

TSUDAKOMA

Rotary Table Selection Guide

2022



WE FOCUS ON BEING THE BEST-

that's why leading companies choose Koma.





KOMA PRECISION

ABOUT US

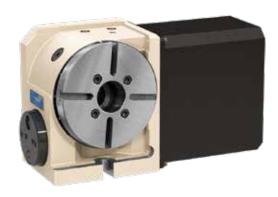
For over forty years Koma Precision has been the foremost source for the finest the world has to offer in machine tool Productivity Innovation.

With over 30,000 rotary table installations, Koma is the largest distributor of Tsudakoma NC rotary tables and indexers in the world. With over 12,000 angle heads and live tools installed, Koma is the world's largest supplier for Alberti - the originator and the foremost innovator of productivity tooling.



ROTARY TABLES





RWE SERIES



RWA SERIES

TSUDAKOMA WORM DRIVE SYSTEM

Tsudakoma utilizes full tooth depth engagement along with a larger gear module. The results are a larger surface contact area yielding a substantially stronger worm gear system The Tsudakoma worm wheel uses an oversize diameter pitch circle resulting in reduced pressure on the contact surface compared to a conventional gearing system. These properties, as well as ultra precision cross over roller bearings, all work to enhance system rigidity and longevity.





TORQUE TRANSFER EFFICIENCY

The Tsudakoma dual lead gearing system features the largest tooth engagement of any rotary table manufacturer. This system generates up to 85% torque transfer efficiency. Tsudakoma's dual lead gearing system features exceptionally smooth cutting due to the inherent lubricating properties of the gear materials.



CROSS ROLLER BEARINGS

Ultra precision cross roller bearings support radial, axial, and moment loads providing four times the level of stiffness as angular contact bearings. Cross roller bearings are constructed with a sequence of cylindrical rollers arranged at right angles to each other within a sealed 90° V-groove. All Tsudakoma rotary tables and indexers use ultra precision cross roller bearings.



YAMA SEIKI MACHINES

Series	Machine	Table Size (mm)	RWE-160R	RWE-200R	RWA-250R	RWA-320R
	AF-610	700 x 450				
	AF-650	750 x 510				
	AF-860	1000 x 600				
	AF-1000	1200 x 550				
AF Series	AF-1060	1200 x 600				
	AF-1250	1350 x 620				
	AF-1460	1500 x 620				
	AF-1400	1500 x 800				
	AF-1600	1700 x 800				
	AV-610	610 x 450				
	AV-650	610 x 510				
	AV-860	860 x 600				
AV Series	AV-1000	1020 x 550				
	AV-1060	1060 x 600				
	AV-1250	1250 x 620				
	AV-1460	1400 x 620				
	BM 850	1050 x 600				
BM Series	BM 1020	1200 x 600				
	BM 1200	1300 x 600				
	BM 1460	1500 x 650				
	BM 1400	1500 x 800				
	BM 1600	1700 x 800				



AF Series High Performance



AV Series High Efficiency



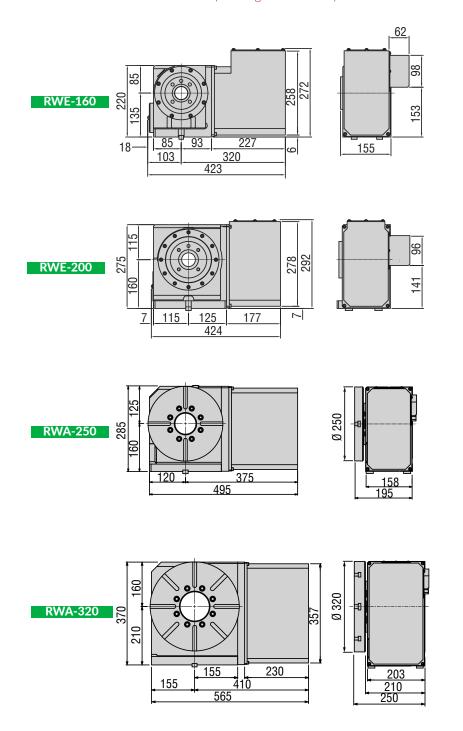
BM Series
Maximum Performance

ROTARY TABLE DIMENSIONS



RWE & RWA-Series ROTARY TABLES

(Drawings Not To Scale)



Please contact Koma Precision to confirm Ganesh / Tsudakoma Rotary Table working envelope.



RWE-SERIES SPECIFICATIONS

Specifications

Specifications								
Table Model		RWE-160	RWE-200					
Versions availab	ole	R, L	R, L					
Spindle outer d	iameter		100h7	120h7				
Table diameter	(optional)	(160, 200)	(200, 250)					
Center height		135	160					
Center bore	Nose Diam	eter	55H7	65H7				
Center bore	Thru Diam	eter	40	45				
Table T-slot wid	th (with faceplate)		(12H8)	(12H8)				
Guide block wid	dth	14h7	18h7					
Servo motor*			Alpha 2i	Alpha 4i				
Maximum moto	or speed	rpm	5,000	5,000				
Speed reductio	n ratio		1/72	1/72				
Maximum table	speed	rpm	69.4	69.4				
Inertia converte	ed into motor shaft	x 10 ⁻³ kg⋅m²	.09	.17				
Clamp system			Pneumatic Disc Clamp	Pneumatic Disc Clamp				
Clamp torque @	72psi	Nm (ft. lbs.)	250 (180)	400 (295)				
Indexing accura	су	arc sec.	±12.5	±10				
Net Weight		kg (lbs.)	40 (88)	61(135)				
Allowable whee	el torque	Nm (ft. lbs.)	206 (152)	288 (212)				
Allowable work	inertia	kg.m²	.64	1.25				
Allowable work weight [with tailstock]	W	kg (lbs)	100 (220) [200 (441)]	125 (275) [250 (551)]				
	F	Nm (ft. lbs.)	10,800 (7,960)	14,400 (10,613)				
Allowable load when table clamped	Ę.	Nm (ft. lbs.)	500 (369)	800 (590)				
	FILE.	Nm (ft. lbs.)	780 (575)	1,900 (1,400)				

^{*}Other motors & rpm available • Dimensions = mm Specifications subject to change without notice

Options & Accessories Additional Accessories Available



T-Slotted Faceplates



3-Jaw Scroll Chucks



Manual Tailstock w/ MT2 Center



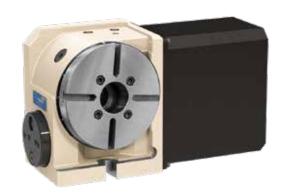
Support Spindle



Support Spindle w/ Pneumatic Clamp



Pneumatic 5C Collet Chuck



RWA-SERIES SPECIFICATIONS



Specifications

эрестейной									
Table Model		RWA-250 (S)	RWA-320 (S)						
Versions availa	able	R, L	R, L						
Spindle outer	diameter	140h7	180h7						
Table diamete	r (optional)	250	320						
Center height		160	210						
Center bore	Nose Diameter		80H7	115H7					
Center bore	Thru Dia	ameter	50	85					
Table T-slot w	idth (with face _l	plate)	12H8	14H7					
Guide block w	ridth	18h7	18h7						
Servo motor*		Alpha 8i (8is)	Alpha 8i (22is)						
Maximum mo	tor speed	rpm	4,000 (4,000)	4,000 (3,000)					
Speed reducti	on ratio	1/90 (1/45)	1/120 (1/45)						
Maximum tab	le speed	rpm	33.3 (88.9)	33.3 (66.6)					
Inertia converted i	nto motor shaft	x 10 ⁻³ kg⋅m²	.41 (.44)	.52 (1.66)					
Clamp system		Pneumatic Dual Taper							
Clamp torque	@72psi	Nm (ft. lbs.)	1,000 (737)	1,500 (1,106)					
Indexing accu	racy	arc sec.	±10	±10					
Net Weight		kg (lbs.)	80 (176)	145 (319)					
Allowable who	eel torque	Nm (ft. lbs.)	596 (439)	939 (692)					
Allowable wor	k inertia	kg.m²	1.95	4.48					
Allowable work weight [with tail- stock]	kg (lbs) [w/ tailstock]		125 (275) [250 (550)]	175 (385) [375 (825)]					
		kg (lbs)	250 (550)	350 (770)					
Allowable load when table clamped	F	N (lbf)	14,400 (3,226)	24,800 (5,555)					
		Nm (ft. lbs.)	1,000 (737)	1,500 (1,106)					
	FULL	Nm (ft. lbs.)	1,900 (1,400)	4,700 (3,464)					

^{*}Other motors & rpm available • Dimensions = mm Specifications subject to change without notice

Options & Accessories Additional Accessories Available



Manual Tailstock w/ MT2 Center



3-Jaw Scroll Chucks



Support Spindle w/ Pneumatic Clamp



Support Spindle



UNLOCK YOUR POTENTIAL TODAY!

For Over 40 years Koma Precision Inc. has partnered with Tsudakoma and Alberti, to become the North American leader in machine tool accessories. Both Tsudakoma and Alberti machine tool accessories are built to the highest standards and set the bar for excellence, quality, and performance.

Koma Precision has an installation base of over 30,000 Tsudakoma rotary tables and 25,000 Alberti angle heads and live tools, leading the way with knowledge and experience.

Knowledge and Experience Matter.

Our three facilities totaling 40,000 sq/ft, feature a full machine shop, state-of-the-art inspection and test equipment, and product demonstration showroom. Our Connecticut based headquarters also houses our multi-million-dollar inventory of new products and spare parts.



20 Thompson Road East Windsor, CT 06088

Tel: 1.800.249.5662 Fax: 860.623.4132 info@komaprecision.com











