

A New Generation Of CNC Tapping Center R

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



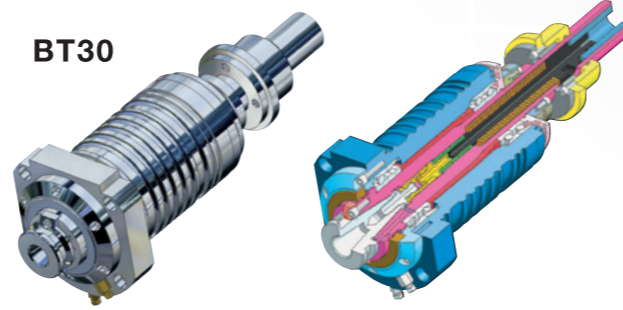
- **Spindle Speed (STD)**
BT30: 10000rpm
BT40: 8000rpm
- **Spindle Speed (OP)**
BT30: 12000 / 15000 / 20000rpm
24000rpm
BT40: 12000 / 15000rpm
- **Number of Tools**
BT30 R12030:14T / A12030:20+1T
BT40 R12040:14T / A12040:24+1T

- **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
- **Rapid Traverse**
BT30 & BT40: 48 / 48 / 48m/min

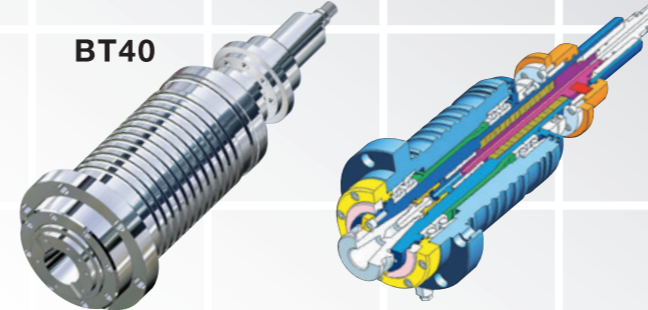
Direct Drive Spindle

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.

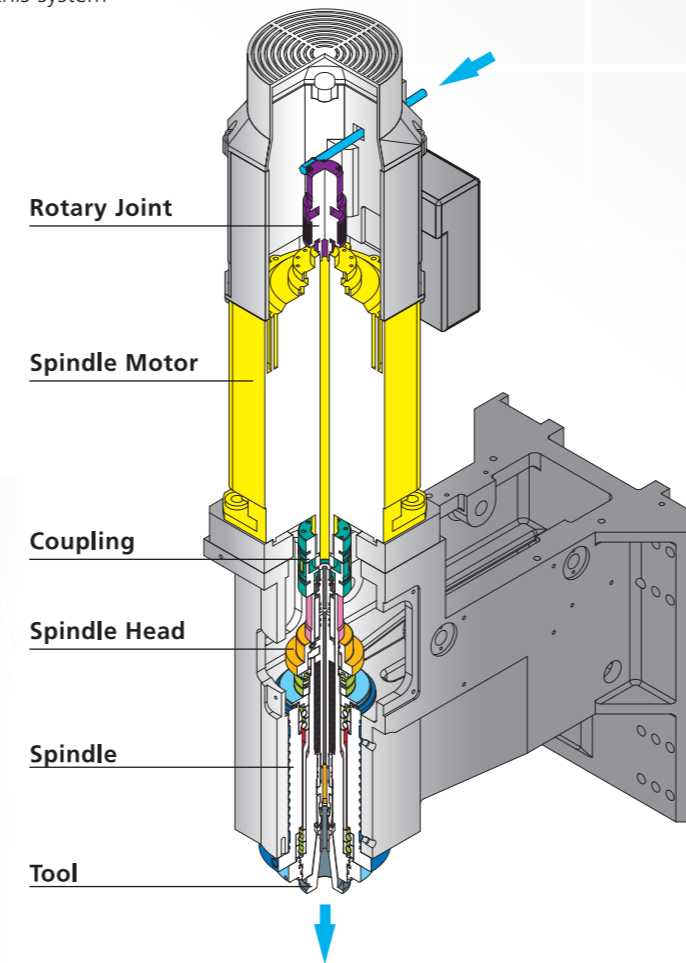


Oil Cooler



CTS Filtration with Water Tank

Coolant Through Spindle



Auto. Roof Flush Chip Purging System (STD)



Machine Dimensions

	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

Water Tank (STD)



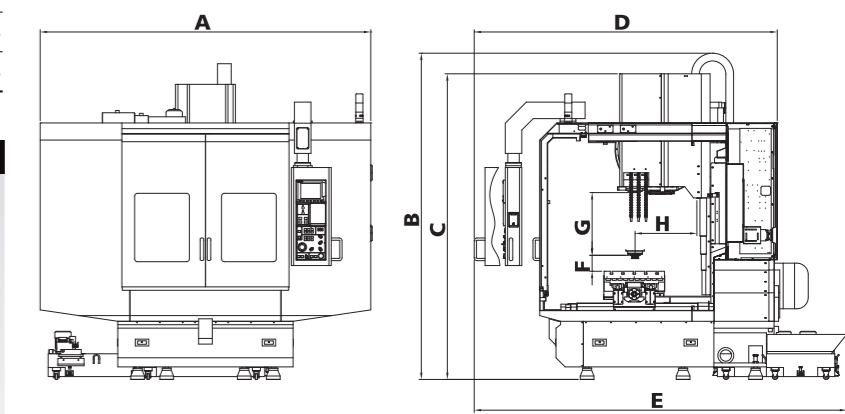
The 4th Axis



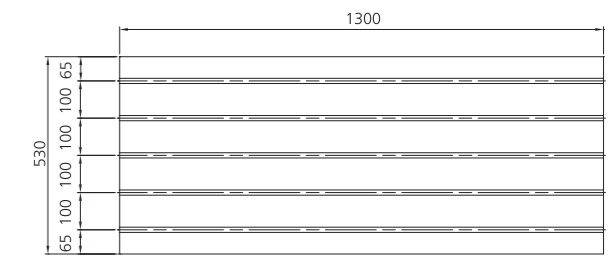
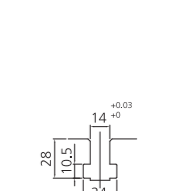
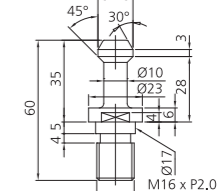
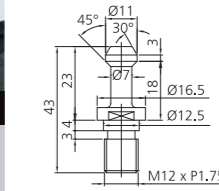
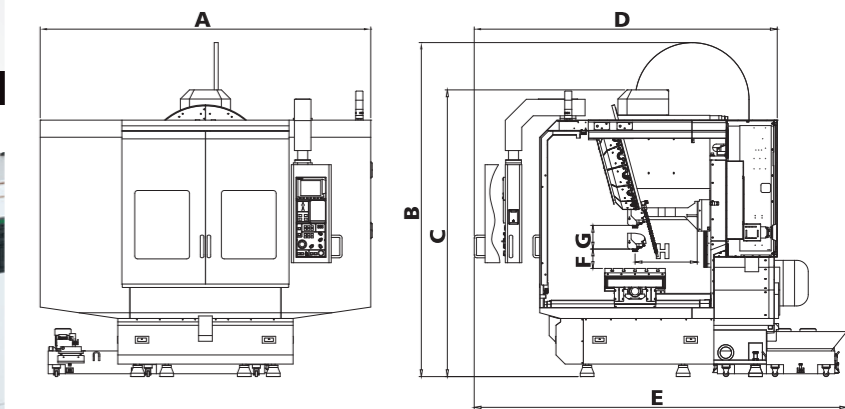
Stabilized Structures of Four Guides



A series



R series



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.

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)

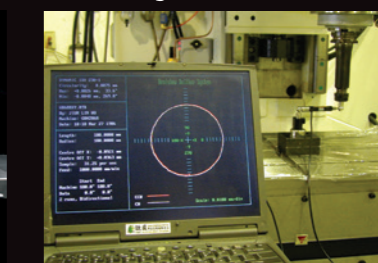


Precision Testing

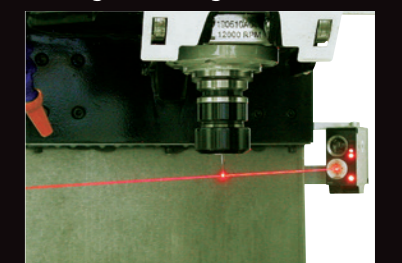
Laser Interferometer Tap Calibrator



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 (T-T)	sec	2.2	2.4	M 2.0 / F3.0	M2.5 / F3.5	
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	
	M80-B	Oi-MF	Multi-language display	O	O
Max. controlled axis	5	5	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	512 kb	512 kb	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 P10000	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
- Triple-color alarm light
- Dual electric cases. (Heat insulated)
- Auto. roof flush chip purging system
- Tool coolant system
- Work light
- TFT LCD

Optional Accessories

- Siemens controller
- Servo ATC (R12030 / R12040)
- Transformer / stabilizer
- Work piece air blow system
- Spindle speed
 - BT30: 12,000 / 15,000 / 20,000rpm
 - 24,000rpm
 - BT40: 12,000 / 15,000rpm
 - High speed spindle (With spindle oil cooling system)
- Auto. tool length measurement
- Damaged cutting tool sensor
- The 4th axis (CNC Rotary Table)
- Coolant through spindle (CTS)
- Full enclosed splash guard (Top cover)
- Chip conveyor with cart
- High speed & high accuracy machining control mode G05 P20000 (Mitsubishi M80-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

EXCELLENCE
THROUGH
EXPERTISE



ARES-SEIKI®

ARES MACHINERY CO., LTD.

www.ares-seiki.com

A12030 / 12040

R12030 / 12040

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