacement compensation
- Spindle ring spray
- Oil skimmer
- RS-232 interface

- All specifications and designs are subject to change without prior notice.

JLU-350 DIMENSIONAL DRAWINGS OF MACHINE



JLU-800 SPECIFICATIONS

| MODEL | JLU-800 | |
|---------------------|--|--------------------|
| Travel | X axis Travel | 800 mm |
| | Y axis Travel | 1245 mm |
| | Z axis Travel | 620 mm |
| | Distance from Spindle Nose to Table Surface | 100 ~ 720 mm |
| Work Table | Work Table Dimension | 800 mm |
| | Max. Table Load (kgs) (Level / Tilt) | 1000 / 500 kg |
| | T-slot (No. x Slot width x Dist) | 7 X 14 X 100 mm |
| Spindle | Spindle | 12000 rpm |
| | Spindle Taper | Built-in |
| | Spindle kW | 21 / 25 kW |
| A axis | TILTING AXIS (A axis) | |
| | Tilting Angle | -120° ~ +30° |
| | Max. Speed | 50 rpm |
| | Minimum Split Angle | 0.001° |
| C axis Rotary Table | C axis | |
| | Rotating Angle | 360° |
| | Max. Speed | 100 rpm |
| | Minimum Split Angle | 0.001° |
| ATC | Other | |
| | Taper Type | HSK A63 / 32T |
| | Max. Tool Dimension Partial Load / Full Load | 125 / 75 mm |
| | Max. Tool Length | 300 mm |
| Feed System | Max. Tool Weight | 8 kg |
| | Rapid Feed Rate X / Y / Z | 48 / 48 / 48 m/min |
| | Cutting Feed Rate | 1 ~ 20000 mm/min |

STANDARD ACCESSORIES

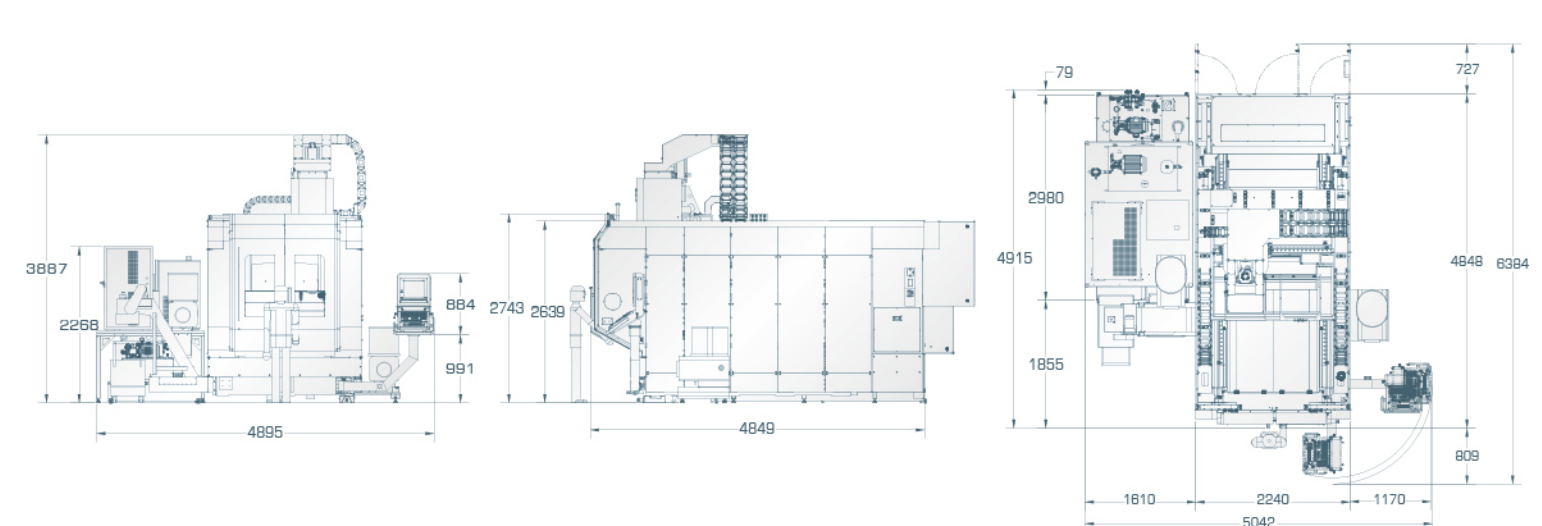
- 12,000rpm Spindle HSK A63
- LHL system
- ATC 32T
- TNC-640
- Spindle/AC axis coolant system
- Linear scale A/C axis
- Pneumatic system Airtac
- Spindle ring spray, Spindle outside air spray 2 outputs
- Spindle Coolant pump
- Chain type chip conveyor
- Water gun
- Air gun

OPTIONAL ACCESSORIES

- 15,000 rpm Spindle
- ATC BBT40 / CAT40 / DIN40
- ATC 24T / 32T / 48T / 60T / 64T / 96T / 120T
- Controller 840 DSL
- Tool length measurement
- Work piece measurement
- Renishaw / Heidenhain
- CTS 30 / 70 bar
- Spindle ring spray, Spindle outside air spray 4 outputs
- Pneumatic system - SMC / Mindman
- Linear scale X / Y / Z axis

- All specifications and designs are subject to change without prior notice.

JLU-800 DIMENSIONAL DRAWINGS OF MACHINE



J1.U-620 SPECIFICATIONS

FIVE AXIS MACHINING CENTER

JIUH-YEH PRECISION MACHINERY CO., LTD.

MILLSTAR

| MODEL | J1.U-620 |
|--------------------------------|----------------------------------|
| Work Table Diameter | 500 / 650 mm |
| Table Indexing | 0.001° |
| Max. Table Loading | 300 kg |
| X / Y / Z 3 Axes Travel | 620 x 520 x 460 mm |
| X / Y / Z 3 Axes Rapid | 36 / 36 / 36 m/min |
| B / C Axes Rapid | 25 rpm |
| B Axis Titring Range | -40 to 110° |
| Spindle Nose to Table Surface | 140 - 600 mm |
| Center Hold Size | Ø50H7 x 30 mm |
| T-slot / Pitch / Size | 5 x 14h7 x 18 mm |
| Spindle Speed | 12,000 rpm (DDS) |
| Spindle Taper | DIN-40 / BT-40 / CAT-40 / HSK-63 |
| ATC | 32T |
| Max. Tool Length | 250 mm |
| Max. Tool Diameter | 76 mm |
| Max. Tool Weight | 7 kg |
| Controller | HEIDENHAIN iTNC640 |
| Spindle Motor | QAN-200UH / 260MH |
| X / Y / Z 3 Axes Motor | 6.5 / 5.1 / 6.5 kw (HEIDENHAIN) |
| B / C Axis Motor | 9 / 4.5 kw (HEIDENHAIN) |
| Machine N.W. | 8500 kg |
| Coolant Tank | 380 L |
| Machine Dimensions (L x W x H) | 4,210 x 2,580 x 2,910 mm |
| Power Requirement | 45 KVA |
| Air Source | 6 kg/cm ² |

STANDARD ACCESSORIES

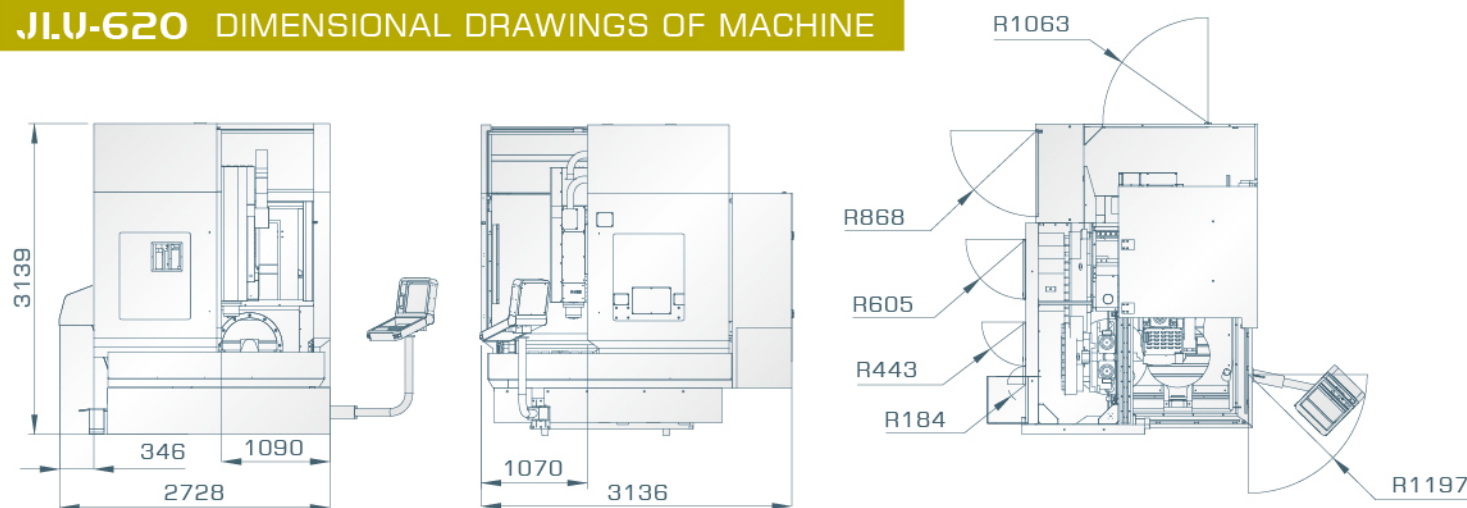
- Heidenhain controller
- Spindle speed 12,000 rpm, direct drive (DDS)
- Spindle taper #40 (DIN, BT, CAT)
- ATC-32 Tools
- Heidenhain 3 axes linear scale
- Roller type linear guide way
- Spindle oil cooler
- Full enclosed splash guard
- Large table size 650 mm
- Z axis motor with brake system
- B / C axis optical encoder
- Chain type chip conveyor & Chip cart
- Heat exchanger for electrical cabinet
- Oil skimmer
- Transformer (Export only)

OPTIONAL ACCESSORIES

- SIEMENS / FANUC controller
- Coolant through spindle (CTS) 20 / 30 / 50 bar
- Programmable cutting coolant nozzle
- Chip flushing system
- Tool length measurement system
- Workpiece measurement system
- Air supply for clamping fixture
- CE standard
- Air conditioner for electrical cabinet
- HSK-63A, 20,000 rpm spindle (Built-in type)
- 15,000 rpm direct driven spindle
- Software for crash protection

- All specifications and designs are subject to change without prior notice.

J1.U-620 DIMENSIONAL DRAWINGS OF MACHINE



JIUH-YEH PRECISION MACHINERY CO., LTD.

No.195, Gongye 11th Rd., Dali Dist., Taichung City 41280, Taiwan.

TEL: +886-4-2491-5298, 2491-1002 FAX: +886-4-2491-5301

E-mail: sales@jiuhyeh.com / jiuhtali@ms22.hinet.net

http://www.jiuhyeh.com



2019.09.1000

J1.U-350

J1.U-620

J1.U-800

11620