

### **i-42 Robo**

This 4 axis lathe with C-axis and live tooling provides the added advantage of robotic loading for unmanned chucking operations



This machine is a modified version of the IT-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 M70 control system.

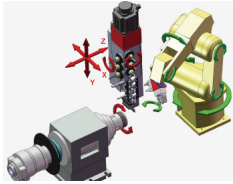


### **INTELLIGENT ROBOT**

Complimenting the standard IT-42 lathe, is a fully integrated high speed, high precision 6 axis robot.

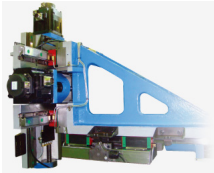
This intelligent robot has a total of 88 programs, and can easily maneuver around tooling and other obstacles within the work area.

It can handle work pieces of up to 6kg, and is ideal for billets, castings and forgings.



**Axial view**

i-42 Robo



## LINEAR GUIDEWAYS

The machine is equipped with high precision, HIWIN linear guideways. The use of 35mm rails throughout the machine increases stability and accuracy, and allows heavier cuts to be achieved.



## SPINDLE

The cartridge type spindle runs on P4 high precision bearings giving high radial and axial stability, allowing for heavy duty cutting.

The spindle is assembled and tested in a temperature controlled clean room, sealed, and requires no maintenance. The spindle housing is large, and symmetrically ribbed to allow heat dissipation and thermal stability.



## Workpiece

i-42 Robo

### Specification

Mitsubishi Controller M70			
Spindle Max. Turning Length 200.0 mm			
Spindle Max. Turning Length 200.0 mm			
Spindle Collet Chuck Type KK5-173E42B/KK6-185E60B(option)			
Spindle Nose ISO(DIN) A2-5/ A2-6			
Spindle Bore 44.0/62.0mm(option)			
Spindle Speed Range 3000 rpm/4000 rpm(4000 rpm/6000 rpm(option))			
C Axis Positioning Accuracy 0.001°			
Travel & Feed X/Y/Zaxis Travel 150.0/415.0/230.0mm			
Lubrication Lubricant Motor 25W			
A.T.C System OD Tools Main Spindle 6			
ID Tools Main Spindle 4			
Tool Shank Size 20.0mm			
Boring Bar (main) ER-20/20.0mm			
Motorized Tool Index Time 0.3sec(one)/0.6(full)			
Number of motorized tools 6 Tools (3 Axial,3 Radial)			
Speed 4000rpm(Max.)			
Size ER-20			
Max.Drilling Dia. 12.0 mm			
Max. Tapping capacity M10 X P1.25			

[Products Download](#)