

EXCELLENCE
THROUGH
EXPERTISE



A12030 / 12040
R12030 / 12040

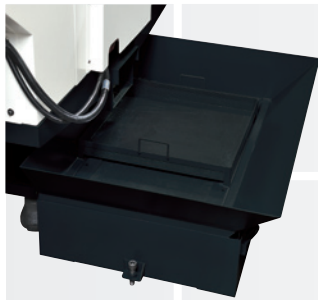
RES·SEIKI®
CNC TAPPING CENTER

A New Generation Of CNC Tapping Center R

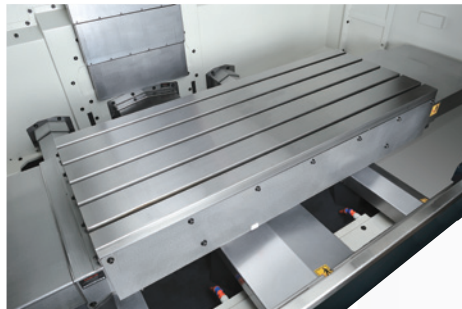
- Direct Drive Spindle
- High Speed 3 Axes Rapid Traverse
- High Response Servo System



- **Spindle Speed (STD)**
BT30: 10000rpm
BT40: 8000rpm
- **Spindle Speed (OP)**
BT30: 12000 / 15000 / 20000rpm
24000rpm (Mitsubishi)
BT40: 12000 / 15000rpm
- **Number of Tools**
BT30 **R12030:14T** / **A12030:20+1T**
BT40 **R12040:14T** / **A12040:24+1T**
- **Rapid Traverse**
BT30 & BT40: 48 / 48 / 48m/min
- **Rigid Tapping**
BT30: 4000rpm
BT40: 3000rpm
- **Positioning Accuracy**
JIS B6338: 0.005 / 300mm
VDI3441 P: 0.012mm
- **Repeatability Accuracy**
JIS B6338: ±0.003mm
VDI3441 P: 0.010mm



Water Tank (STD)



Table



A series



R series

The Fastest Spindle Acceleration

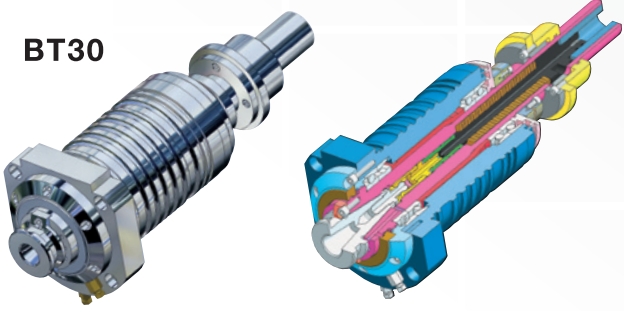
Reduced Non-cut Time and Spindle Acceleration / Deceleration

Special design is adopted all new spindle motor. This greatly reduces the response time for rigid tapping, powerful servo motors on 3 axes feature fast acceleration / deceleration time for 3 axes rapid traverses.

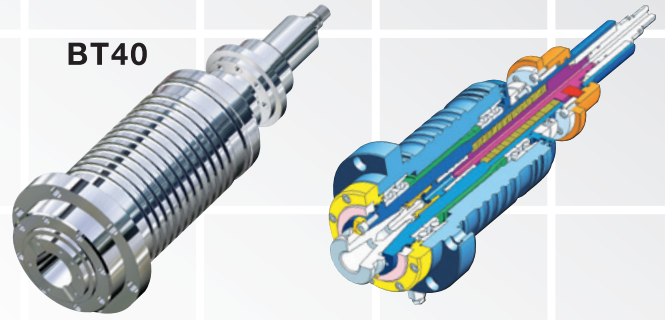
Direct Drive Spindle

Spindle: The directly coupled spindle eliminates power transmission loss to develop the highest efficient of spindle motor. Spindle is mounted on four P4 high precision angular contact ball bearings combined with constant temperature device to provide outstanding richening rigidity.

BT30



BT40



CTS (OP)

Coolant flow is fed by a high pressure pump through the spindle and out the tip of the cutting tool, immediately reducing any heat at the cut point. This substantially increases the cutting efficiency while extending tool life, this system reduces thermal deformation and provides stable accuracy.

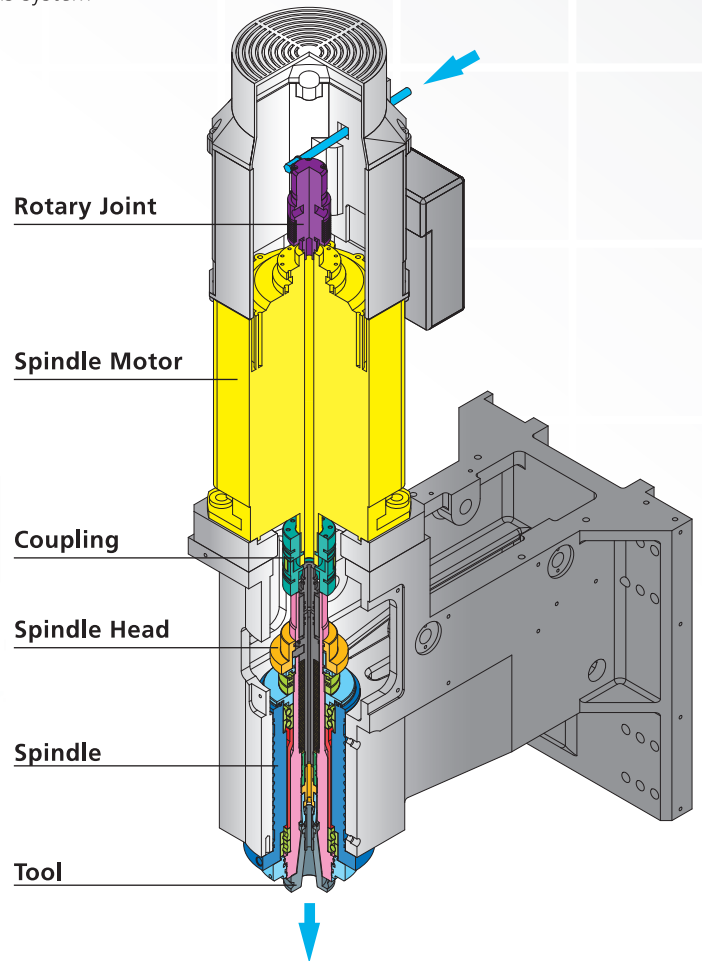


Oil Cooler



CTS Filtration with Water Tank

Coolant Through Spindle



Auto. Roof Flush Chip Purging System (STD)



High Speed

Travel Speed: Provides X / Y / Z axis 48m/min (BT30, BT40)

Tapping: The rigid spindle is directly coupled to the motor. This reduces transmission error and maximizes transmission power.

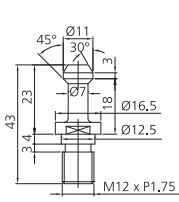
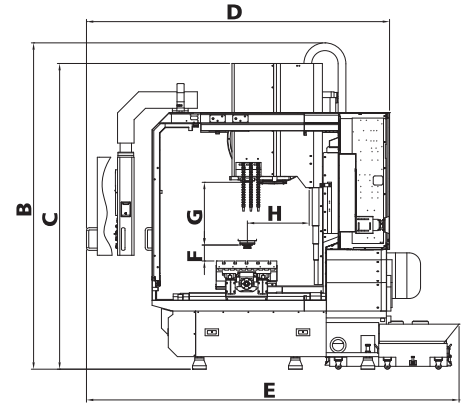
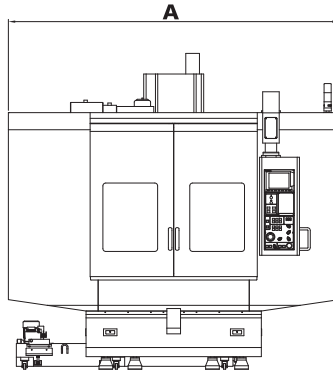
Tool Change: Incorporates a special structure which reduces electronic sensing time. Adjacent tool change time is only T-T: BT30 2.2 sec (A12030), M2.0/F3.0 sec(R12030) T-T: BT40 2.4 sec (A12040), M2.5/F3.5 sec (R12040)



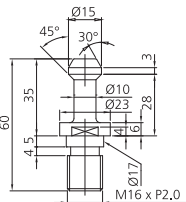
Machine Dimensions

A series

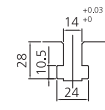
	A	B	C	D	E	F	G	H
A12030	2900	2625	2315	2660	3270	170	350	545
A12040	2900	2885	2685	2660	3270	140	550	545
R12030	2900	2940	2520	2660	3270	170	300	545
R12040	2900	3000	2580	2660	3270	140	400	545



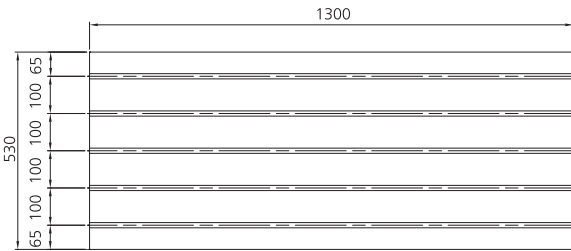
MAS 403-P30T-1 (45°)



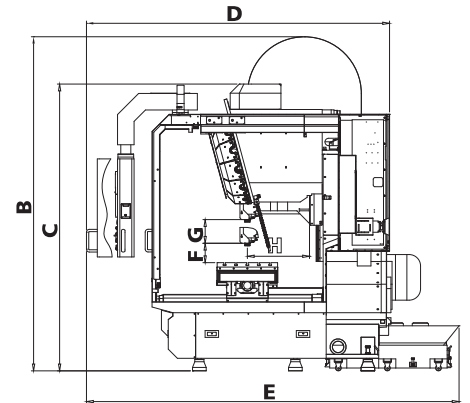
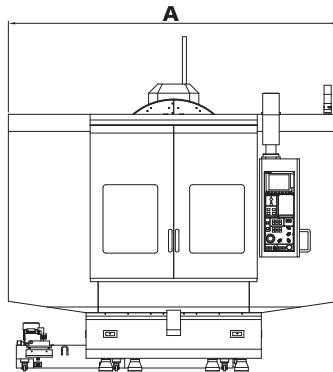
MAS 403-P40T-1 (45°)



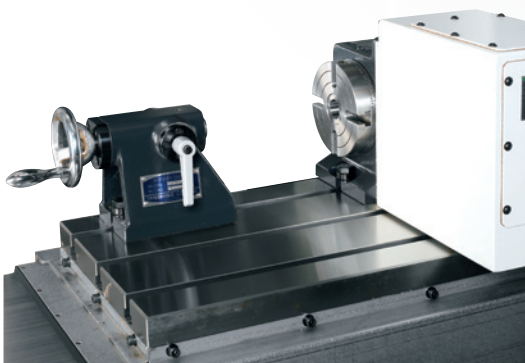
T-Slot Specifications



R series



The 4th Axis



Control Panel (8.4 TFT LCD)



Mitsubishi M70 Controller



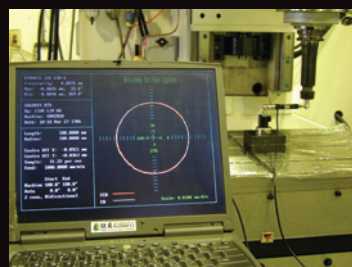
FANUC 0iMD Controller

Precision Testing

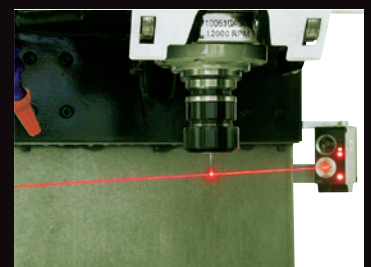
Laser Interferometer Tap Calibrator



Bar Testing



Damaged Cutting Tool Sensor



Machine Specifications

A series

R series

		Unit	A12030	A12040	R12030	R12040
Table size		mm	1300 x 530	1300 x 530	1300 x 530	1300 x 530
Max. table load		kg	400	400	400	400
X, Y, Z axis travel		mm	1200 x 500 x 350	1200 x 500 x 550	1200 x 500 x 300	1200 x 500 x 400
Table to spindle nose		mm	170 ~ 520	140 ~ 690	170 ~ 470	140 ~ 540
Spindle taper			BT30	BT40	BT30	BT40
Pull stud			MAS403 P30T-1 (45°)	MAS403 P40T-1 (45°)	MAS403 P30T-1 (45°)	MAS403 P40T-1 (45°)
Spindle motor	Mitsubishi	kw	5.5 / 3.7	7.5 / 5.5	5.5 / 3.7	7.5 / 5.5
	Fanuc	kw	3.7 / 2.2	7.5 / 5.5	3.7 / 2.2	7.5 / 5.5
X drive motor	Mitsubishi	kw	3.5	3.5	3.5	3.5
	Fanuc	kw	3.0	3.0	3.0	3.0
Y drive motor	Mitsubishi	kw	3.5	3.5	3.5	3.5
	Fanuc	kw	3.0	3.0	3.0	3.0
Z drive motor	Mitsubishi	kw	3.5	3.5	3.5	3.5
	Fanuc	kw	4.0	4.0	4.0	4.0
Spindle speeds		rpm	10000	8000	10000	8000
X, Y, Z axis rapid traverse		m/min	48 / 48 / 48	48 / 48 / 48	48 / 48 / 48	48 / 48 / 48
Magazine capacity			20+1	24+1	14	14
Max. tool weight		kg	4	5	3	3
Max. tool length		mm	200	250	200	250
ATC time		sec	2.2 (T-T)	2.4 (T-T)	M 2.0 / F3.0 (T-T)	M2.5 / F3.5 (T-T)
Net weight		kg	4570	4700	4500	4620
Floor space		mm	2900 x 3270 x 2625	2900 x 3270 x 2885	2900 x 3270 x 2940	2900 x 3270 x 3000

Controller Specifications

O : Standard OP : Option

	Mitsubishi	FANUC		Mitsubishi	FANUC
	M70V-B	0iMD	Multi-language display	O	O
Max. controlled axis	5	4	ABS servo motor	O	O
Max. simultaneous axis	4	4	Tool length compensation	O	O
Standard controlled axis	3	3	Tool path compensation	O	O
Program storage length	1280m	1280m	On-screen drafting	O	O
Work piece coordinates	54	54	High speed data server & ethernet	O	OP
Max. variable number	700	600	High speed & high accuracy machining control mode	G05.1 Q1	
Tool offset pairs	400	400	Interface	RS232 / RJ45	
Conversational programming	NAVI	Manual guide Oi	Memory card input / output	O	O
Monitor	8.4" TFT LCD				

★ Tool change time supplied with 60Hz power.
For electrical requirements other than this standard, please contact one of our personnel.

Standard Accessories

- Toolbox and tools
- Auto. lubrication system
- Spindle air blow system
- Leveling bolts and pads
- Direct drive spindle system
- Dual-color alarm light
- Dual electric cases. (Heat insulated)
- Auto. roof flush chip purging system
- Tool coolant system
- Work light
- TFT LCD

Optional Accessories

- Transformer / stabilizer
- Work piece air blow system
- Spindle speed
BT30: 12,000 / 15,000 / 20,000rpm
24,000rpm (Mitsubishi)
BT40: 12,000 / 15,000rpm
High speed spindle
(With spindle oil cooling system)
- Auto. tool length measurement
- Damaged cutting tool sensor
- The 4th axis (NC indexing table)
- Coolant through spindle (CTS)
- Full enclosed splash guard (Top cover)
- Chip conveyor with cart
- High speed & high accuracy machining control mode G05 P10000 (Mitsubishi M70-A)
- Oil / water partition
- Oil mist collector
- Water gun
- Air gun
- Auto. door
- CTS filtration
- CE

★ ARES·SEIKI reserves the right to change the specifications of its machines as technology develops without prior notice.

CNC TAPPING CENTER



A series



R series

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