



TSUDAKOMA
ROTARY TABLE
SELECTION GUIDE



Bridgeport[®]

ABOUT US

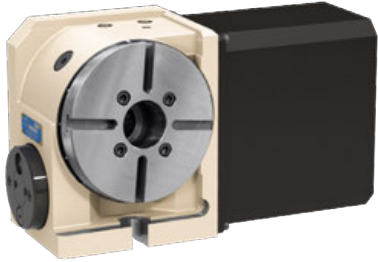
KOMA PRECISION

For over thirty 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.



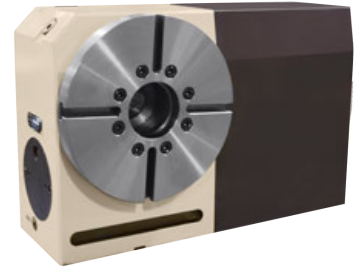
ROTARY TABLES



RWE SERIES



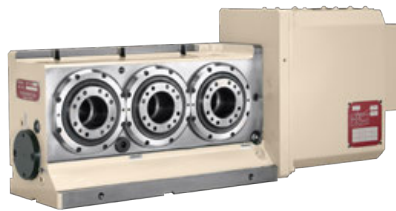
RWA SERIES



RBS SERIES



RWB SERIES



RN MULTI SERIES



5TH AXIS TILTING
RTT-111, CA



TWA SERIES



TBS SERIES

GX 480 & GX 600



GX 480				
RWE SERIES	RWE-160R			
RWA SERIES	RWA-160R			
RBS SERIES	RBS-160R			
RWB SERIES	RWB-250R			
RN MULTI SERIES	RN-100R-2			
TWA SERIES	TN-101	TWA-130	TWA-160	
TBS SERIES	TBS-130	TBS-160		
5 TH AXIS TILTING	RTT-111 CA			



GX 600				
RWE SERIES	RWE-160R	RWE-200R		
RWA SERIES	RWA-160R	RWA-200R	RWA-250R	
RBS SERIES	RBS-160R	RBS-250R		
RWB SERIES	RWB-250R			
RN MULTI SERIES	RN-100R-2	RN-100R-3	RN-100R-4	
TWA SERIES	TN-101	TWA-130	TWA-160	
TBS SERIES	TBS-130	TBS-160		
5 TH AXIS TILTING	RTT-111 CA			

GX 710 & GX 1000



GX 710				
RWE SERIES	RWE-160R	RWE-200R		
RWA SERIES	RWA-160R	RWA-200	RWA-250	
RBS SERIES	RBS-160R	RBS-250		
RWB SERIES	RWB-250R			
RN MULTI SERIES	RN-100R-2	RN-100R-3	RN-100R-4	
TWA SERIES	TN-101	TWA-130	TWA-160	
TBS SERIES	TBS-130	TBS-160		
5 TH AXIS TILTING	RTT-111 CA			



GX 1000				
RWA SERIES	RWA-250R	RWA-320R		
RBS SERIES	RBS-250R	RBS-320R		
RWB SERIES	RWB-250R	RWB-320R		
RN MULTI SERIES	RN-100R-2	RN-100R-3	RN-100R-4	
TWA SERIES	TWA-130	TWA-160	TWA-200	
TBS SERIES	TBS-130	TBS-160		
5 TH AXIS TILTING	RTT-111 CA			

GX 1300 & GX 1600



GX 1300				
RWA SERIES	RWA-250R	RWA-320R		
RBS SERIES	RBS-250R	RBS-320R		
RWB SERIES	RWB-250R	RWB-320R	RWB-400R	
RN MULTI SERIES	RN-100R-2	RN-100R-3	RN-100R-4	
TWA SERIES	TWA-130	TWA-160	TWA-200	TN-320
TBS SERIES	TBS-130	TBS-160		
5 TH AXIS TILTING	RTT-111 CA			



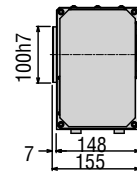
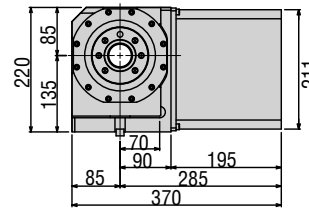
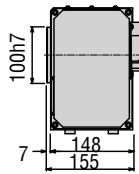
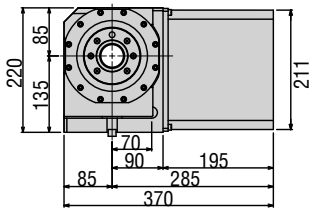
GX 1600				
RWA SERIES	RWA-250R	RWA-320R		
RBS SERIES	RBS-250R	RBS-320R		
RWB SERIES	RWB-250R	RWB-320R	RWB-400R	
RN MULTI SERIES	RN-100R-2	RN-100R-3	RN-100R-4	
TWA SERIES	TWA-160	TWA-200	TN-320	
TBS SERIES	TBS-160			

ROTARY TABLE DIMENSIONS

RWE, RWA & RN Multi Series

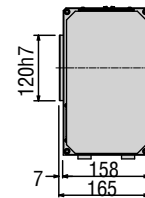
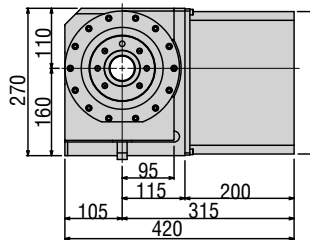
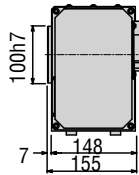
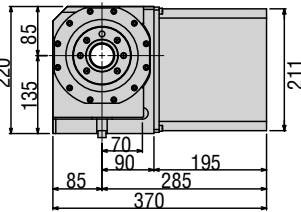
(Drawings Not To Scale)

RWE-160



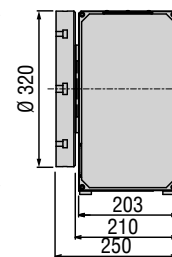
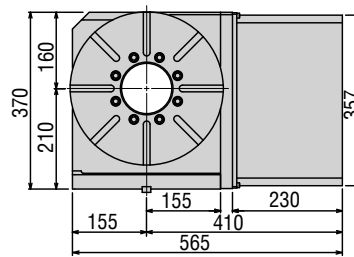
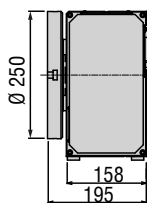
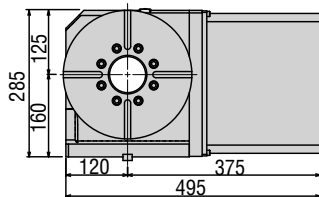
RWE-200

RWA-160

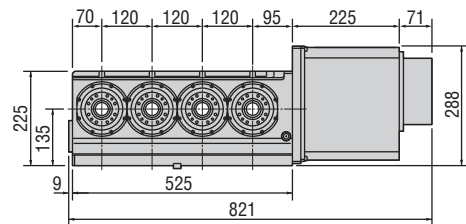
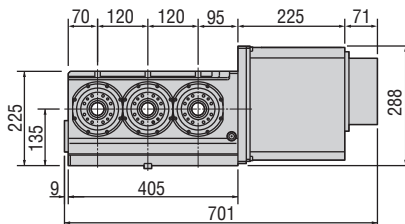
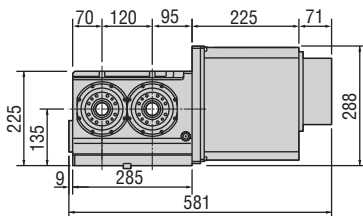


RWA-200

RWA-250



RWA-320



RN-100R-2,3,4

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(Drawings Not To Scale)

Technical drawing of the 1000 Series Locking Cabinet showing front and side views with dimensions.

Front View Dimensions:

- Overall Height: 335
- Height to Top of Locking Mechanism: 210
- Width of Locking Mechanism: 245
- Width of Cabinet Body: 268
- Overall Width: 513

Side View Dimensions:

- Overall Depth: 229
- Depth of Locking Mechanism: 42
- Depth of Cabinet Body: 168

The technical drawing shows two views of the SPS 6000 unit:

- Front View (Left):** A square unit with a circular central feature. Dimensions include a total height of 415 mm, a distance from the top edge to the center of the circle of 255 mm, a width of 320 mm for the central section, and a total width of 585 mm.
- Side View (Right):** Shows the depth of the unit as 284 mm. The mounting bracket has a thickness of 52 mm. The main body has a depth of 213 mm.

Technical drawings of the machine showing front and side views with dimensions in mm.

Front View Dimensions:

- Top width: 239.5
- Top width (inner): 218.5
- Top width (right section): 49.5
- Distance from top edge to center: 130
- Distance from center to right edge: 189
- Right side height: 21
- Left side height: 396
- Bottom height (left section): 220
- Bottom height (right section): 341
- Bottom height (inner section): 90

Side View Dimensions:

- Top width: 608
- Distance from left edge to center: 289
- Distance from center to right edge: 319
- Distance from center to right edge (inner section): 85
- Distance from center to right edge (inner section): 85
- Left side height: 276
- Right side height: 85
- Distance from bottom edge to center: 190
- Distance from bottom edge to center (inner section): 275
- Distance from bottom edge to center (inner section): 56
- Bottom width (left section): 231
- Bottom width (middle section): 164
- Bottom width (right section): 155

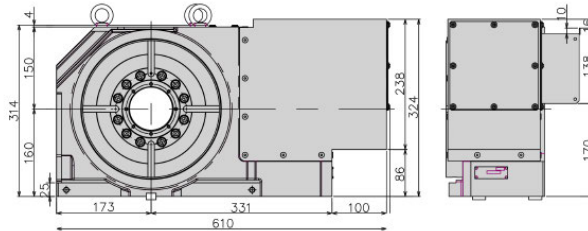
Labels: Pallet, Chuck

ROTARY TABLE DIMENSIONS

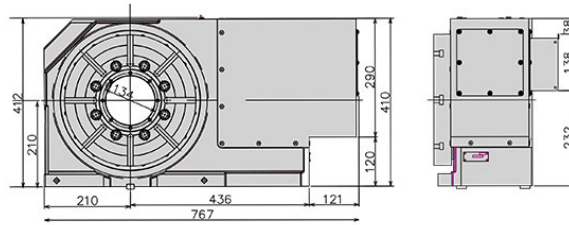
RWB & TBS Series

(Drawings Not To Scale)

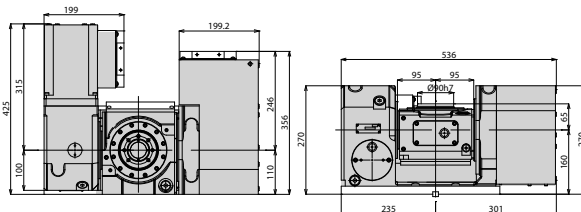
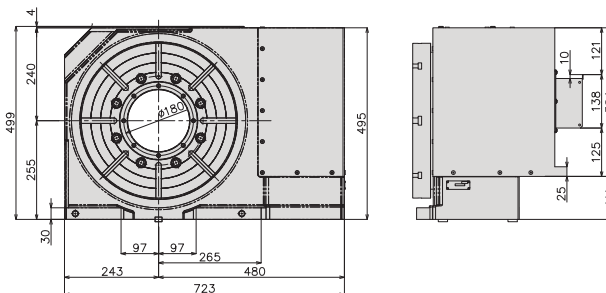
RWB-250



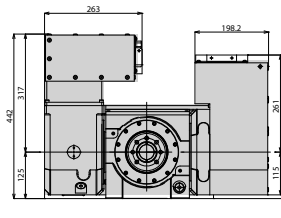
RWB-320



RWB-400



TBS-130



TBS-160

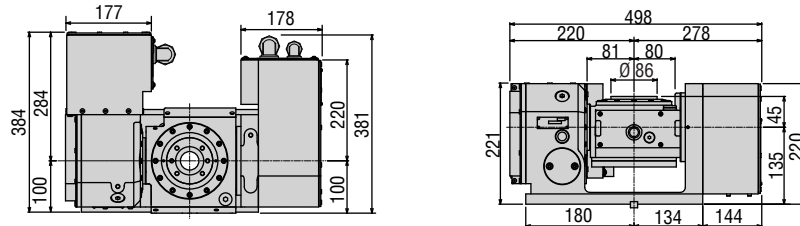
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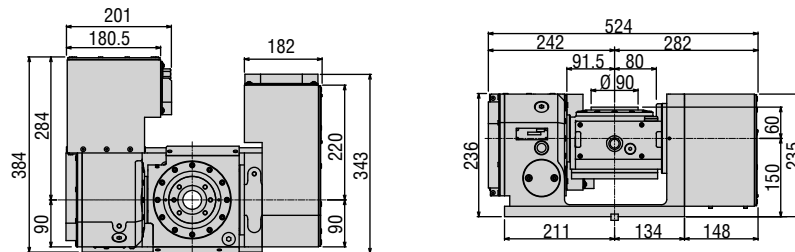
ROTARY TABLE DIMENSIONS

TWA-Series (Drawings Not To Scale)

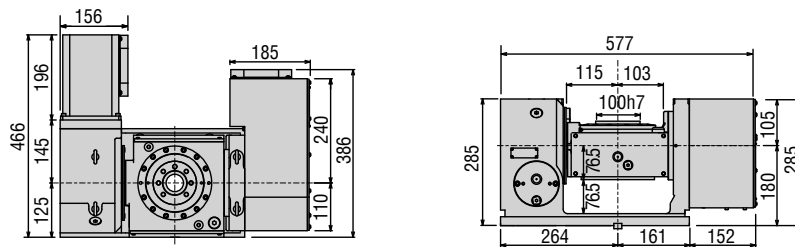
TN-101



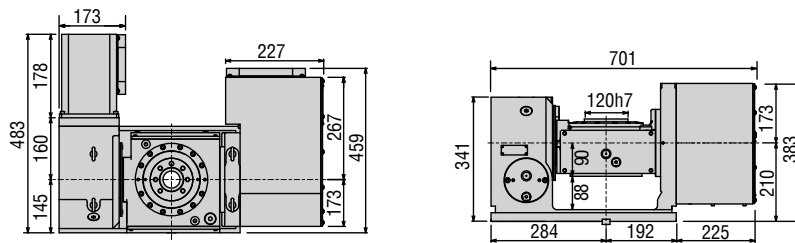
TWA-130



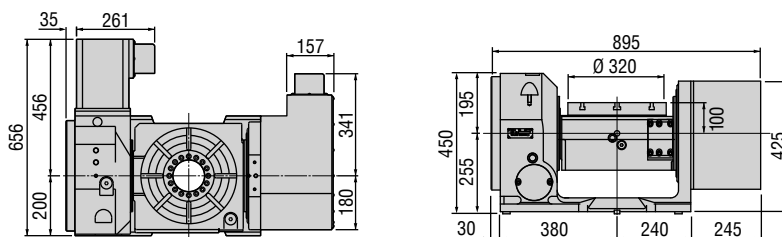
TWA-160



TWA-200



TN-320



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ROTARY TABLE SPECIFICATIONS

RN-Multi & RWE-Series

Table Model		RN-100-2,3,4			RWE-160	RWE-200
Versions available		R, L			R, L	R, L
Spindle outer diameter		80h7			100h7	120h7
Table diameter (optional)		(115)			(160, 200)	(200, 250)
Center height		135			135	160
Center bore	Nose Diameter	50H7			55H7	65H7
	Thru Diameter	30			40	45
Table T-slot width (with face plate)		-			(12H8)	(12H8)
Minimum spindle center distance		120			-	-
Guide block width		18h7			14h7	18h7
Servo motor (Fanuc)*		Alpha 4i			Alpha 2i	Alpha 4i
Maximum motor speed rpm		5,000			5,000	5,000
Speed reduction ratio		1/36			1/72	1/72
Number of spindles		2	3	4	-	-
Maximum table speed rpm		138.9			69.4	69.4
Inertia converted into motor shaft $\times 10^{-3} \text{kg}\cdot\text{m}^2$		.64	.92	1.06	.09	.17
Clamp system		Pneumatic			Pneumatic Disc Clamp	
Clamp torque @72psi Nm (ft. lbs.)		80 (59)			250 (180)	400 (295)
Indexing accuracy arc sec.		± 30			± 12.5	± 10
Net Weight kg (lbs.)		70-110(154-242)			40 (88)	61 (135)
Allowable wheel torque Nm (ft. lbs.)		176 (130)			206 (152)	288 (212)
Allowable work inertia $\text{kg}\cdot\text{m}^2$		.10			.64	1.25
Allowable work weight	 kg (lbs) [w/ tailstock]	25 (55) [50 (110)]			100 (220) [200 (441)]	125 (275) [250 (551)]
	 kg (lbs)	50 (110)			-	-
Allowable load when table clamped	 N (lbf)	5,880 (1,317)			10,800 (2,419)	14,400 (3,226)
	 Nm (ft. lbs.)	80 (59)			500 (369)	800 (590)
	 Nm (ft. lbs.)	156 (115)			780 (575)	1,900 (1,400)

* Other motors & RPM available

Dimensions = mm

Specifications subject to change without notice

ROTARY TABLE SPECIFICATIONS

RWA & RBS-Series

Table Model		RWA-160	RWA-200	RWA-250 (S)	RWA-320 (S)	RBS-160	RBS-250	RBS-320
Versions available		R, L	R, L	R, L	R, L	R	R	R
Spindle outer diameter		100h7	120h7	140h7	180h7	100h7	140h7	180h7
Table diameter (optional)		(160, 200)	(200, 250)	250	320	(160, 200)	250	320
Center height		135	160	160	210	160	210	255
Center bore	Nose Diameter	55H7	65H7	80H7	115H7	55H7	80H7	115H7
	Thru Diameter	40	45	50	85	40	50	85
Table T-slot width (with face plate)		(12H8)	(12H8)	12H8	14H7	12H8	12H8	14H8
Minimum spindle center distance		-	-	-	-	-	-	-
Guide block width		14h7	18h7	18h7	18h7	14h7	18h7	18h7
Servo motor (Fanuc)*		Alpha 2i	Alpha 4i	Alpha 8i (8is)	Alpha 8i (22is)	Alpha 4i	Alpha 8i	Alpha 12i
Maximum motor speed rpm		5,000	5,000	4,000 (4,000)	4,000 (4,000)	5,000	4,000	4,000
Speed reduction ratio		1/72	1/72	1/90 (1/45)	1/120 (1/45)	1/36	1/36	1/36
Number of spindles		-	-	-	-	-	-	-
Maximum table speed rpm		69.4	69.4	44.4 (88.9)	33.3 (88.9)	138.9	111.1	111.1
Inertia converted into motor shaft x 10 ⁻³ kg·m ²		.09	.17	.41 (.44)	.52 (1.66)	0.19	0.42	2.24
Clamp system		Pneumatic Dual Taper				Pneumatic Disc Clamp		
Clamp torque @72psi Nm (ft. lbs.)		500 (369)	800 (590)	1,000 (737)	1,500 (1,106)	700 (516)	1480 (1076)	2580 (1901)
Indexing accuracy arc sec.		±12.5	±10	±10	±10	±12.5	±10	±10
Net Weight kg (lbs.)		38 (84)	61 (134)	80 (176)	145 (319)	44 (97)	62 (136)	107 (235)
Allowable wheel torque Nm (ft. lbs.)		206 (152)	288 (212)	596 (439)	939 (692)	206 (152)	288 (212)	565 (416)
Allowable work inertia kg·m ²		.64	1.25	1.95	4.48	.48	1.25	1.95
Allowable work weight	 kg (lbs) [w/ tailstock]	100 (220) [175 (385)]	125 (275) [250 (550)]	125 (275) [250 (550)]	175 (385) [375 (825)]	75 (165) [150 (330)]	100 (220) [250 (550)]	100 (220) [250 (550)]
	 kg (lbs)	200 (440)	250 (550)	250 (550)	350 (770)	-	-	-
Allowable load when table clamped	 N (lbf)	10,800 (2,419)	14,400 (3,226)	14,400 (3,226)	24,800 (5,555)	7,840 (1,762)	13,720 (3,085)	250 (550)
	 Nm (ft. lbs.)	500 (369)	800 (590)	1,000 (737)	1,500 (1,106)	250 (180)	400 (295)	13,720 (3,073)
	 Nm (ft. lbs.)	780 (575)	1,900 (1,400)	1,900 (1,400)	4,700 (3,464)	392 (290)	980 (723)	600 (442)

* Other motors & RPM available

Dimensions = mm

Specifications subject to change without notice

ROTARY TABLE SPECIFICATIONS

RWB -Series

Model		RWB-250	RWB-320	RWB-400
Versions available		R, L	R, L	R, L
Table diameter		250	320	400
Center height		160	210	255
Center bore	Nose Diameter	105	150	200
	Thru Diameter	80	120	160
Table T-slot width (with faceplate)		12H7	14H7	
Guide block width		18h7		
Servo motor (Fanuc)*		Alpha 8i	Alpha 12i	Alpha 12i
Maximum motor speed rpm		4,000	4,000	4,000
Speed reduction ratio		1/90	1/90	1/90
Maximum table speed rpm		44.4	44.4	44.4
Inertia converted into motor shaft x 10 ⁻³ kg·m ²		1.27	3.53	4.63
Clamp system		Hydraulic		
Clamp torque @500psi Nm (ft. lbs.)		1,300 (958)	3,100 (2,284)	5,500 (4,053)
Indexing accuracy arc sec.		±7		
Net Weight kg (lbs.)		125 (286)	250 (550)	360 (792)
Allowable wheel torque Nm (ft. lbs.)		1,011 (745)	2,127 (1,567)	3,958 (2,917)
Allowable work inertia kg·m ²		7.0	19.2	36.0
Allowable work weight	 kg (lbs) [w/ tailstock]	175 (385) [350 (770)]	250 (550) [500 (1,100)]	300 (660) [600 (1,320)]
	 kg (lbs)	350 (770)	500 (1,100)	600 (1,320)
Allowable load when table clamped	 N (lbf)	35,000 (7,700)	89,000 (19,580)	109,000 (23,980)
	 Nm (ft. lbs.)	1,300 (958)	2,100 (2,284)	5,500 (4,053)
	 Nm (ft. lbs.)	1,500 (1,105)	5,300 (3,906)	7,800 (5,748)

* Other motors & RPM available

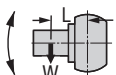
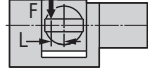
** Booster optional

Dimensions = mm

Specifications subject to change without notice

ROTARY TABLE SPECIFICATIONS

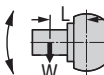
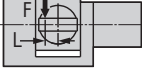
TWA-Series

Model		TN-101		TWA-130		TWA-160		TWA-200		TN-320	
Tilt Range		-17° ~ +107°		-17° ~ +107°		-30° ~ +110°		-30° ~ +110°		-30° ~ +110°	
Spindle outer diameter		86h7		90h7		100h7		120h7		-	
Table diameter (optional)		(135)		(135)		160 (200)		200 (250)		320	
Table height at 0° position		180 (205 w/face plate)		210 (235 w/face plate)		235 (260 w/face plate)		270 (300 w/face plate)		355	
Center height at 90° position		135		150		180		210		255	
Center bore	Nose Diameter (w/face plate)	55H7 (40H7)		55H7 (40H7)		55H7 (50H7)		65H7 (60H7)		105H7	
	Thru Diameter	35		35		40		45		100	
Table T-slot width		12H7 (w/face plate)		12H8 (w/face plate)		12H8 (w/face plate)		12H8 (w/face plate)		14H7	
Guide block width		14h7		14h7		18h7		18h7		18h7	
Servo motor (Fanuc)*		Rotary	Tilt	Rotary	Tilt	Rotary	Tilt	Rotary	Tilt	Rotary	Tilt
		Alpha 2i	Alpha 2i	Alpha 2i	Alpha 2i	Alpha 2i	Alpha 2i	Alpha 4i	Alpha 4i	Alpha 8i	Alpha 8i
Maximum motor speed	rpm	5,000	5,000	5,000	5,000	5,000	5,000	4,000	4,000	4,000	4,000
Speed reduction ratio		1/60	1/120	1/60	1/120	1/72	1/120	1/45	1/90	1/120	1/240
Maximum table speed	rpm	83.3	41.7	83.3	41.7	69.4	41.7	88.9	44.4	33.3	16.7
Inertia converted into motor shaft	x 10 ⁻³ kg·m ²	.072	.078	.074	.072	.17	.18	.38	.45	.82	.45
Clamp system		Pneumatic				Pneumatic Dual Taper				Hydraulic @500 psi **	
Clamp torque @72psi	Nm (ft. lbs.)	200 (147)	300 (221)	500 (369)	500 (369)	500 (369)	800 (590)	800 (590)	1,000 (737)	[2,200] [[1,621]]	[2,200] [[1,621]]
Indexing accuracy	arc sec.	±20	-	±20	-	±15	-	±15	-	±10	-
Tilting accuracy	arc sec.	-	±22.5	-	±22.5	-	±22.5	-	±22.5	-	±22.5
Net Weight	kg (lbs.)	65 (143)		76 (167)		127 (279)		190 (418)		440 (968)	
Allowable wheel torque - rotary	Nm (ft. lbs.)	152 (112)		152 (112)		200 (147)		450 (332)		931 (686)	
Allowable work inertia	kg·m ²	.08		.08		.19		.59		1.53	
Allowable work weight	0° tilt angle  kg (lbs)	35 (77)		35 (77)		60 (132)		120 (264)		150 (330)	
	0° ~ 90° tilt angle  kg (lbs)	20 (44)		20 (44)		40 (88)		70 (154)		100 (220)	
Allowable work moment	 Nm (ft. lbs.)	24 (17.7)		24 (17.7)		39.2 (28.9)		53.7 (39.6)		163.3 (120.4)	
Allowable load when table clamped	 N (lbf)	3,920 (878)		3,920 (878)		7,840 (1,756)		13,720 (3,073)		19,600 (4,390)	
	 Nm (ft. lbs.)	200 (147)		500 (369)		500 (369)		800 (590)		2,200 (1,621)	
	 Nm (ft. lbs.)	300 (221)		500 (369)		800 (590)		1,000 (737)		2,200 (1,621)	

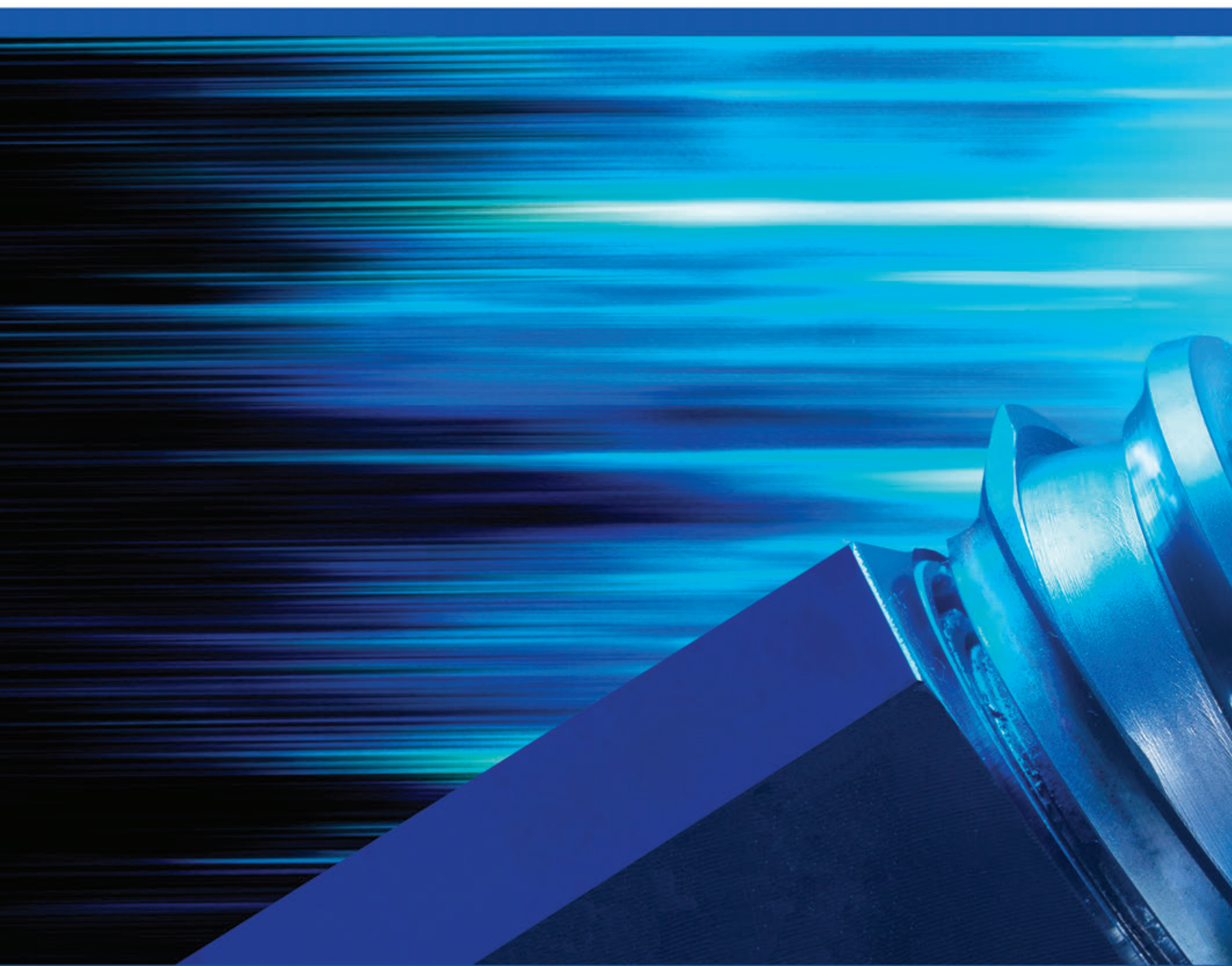
* Other motors & RPM available • ** Booster optional • Dimensions = mm • Specifications subject to change without notice

ROTARY TABLE SPECIFICATIONS

TBS-Series & RTT-111,CA

Model		TBS-130		TBS-160		RTT-111,CA	
Tilt Range		-30° ~ +110°		-30° ~ +110°		-17° ~ +107°	
Spindle outer diameter		90h7		100h7			
Table diameter (optional)		(135)		(160 or 200)			
Table height at 0° position		225 (250 w/faceplate)		270 (300 w/faceplate)		190	
Center height at 90° position		160		200		190	
Center bore	Nose Diameter (w/face plate)	55H7 (40H7)		55H7 (50H7)		-	
	Thru Diameter	40		40		-	
Table T-slot width		12H8		12H8		14H7	
Guide block width		14h7		18h7		14H7	
Servo motor (Fanuc)*		Rotary	Tilt	Rotary	Tilt	Rotary	Tilt
		Alpha 2i	Alpha 2i	Alpha 2i	Alpha 4i	Alpha 2i	Alpha 2i
Maximum motor speed	rpm	5,000	5,000	5,000	5,000	5,000	5,000
Speed reduction ratio		1/48	1/60	1/60	1/60	1/60	1/120
Maximum table speed	rpm	104.2	83.3	83.3	83.3	83.3	41.7
Inertia converted into motor shaft	$\times 10^{-3} \text{kg} \cdot \text{m}^2$	.074	.072	.17	.18	.074	.72
Clamp system		Pneumatic				Hydraulic @500 psi **	
Clamp torque @72psi	Nm (ft. lbs.)	700 (516)	700 (516)	700 (516)	700 (516)	[2,200] [(1,621)]	[2,200] [(1,621)]
Indexing accuracy	arc sec.	±10	-	±10	-	±20	-
Tilting accuracy	arc sec.	-	±17.5	-	±17.5	-	±30
Net Weight	kg (lbs.)	125 (276)		160 (353)		98 (216)	
Allowable wheel torque - rotary	Nm (ft. lbs.)	-		-		152 (112)	
Allowable work inertia	kg·m ²	.08		.19		.08	
Allowable work weight	0° tilt angle 	kg (lbs)	35 (77)	60 (132)	35 (77)		
	0° ~ 90° tilt angle 	kg (lbs)	20 (44)	40 (88)	20 (44)		
Allowable work moment		Nm (ft. lbs.)	61.1	59.6	57 (42)		
Allowable load when table clamped		N (lbf)	3,920 (878)	10,800	3,920 (878)		
		Nm (ft. lbs.)	700 (516)	700 (516)	500 (369)		
		Nm (ft. lbs.)	700 (516)	700 (516)	500 (369)		

* Other motors & RPM available • ** Booster optional • Dimensions = mm • Specifications subject to change without notice



Tsudakoma-Hardinge Bridgeport 19.0 1/14/19



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