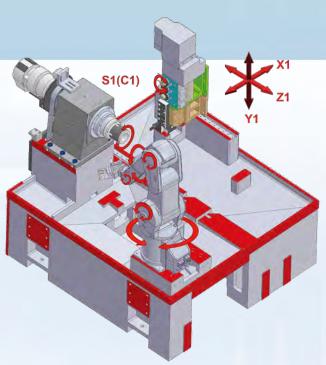


## i-42 Robo automation

This machine is a modified version of the I-42 with internal integration of a Mitsubishi 6 axis articulated robot. This requires no additional floor space, and is positioned so it will not hinder the machine operator while setting the machine, or operating the Mitsubishi M80 control system.

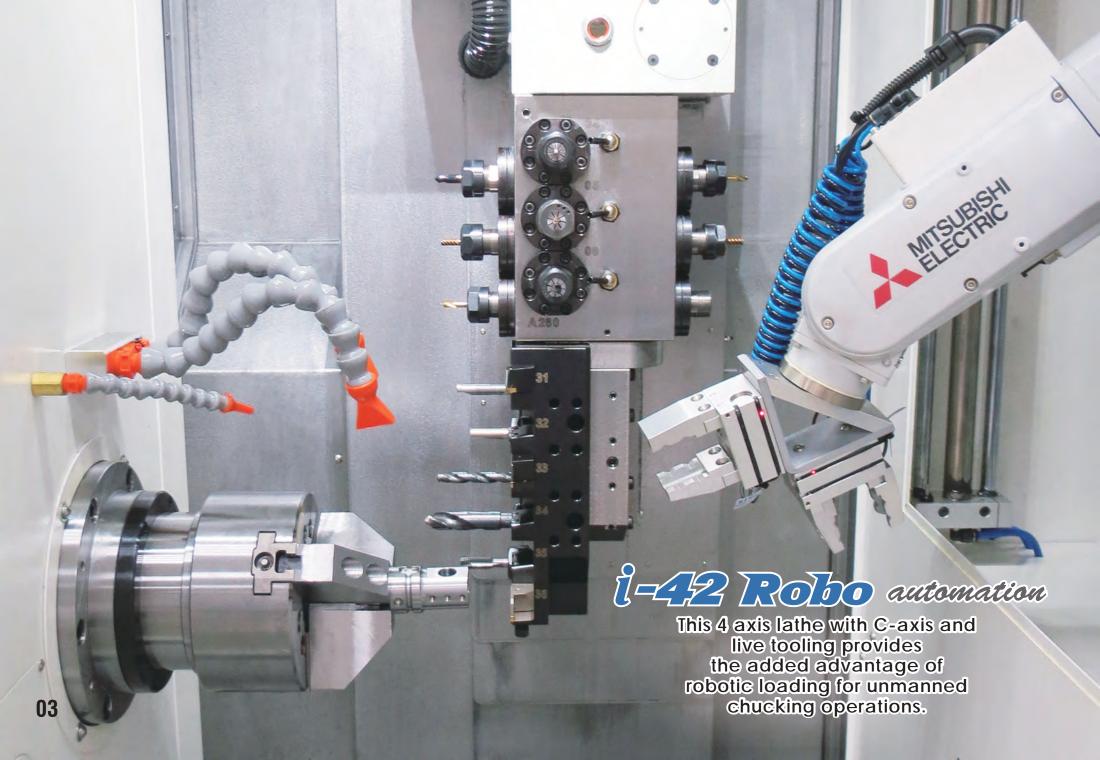


### Feature:

- Flexible gantry type tooling system
- Mitsubishi M80 high-end controller
- Live tools with powerful motor
- 25 bar coolant pressure
- Free angle B axis 360° for all the angular tapping and drilling for some specific models





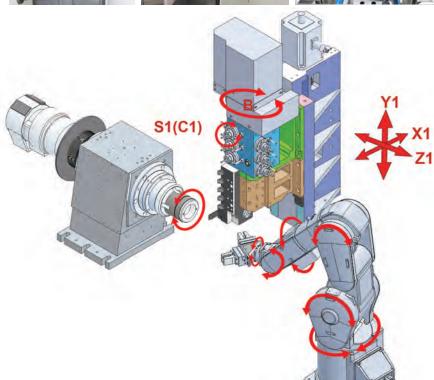












## i-42 Robo (automation)

	Mitsubishi Controller	M80
Spindle Capacity	Max. Turning Dia.	100mm
	Max. Bar Working Dia.	42mm (65mm)
	Max. Turning Length	230mm
	Collet Chuck Type	KK5-173E42B (KK6-185E60B)
	Spindle Nose	A2-5 (A2-6)
	Spindle Bore	43mm (66mm)
	Max. RPM.	4000rpm (6000rpm)
Sub-Spindle Capacity	Max. Turning Dia.	40001piii (00001piii)
	Max. Bar Working Dia.	
	e e	
	Max. Turning Length	
	Collet Chuck Type	<del></del>
	Spindle Nose	
	Spindle Bore	
	Max. RPM.	
C Axis	Least Command Unit	0.001°
	Positioning Accuracy	0.02°
Travel & Feed	X1/Y1/Z1 axis	150 / 410 / 250mm
	X2/Y2/Z2 axis	
	Rapid Feed	
	Repeated Positioning Accuracy	0.005mm
Motor	Main-Spindle	Servo Spindle 7.5kw (11.0kw)
	Sub-Spindle	
	X1/Y1/Z1 axis	AC Servo 1.0 / 1.5 / 1.5kw
	X2/Y2/Z2 axis	
	Motorized Tool	AC Servo 1.5kw
A.T.C System	OD/ID Tools Main Spindle	6/5
	OD/ID Tools Sub Spindle	
	Tool Shank Size	□ 20mm
	Drill Holder Size (Main)	ER-20 / φ20mm
	Drill Holder Size (Sub)	
Motorized Tool	Number of Motorized Tools	6 (12 with B-axis)
	B axis	(360°)
	Max. RPM.	4000rpm
	Collet Specification	ER-20
	Max. Drilling Dia.	12.0mm
	Max. Tapping Capacity	M10xP1.5
	Hydraulic Pump / Tank Capacity	1HP / 40L
Hydraulic System	Max. Pressure / Flow	30 kg/cm²
Lubrication	Lubricant Pump / Tank Capacity	25W / 2L
	Max. Pressure	15 kg/cm <sup>2</sup>
Coolant System	Coolant Pump	TPH4T5K, 5Bar, 75 L/min
	Hydraulic Pump	1FH413K, 3Bai, 73 L/IIIIII
	· · · · · · · · · · · · · · · · · · ·	125L
Machine Size	Coolant Tank Capacity Length/ Width/ Height	3650 (2350) / 1700 / 2040mm
	Weight	4300 kg

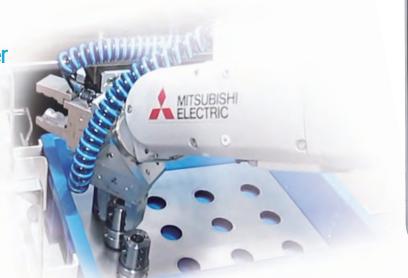
() Option





### Robot with Flexible pallet changer

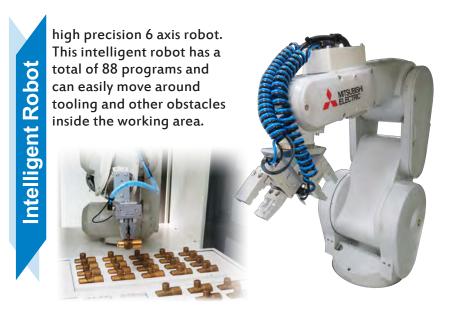
This efficient auto-pallet has equipped 5 trays and moveable cart for easy loading and unloading. No any human operation required. The operator can easily use and maintain this auto-pallet while the lathe is under mass production.

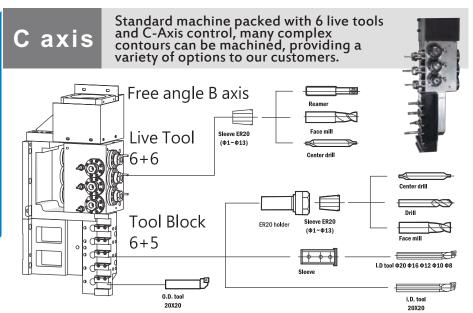


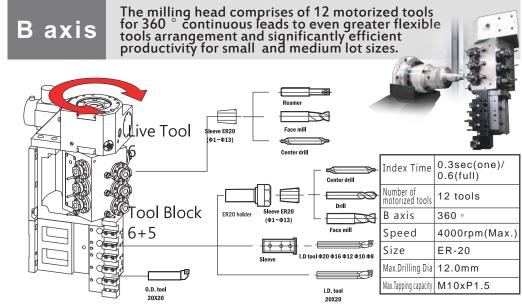


#### Mitsubishi AC Servo 7.5 kw A2-5 spindle with 44 mm bore 7.5kw 15-minute rating 7.5 47.7 N.m 47.7 5.5kw Continuous rating 5.5 35.0 N.m 35.0 Output[kw] 11.9 Torque[N. 0 1500 4500 6000

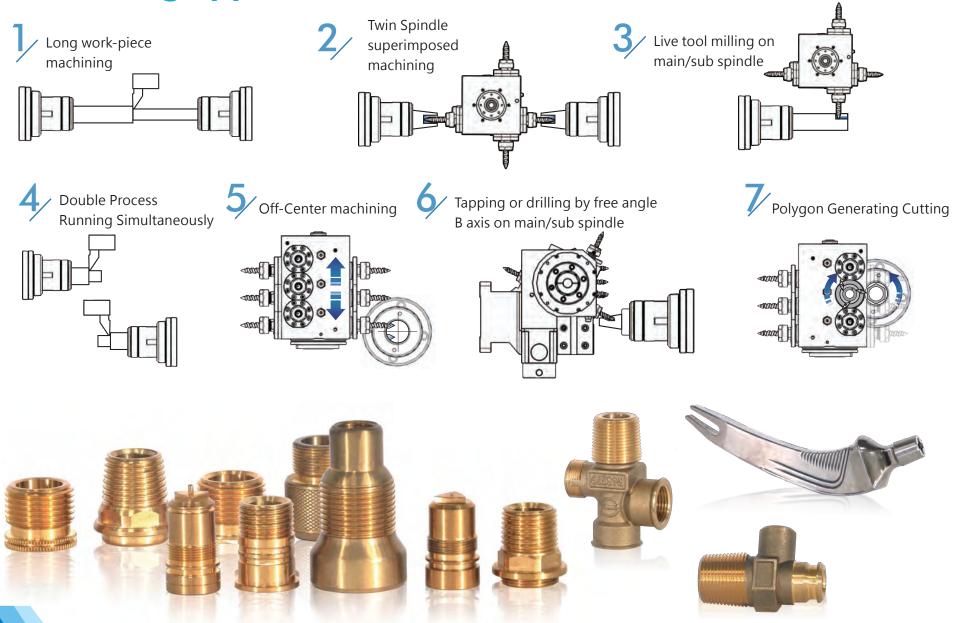
Rotation speed[r/min]



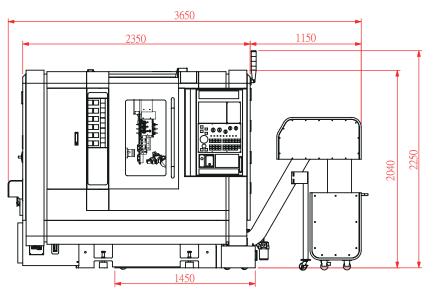


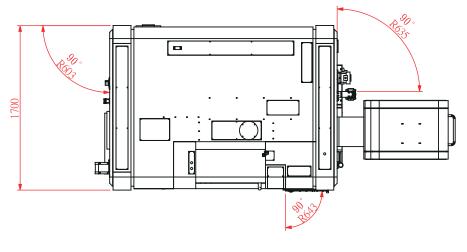


## **Machining applications**

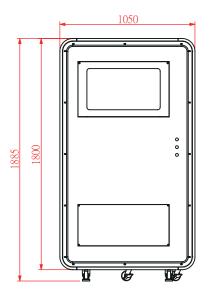


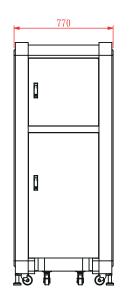
### **External view**

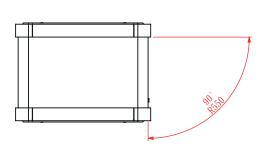


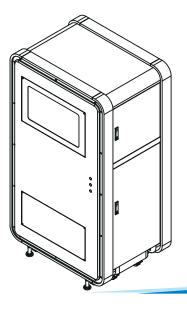


## Pallet changer size









# Flexible, Fast and High production Smart lathe in one setup

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### **Simple Visual Monitor**

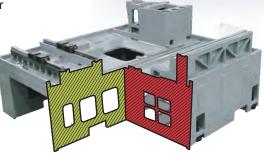
Transparent window for the lubrication and solenoid status check.





## High pressure Coolant

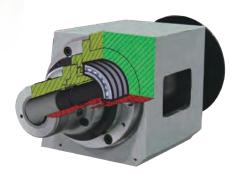
High pressure with 25 Bar with filter



### 01 Robust FC35 Meehanite Castings

Harden to over HRB 190 and tempered to relieve stress.





### 02 P4 class preload spindle bearing

Preload bearings are offered for the maximum attachment effect



### Mitsubishi controller

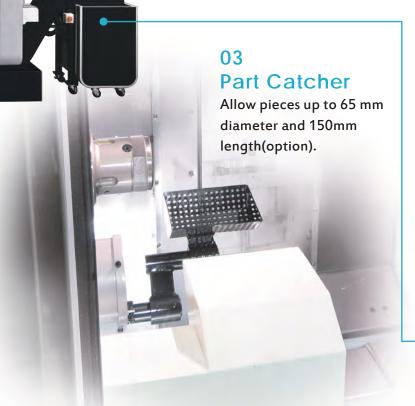




### **Linear Guideways**

The machine is equipped with high precision HIWIN 35mm Linear guideways.

Increase the stability and accuracy, allows heavier cut to be achieved.





### **Chip Conveyor**

Standard and high type depends on your production request



the art of turning





