

CUBE

2 + 1 axes slides CNC lathe

2 horizontal and 1 vertical slides
Spindle moves mounted on the
horizontal slides



■ 2 + 1 axes slides

The spindle is mounted on the X, Z slides and the tools are set on the Y slide.

■ Easiest chip disposal

Tools are set vertically on the Y slide.

This makes an open space under the spindle and the chips drop down directly to the chip tank.

The machine is the best basic machine for automation.

■ Application of various kinds of automation devices

Besides being used as a front type lathe, this machine can become the base for the application of the robot-station or simple automation device of LL loader having work supply chute or work collection device.

Machine standard specifications

Item		Description	
Holder and Work size	Tool holder for O.D. turning		□16 x 5 pcs.
	Tool holder for I.D. turning		φ 25 x 5 pcs.
	Max. work size	mm	φ 100 x 80
Spindle	Change of speed		Step-less, S4 digits direct command
	Speed	m i n ⁻¹	max. 8,000
	Nose	mm	φ 100 flat
Slide	Travel	mm	X axis : 300
			Y axis : 170
			Z axis : 150
	Rapid traverse	m/m i n	X axis : 12
			Y axis : 12
			Z axis : 12
Jog speed	mm/m i n	0 ~1,287	
Number of tools		max. 10	
Type of slide			Vertical linear turret
Motors	Spindle		2.2/3.7 (Built-in motor)
	Slide	X axis	2.5
		Y axis	1.0 (with brake)
		Z axis	1.0
Power Electricity		KVA	14
Center height		mm	1 0 0 7
Machine height		mm	1, 6 6 0
Floor space		mm	1, 1 5 0 × 1, 3 7 0
Machine weight		k g	1, 6 6 0

Control unit

Item	Description
NC contril unit	FANUC/S 32i-A
Display	7.2 inch L.C.D. (mono-chrome)
Axes controlled	3 axes (X, Y, Z)/Max. Simultaneous 4 axes (Option)
Least input incremental	X axis : 0.001 (dia.) , Y and Z axes : 0.001
Interpolation	Linear, Taper, Thread, Circular
Auxiliary function	M 2 digits
Spindle function	S 5 digits
Tool function	T 2 digits
Tool offset	16 pairs
Part program storage length	64KB (equiv. 160m)
Rapid traverse override	0 ~ 1 5 0 %
Canned cycle	O.D. (G90), Thread (G92), Face (G94)
Interface	RS232C and memory card
Others	Run hour and parts count display Optional stop, Geometry offset Program number search, Single block Radius designation on arc, Feed hold Chamfering and corner R, Block delete Sequence number search, Emergency stop

Recommended options

- Work light (LED)
- Cutting tool coolant device

Standard accessories

- Tool box and tool kit
- Splash guard

Machine options

Air blower, Mist collector, Spindle index device
Oil mist coolant device, Work collection device, Spindle brake device
Hole and flange for mist collector, Chip conveyor, Work collection conveyor
Temperature control device for tool tip coolant oil, Optical scales for X, Y, Z

CNC options

- Tool offset pairs 32
- Simple tool life management function
- Tool nose radius compensation
- Custom macro
- Spindle orientation
- Circular threading / continuous threading
- Multiple repetitive cycle (G70~G76)
- Incremental system 1/10

Work samples at JIMTOF 2008



Thrust bearing

Material : C3603

The vertical multi joint robot reverses the workpiece.
The both faces are turned. The rotating tools mill the slots.

Dimensions

