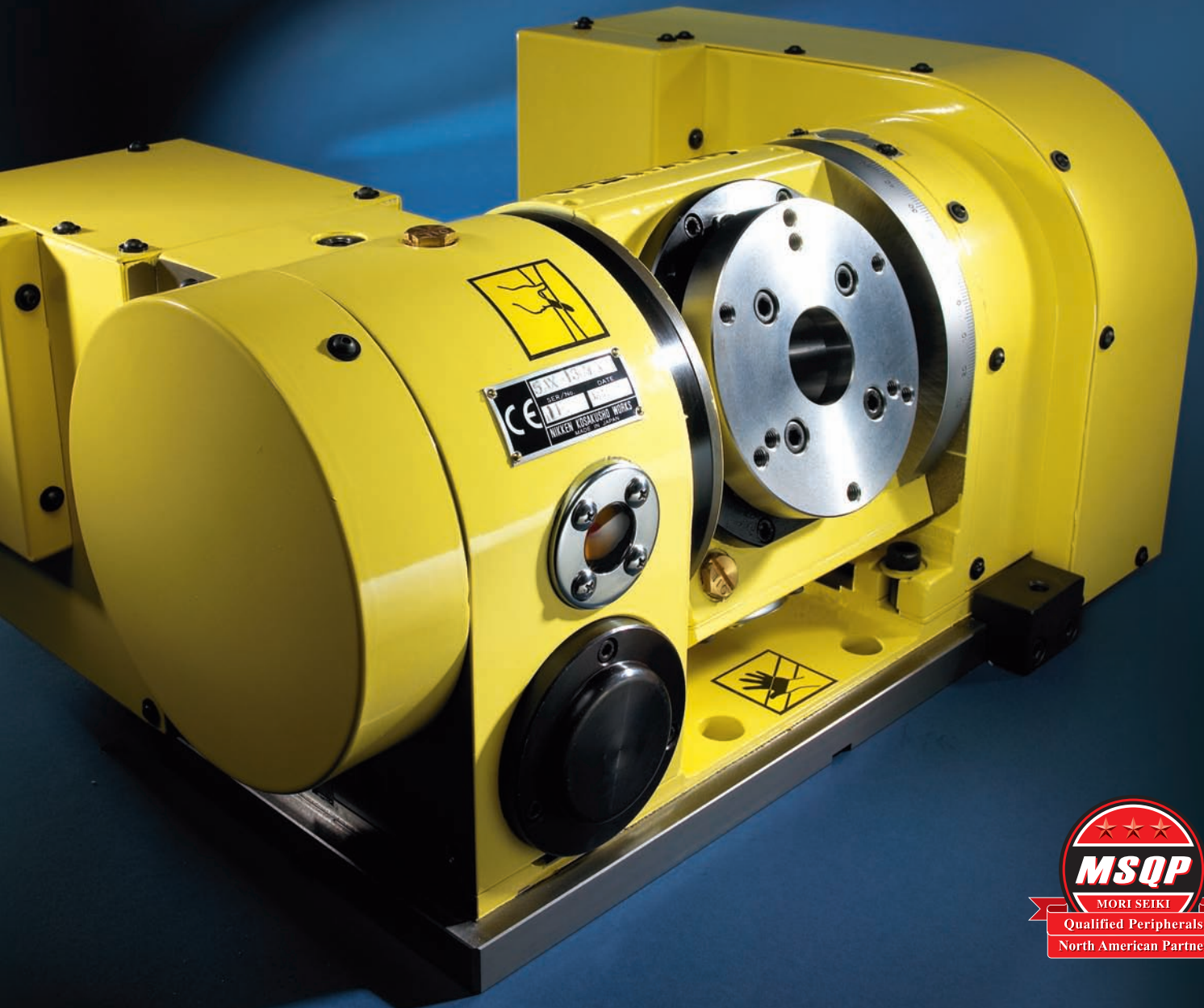


# CNC ROTARY TABLES

FOR MORI SEIKI VERTICAL MACHINING CENTERS  
DURAVERTICAL, NV, VS AND MV SERIES



# General Matrix

## MORI SEIKI

■ X,Y,Z Axis Travel ■ Working Surface

Lyndex-Nikken Rotary Table		DuraVertical			NV4000	NV5000		NV6000
		5060	5080	5100	DGC	a1A/40/50	a1B40/50	DCG 40/50
Faceplate Ø	Part Number	23.6x20.9x20.1	31.5x20.9x20.1	41.3x20.9x20.1	23.6x15.7x15.7	31.5x20.1x20.1	40.2x20.1x20.1	35.4x23.6x17.7
		35.4x23.6	43.3x23.6	53.1x23.6	27.6x17.7	43.3x23.6	52.0x23.66	39.4x23.6

### 4 Axis Tables

#### Right Side Motor

4"-105mm	CNC105FA-M	Page 8	Page 8	Page 8	Page 8	Page 8	Page 8	Page 8
7"-180mm	CNC180FA-M	Page 8	Page 8	Page 8	Page 8	Page 8	Page 8	Page 8
8"-202mm	CNC202FA-M	Page 10	Page 10	Page 10	Page 10	Page 10	Page 10	Page 10
10"-260mm	CNC260FA-M	Page 10	Page 10	Page 10	-	Page 10	Page 10	Page 10
12"-302mm	CNC302FA-M	Page 10	Page 10	Page 10	-	Page 10	Page 10	Page 10
12.5"-321mm	CNC321FA-M	-	-	-	-	-	-	-
15.5"-401mm	CNC401FA-M	-	-	-	-	-	-	-
17.5"-450mm -big bore	CNCB450FA-M	-	-	-	-	-	-	-
19.5"-501mm	CNC501FA-M	-	-	-	-	-	-	-
23.5"-601mm	CNC601FA-M	-	-	-	-	-	-	-
4"-105mm	CNC100-2W-120-FA-M	Page 14	Page 14	Page 14	call	Page 14	Page 14	Page 14
4"-105mm	CNC100-3W-120-FA-M	Page 14	Page 14	Page 14	call	Page 14	Page 14	Page 14
4"-105mm	CNC100-4W-120-FA-M	Page 14	Page 14	Page 14	call	Page 14	Page 14	Page 14

#### Back Side Motor

10"-260mm	CNC260BFA-M	-	-	-	-	-	-	-
12"-302mm	CNC302BFA-M	-	-	-	-	-	-	-
12.5"-321mm	CNC321BFA-M	-	-	-	-	-	-	-
15.5"-401mm	CNC401BFA-M	-	-	-	-	-	-	-

### 5 Axis Tables

4"-105mm	5AX-130FA-M	Page 16	Page 16	Page 16	Page 16	Page 16	Page 16	Page 16
6"-150mm	5AX-150FA-M	Page 16	Page 16	Page 16	Page 16	Page 16	Page 16	Page 16
7.8"-200mm	5AX-201FA-M	Page 18	Page 18	Page 18	Page 18	Page 18	Page 18	Page 18
7.8"-200mm	5AX-200IIFA-M	Page 18	Page 18	Page 18	-	Page 18	Page 18	Page 18
9.8"-250mm	5AX-250FA-M	Page 20	Page 20	Page 20	-	Page 20	Page 20	Page 20
13.7"-350mm	5AX-350FA-M	-	-	-	-	-	-	-
21.6"-550mm	5AX-550FA-M	-	-	-	-	-	-	-
4"-105mm	5AX-2MT-105-120FA-M	Page 20	Page 20	Page 20	-	Page 20	Page 20	Page 20

### Manual Tilting Tables

9.8"-250mm	NST250FA-M	Page 22	Page 22	Page 22	-	Page 22	Page 22	Page 22
------------	------------	---------	---------	---------	---	---------	---------	---------

## MORI SEIKI

■ X,Y,Z Axis Travel ■ Working Surface

Lyndex-Nikken Rotary Table		NV7000	VS8000	VS10000		MV-653	MV-1003	
		/50	40/50 -1600	40/50 -2050	40/50 -3150	40/50	B/50	L/50
Faceplate Ø	Part Number	60.6x29.9x29.0	63.0x33.9x23.6	80.7x39.4x23.6	124.0x39.4x23.6	60.2x26.0x25.6	94.5x40.2x31.5	137.8x40.2x31.5
		66.9x29.9	78.7x33.5	88.6x39.4	131.9x39.4	66.9x26.0	110.2x40.2	153.5x40.2

### 4 Axis Tables

#### Right Side Motor

4"-105mm	CNC105FA-M	-	-	-	-	-	-	-
7"-180mm	CNC180FA-M	-	-	-	-	-	-	-
8"-202mm	CNC202FA-M	-	-	-	-	-	-	-
10"-260mm	CNC260FA-M	Page 10	Page 10	Page 10	Page 10	Page 10	Page 10	Page 10
12"-302mm	CNC302FA-M	Page 10	Page 10	Page 10	Page 10	Page 10	Page 10	Page 10
12.5"-321mm	CNC321FA-M	Page 12	Page 12/25	Page 12/25	Page 12/25	Page 12/25	Page 12/25	Page 12/25
15.5"-401mm	CNC401FA-M	Page 12	Page 12/25	Page 12/25	Page 12/25	Page 12/25	Page 12/25	Page 12/25
17.5"-450mm -big bore	CNCB450FA-M	-	Page 26	Page 26	Page 26	Page 26	Page 26	Page 26
19.5"-501mm	CNC501FA-M	-	Page 26	Page 26	Page 26	-	Page 26	Page 26
23.5"-601mm	CNC601FA-M	-	Page 27	Page 27	Page 27	-	Page 27	Page 27
4"-105mm	CNC100-2W-120-FA-M	-	-	-	-	-	-	-
4"-105mm	CNC100-3W-120-FA-M	-	-	-	-	-	-	-
4"-105mm	CNC100-4W-120-FA-M	-	-	-	-	-	-	-

#### Back Side Motor

10"-260mm	CNC260BFA-M	-	Page 24	Page 24	Page 24	Page 24	Page 24	Page 24
12"-302mm	CNC302BFA-M	-	Page 24	Page 24	Page 24	Page 24	Page 24	Page 24
12.5"-321mm	CNC321BFA-M	-	Page 24	Page 24	Page 24	Page 24	Page 24	Page 24
15.5"-401mm	CNC401BFA-M	-	Page 24	Page 24	Page 24	Page 24	Page 24	Page 24

### 5 Axis Tables

4"-105mm	5AX-130FA-M	-	-	-	-	-	-	-
6"-150mm	5AX-150FA-M	-	-	-	-	-	-	-
7.8"-200mm	5AX-201FA-M	Page 18	-	-	-	-	-	-
7.8"-200mm	5AX-200IIFA-M	Page 18	-	-	-	-	-	-
9.8"-250mm	5AX-250FA-M	Page 20	-	-	-	-	-	-
13.7"-350mm	5AX-350FA-M	-	Page 28	Page 28	-	Page 28	Page 28	Page 28
21.6"-550mm	5AX-550FA-M	-	Page 28	Page 28	-	Page 28	Page 28	Page 28
4"-105mm	5AX-2MT-105-120FA-M	-	-	-	-	-	-	-

### Manual Tilting Tables

9.8"-250mm	NST250FA-M	Page 22	-	-	-	-	-	-
------------	------------	---------	---	---	---	---	---	---



The world's number one most durable, precise and rigid CNC Rotary Tables are provided from these assembly lines to the worldwide market.

## Table of Contents

General Matrix	-----	Inside cover - 1
Table of Contents	-----	2
Introduction	-----	3
Features and Technology	-----	4 - 7
Product Specifications and Application Drawings	-----	8 - 28
<b>Rotary Tables for Mori Seiki DuraVertical and NV Series</b>	-----	<b>8 - 23</b>
4 Axis Rotary Tables	-----	8 - 15
5 Axis Rotary Tables	-----	16 - 21
Manual Tilting Rotary Tables	-----	22 - 23
<b>Rotary Tables for Mori Seiki VS and MV Series</b>	-----	<b>24 - 28</b>
4 Axis Rotary Tables	-----	24 - 27
5 Axis Rotary Tables	-----	28
Accessories	-----	29
Installation and Interface	-----	30 - 31
Service and Repair	-----	32
Static and Live Tools	-----	Inside back cover

# Maximize the capabilities of your Mori Seiki Machine

Mori Seiki has selected Lyndex-Nikken CNC Rotary Tables for inclusion in their MSQP (Mori Seiki Qualified Peripherals) program to ensure that peripherals equipment used on their machining centers is consistent both in terms of quality and performance.

At the heart of the Nikken CNC Rotary Table is a Carbide Worm System that dramatically reduces frictions between the gears. After years and years of use, this system has proven to offer unparalleled durability and accuracy, when other manufacturers' tables cannot offer long-term wear resistance.

With our unique technological advantages and engineering expertise, we are confident that Lyndex-Nikken Rotary Tables will keep you far ahead of the global competition.

Enhanced with Lyndex-Nikken Rotary Tables, your Mori Seiki machining center will allow you to reduce cycle times, eliminate extra operations and achieve maximum efficiency.



Parts inventory, maintenance and repair, and rebuild services are available through Lyndex-Nikken (See page 32 for more details.)



Nikken's complete line of CNC Rotary Tables is recognized worldwide for wear-resistance, rigidity and high-speed rotation. Every part of every table is designed and built to provide high accuracy, increased production and a trouble-free long life. All Nikken Rotary Tables have built-in features and benefits unmatched by the competition.

### Casting and Sealing

The environments in which CNC rotary tables are used are becoming increasingly severe with each passing year. Nikken Rotary Tables utilize fine grain high-density Gray Cast Iron castings. These castings offer long-term stability, low distortion and high strength. Casting is roughed out and a period of 30 days is allowed for the casting to stabilize before the rotary table is finished being machined.

Now that cutting fluids are used in large quantities, waterproofing of CNC rotary tables has become very important. When used for a long period of time, the table bearing race in particular becomes a problem. That's why the bearing race of Nikken Rotary Tables consists of hardened steel (HRC58-60) polished to a mirror finish. The edge of the rotary table is sealed by a special seal ring that prevents cutting fluid from entering the unit, even when used for a long period of time.

### Assessment and Inspection

Our tables are thoroughly assessed thru various series of tests such as overload test, rigidity test, cutting stability test, and brake torque test. Every table is 100% inspected and comes with an inspection certificate.

### Construction of a Nikken Rotary Table

There are several factors determining the quality of a rotary table such as the selection of the various materials, the precision with which the components are machined and assembled, the method by which the bearings are supported, the seal characteristics and the braking method.

They are all important.

However, the life of CNC rotary tables hinges on their worm systems. The Worm Screw Shaft and the Worm Wheel determine the precision, rigidity and durability of the rotary table.

That's where Nikken Rotary Tables make a real difference.

Learn what makes Nikken Rotary Table "Unique".



## Nikken Patented Carbide Worm System: less maintenance, more productivity

Nikken worm wheel and carbide worm screw shaft offer excellent wear resistance over time and permit high-speed rotation.

### Patents

Japan (PAT. 1856404)

USA (PAT. 4576058)

Germany (PAT. DE3417860C2)

UK (PAT. 2158546)

France (PAT. 8407554)

V-Grade Carbide Worm Screw

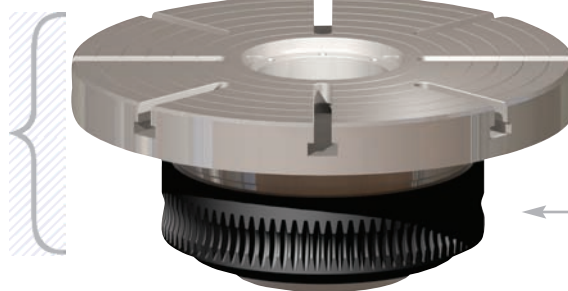
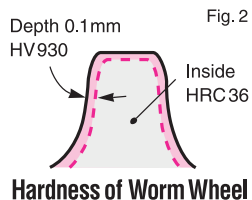


## Faceplate Construction and Steel Worm Wheel Assembly

Comparison between Lyndex-Nikken and the competition:

### LYNDEX-NIKKEN

Nikken's unique design shrink fits the worm wheel onto the solid faceplate and quill body. This along with the hand pairing of the carbide worm screw eliminates backlash



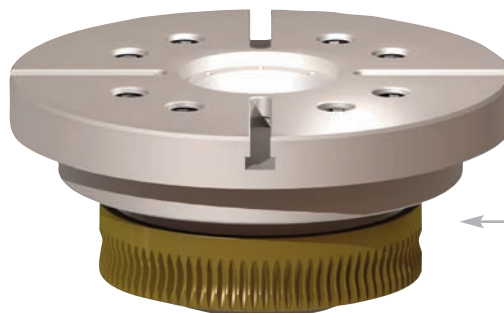
← Much shorter distance from faceplate to gear allows for greater torsional forces to be sustained

← Fine pitch of the worm wheel contributes to 4 arc second repeatability

The material used for the Nikken worm wheel is custom made steel, specially hardened and ion nitrided on the teeth. As a consequence, frictions between the gears are eliminated.

### COMPETITION

Bolt-on bronze wheel to a two pieces faceplate and quill design. Configuration relies on the malleability of the worm wheel to deform around the shape of the worm screw to eliminate backlash



← Bolt-on faceplate to quill base

← Soft worm wheels wear much quicker, resulting in indexing inaccuracies and unnecessary maintenance

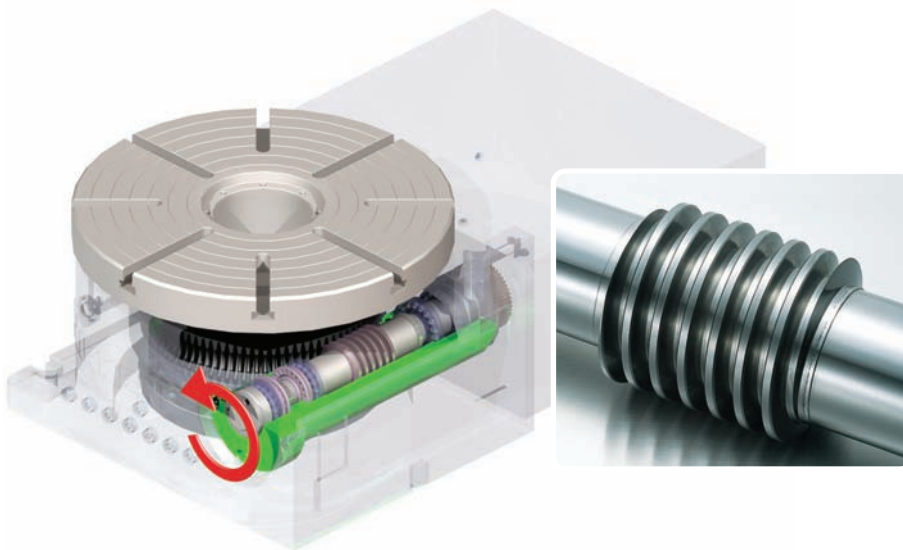
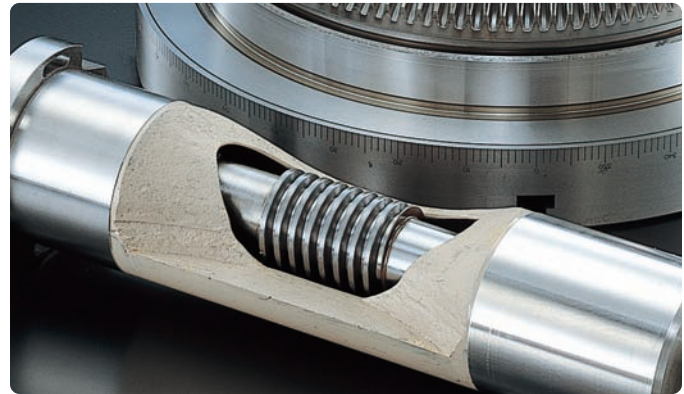
## Nikken Carbide Worm Screw: Extremely Durable and Wear-Resistant

### Eccentric Housing

Thread ground carbide worm gear and honed steel worm wheel are hand matched and paired to maintain maximum thread engagement and rotation accuracy.

### Dual Bearing Support

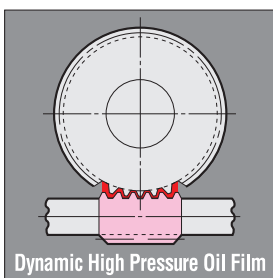
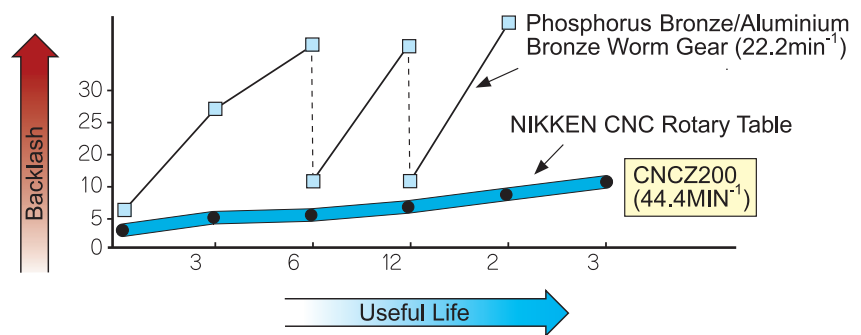
Four point bearing support system and eccentric housing structure for the carbide worm screw provide extreme support for thrust forces applied on carbide worm screw during heavy part/ offset weight indexing.



**The V-Grade Carbide Worm Screw** ensures high rigidity and virtually eliminates wear. Compared with traditional worm system combinations (consisting of phosphorous bronze and aluminum bronze), wear is reduced by up to 8 times, and overall accuracy is substantially increased.

### Backlash Compensation

As wear is reduced, so is the need for backlash compensation. This chart shows typical wear characteristics, as well as the necessity for frequent adjustments for other manufacturers' rotary tables.



### Hydrostatic High pressure Oil Film Effect: Ideal for High-Speed Rotation

The Nikken worm gear and screw system in conjunction with the tables higher speed rates create a hydro-static high pressure oil film, virtually eliminating the wear between the gears. The rotational speed of the screw creates the pressure to force the oil between the gears preventing any metal-to-metal contact. This also eliminates gear wear and produces high rigidity and durability.



# Independent Tubular Thrust and Radial Bearing

Bearings are located directly under the edge of the faceplate to maximize load distribution.

Hand picked and matched (in increments of 1 micron) between the rotary table and the faceplate assembly, they assure the utmost rotation accuracy and elimination of slop.

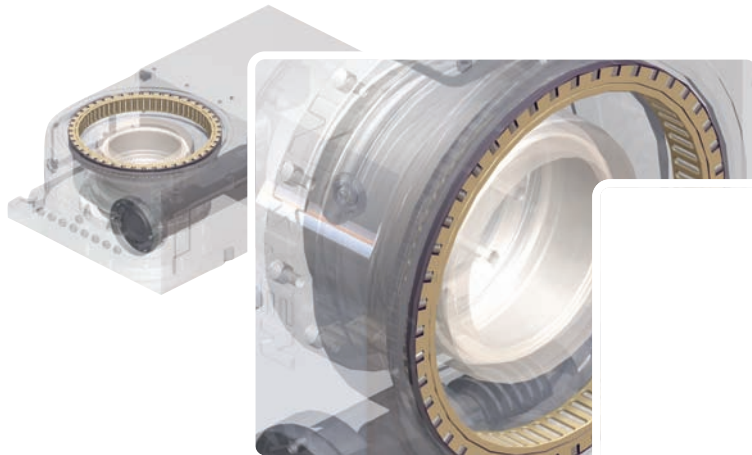
## Strength and Support

Tubular thrust bearings dampen vibration and protect internal gears during crash situations.

## Accuracy

Radial support from needle roller bearings allows for more points of contact versus traditional ball bearings or cross roller bearings, resulting in smooth and accurate rotation.

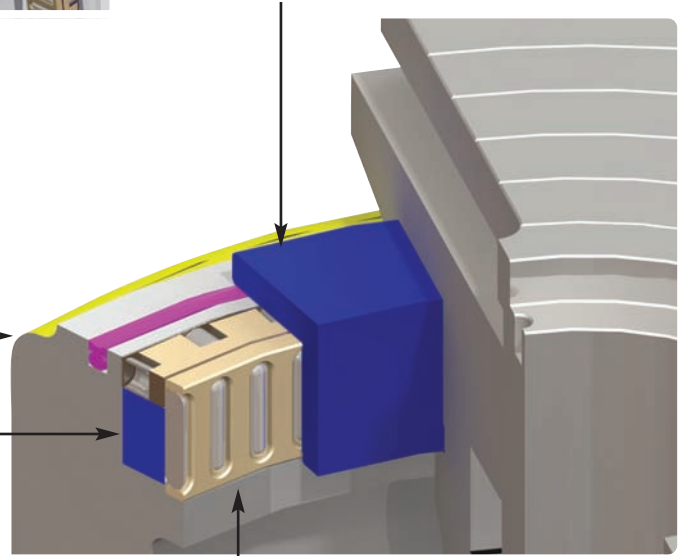
## Nikken-Made Bearing System



Hardened Steel Guide Way imbedded into faceplate

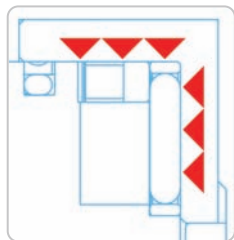
Double lip Teflon seal to reduce coolant contamination

Hardened Imbedded Steel Guide Way for independent thrust and radial bearings



### Dual Face Contact

between radial and thrust bearing to faceplate assembly



Independent radial and thrust bearings:

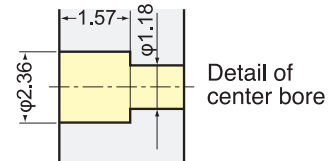
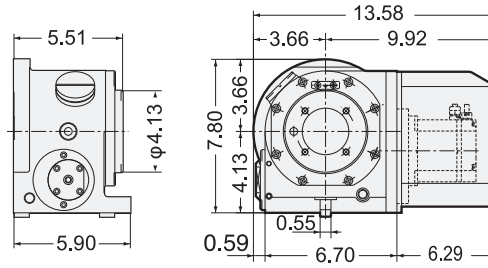
- Radial bearings with roller bearings to maximize surface area and rigidity
- Thrust bearings with tubular bearings to dampen vibration and to prevent damage in case of crashes

## Compact CNC Rotary Tables

- Available in standard and high speed (Z) models
- Suitable for a wide range of applications from small machines with simple indexing to full CNC integration for production applications

### CNC105FA-M - Ø: 4" (105 mm)

Powerful Brake



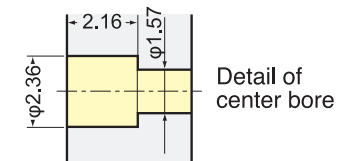
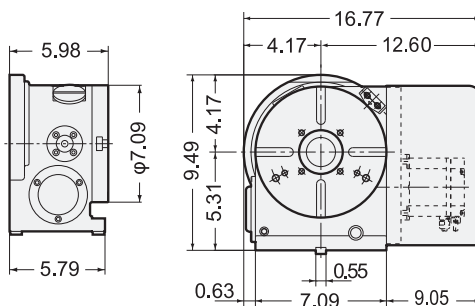
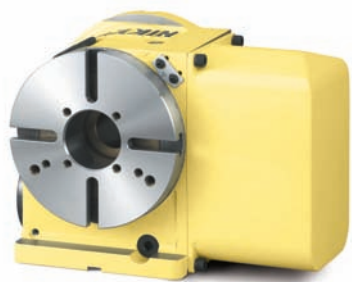
Air purge function is provided inside the motor cover as standard

Faceplate Dia.	Brake System	Brake Torque ft lbs	Min. Increment	Rotation Speed RPM	Total Reduction Ratio	Indexing Accuracy	Net Weight lbs	Driving Torque ft lbs	Repeatability
4"(105mm)	air	151	0.001°	22.2	1/90	+/- 30	66	26.5	4 arc sec.

- Please refer to page 29 for tailstocks and table accessories details. • Left hand mounted motor table(L type) is available; please contact us for more information.
- High-speed table model is available. The maximum rotation speed is 44.4RPM. • Maximum work load (in lbs) is 66(vertical), 132(horizontal).

### CNC180FA-M - Ø: 7" (180 mm)

Powerful Brake



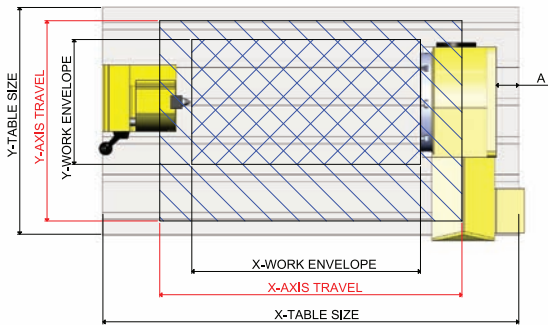
Air purge function is provided inside the motor cover as standard

Faceplate Dia.	Brake System	Brake Torque ft lbs	Min. Increment	Rotation Speed RPM	Total Reduction Ratio	Indexing Accuracy	Net Weight lbs	Driving Torque ft lbs	Repeatability
7"(180mm)	air	223.5	0.001°	22.2	1/90	+/- 20	95	53	4 arc sec.

- Please refer to page 29 for tailstocks and table accessories details. • Left hand mounted motor table(L type) is available; please contact us for more information.
- High-speed table model is available. The maximum rotation speed is 44.4RPM. • Maximum work load (in lbs) is 220.5(vertical), 441(horizontal).

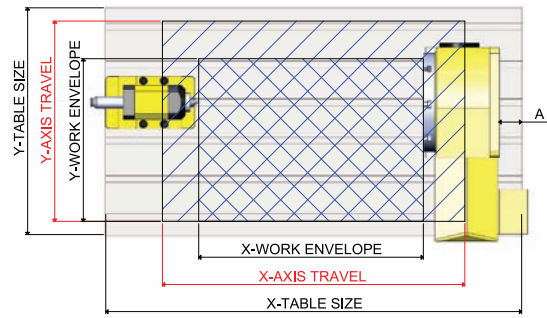
DuraVertical & NV Series

Fig.1 – with manual tailstock (P Series)



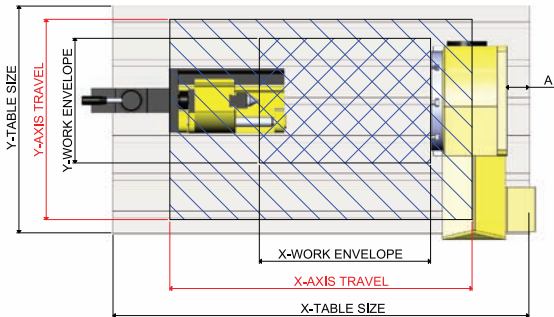
Note 1: 0.295" have been added to the work envelope as the stroke distance of the tailstock to allow for chucking/unchucking.

Fig.2 – with air/hydr. tailstock (PBA Series)



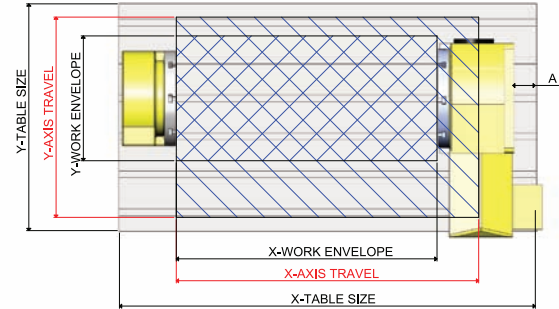
Note 2: 1.180" have been added to the work envelope as the stroke distance of the tailstock to allow for chucking/unchucking.

Fig.3 – with hydraulic tailstock (H Series)



Note 3: 1.969" have been added to the work envelope as the stroke distance of the tailstock to allow for chucking/unchucking. Tailstock has been offset by 5.9" from machine table edge for clearance of the actuation handle.

Fig.4 – with support table (TAT Series)



		Tailstock/Support Table Part #	DuraVertical			NV4000	NV5000		NV6000
			5060	5080	5100	DCG	α1A40/50	α1B40/50	DCG 40/50
X-Y Axis Travel			23.6 x 20.9	31.5 x 23.5	41.3 x 20.9	23.6 x 15.7	31.5 x 20.1	40.2 x 20.1	35.4 x 23.6
X-Y Table Size			35.4 x 23.6	43.3 x 73.6	53.1 x 23.6	27.6 x 17.7	43.3 x 23.6	52.0 x 23.6	39.4 x 23.6
<b>CNC105FA-M</b>									
X-Work Envelope	fig.1	P-105S	20.30	28.17	38.02	12.42	28.17	36.83	24.23
	fig.2	PBA105	18.07	25.94	35.79	10.20	25.94	34.60	22.01
	fig.3	-	21.65	29.52	39.37	-	29.52	38.18	29.53
	fig.4	TAT105	*21.65	*29.53	*39.37	*15.24	*29.53	*38.19	27.05
Y-Work Envelope		-	7.87	7.87	7.87	7.87	7.87	7.87	7.87
<b>CNC180FA-M</b>									
X-Work Envelope	fig.1	P-125S	19.82	27.69	37.54	11.95	27.69	36.35	23.76
	fig.2	PBA-135	17.60	25.47	35.32	9.72	25.47	34.13	21.54
	fig.3	-	21.18	29.05	38.90	-	29.05	37.71	29.06
	fig.4	TAT170	*21.18	*29.06	*38.90	*13.78	*29.06	*37.72	25.59
Y-Work Envelope		-	10.24	10.24	10.24	10.24	10.24	10.24	10.24

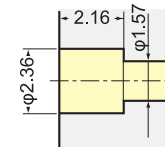
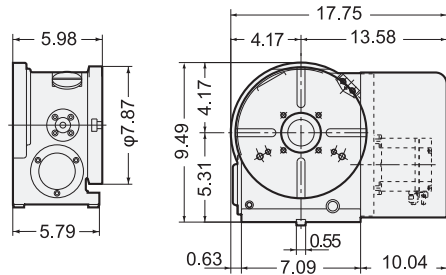
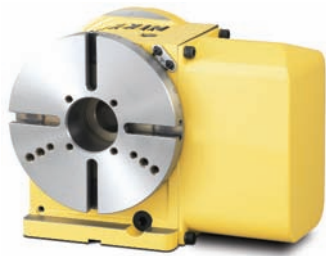
\* The overall length of the support table unit is offset from the machine table edge to match the TAT faceplate edge with the X-work envelope.

## Standard CNC Rotary Tables

- Available in standard and high speed (Z) models
- Several options available for motor mounting position, including right side, back and top
- Highest weight load capacity in its class

### CNC202FA-M - Ø: 8" ( 202 mm)

Powerful Brake



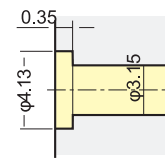
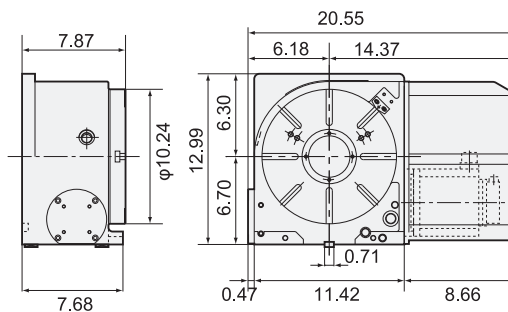
Detail of center bore

Air purge function is provided inside the motor cover as standard

Faceplate Dia.	Brake System	Brake Torque ft lbs	Min. Increment	Rotation Speed RPM	Total Reduction Ratio	Indexing Accuracy	Net Weight lbs	Driving Torque ft lbs	Repeatability
8"(202mm)	air	223.5	0.001°	22.2	1/90	+/- 20	108	106.2	4 arc sec.

- Please refer to page 29 for tailstocks and table accessories details. • Left hand mounted motor table(L type) is available; please contact us for more information.
- High-speed table model is available. The maximum rotation speed is 44.4RPM. • Maximum work load (in lbs) is 220.5(vertical), 441(horizontal).

### CNC260FA-M/CNC302FA-M - Ø: 10/12" ( 206/302 mm)



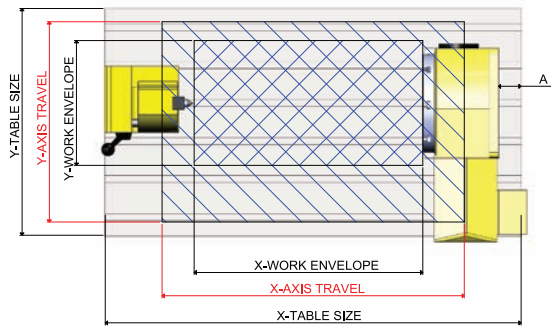
Detail of center bore

Air purge function is provided inside the motor cover as standard

Faceplate Dia.	Brake System	Brake Torque ft lbs	Min. Increment	Rotation Speed RPM	Total Reduction Ratio	Indexing Accuracy	Net Weight lbs	Driving Torque ft lbs	Repeatability
10/12"(206/302mm)	air/hyd.	433.6	0.001°	16.6	1/120	20	264.5	141.6	4 arc sec.

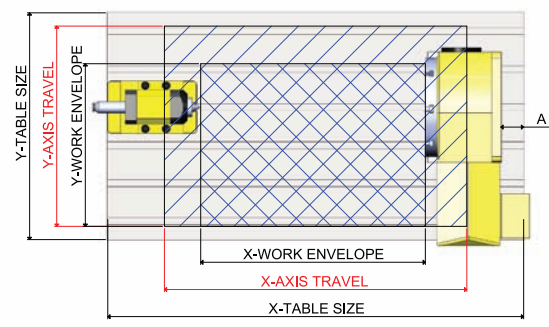
- Please refer to page 29 for tailstocks and table accessories details. • Left hand mounted motor table(L type) is available; please contact us for more information.
- High-speed table model is available. The maximum rotation speed is 33.3RPM. • Maximum work load (in lbs) is 386(vertical), 771.6(horizontal).

Fig.1 – with manual tailstock (P Series)



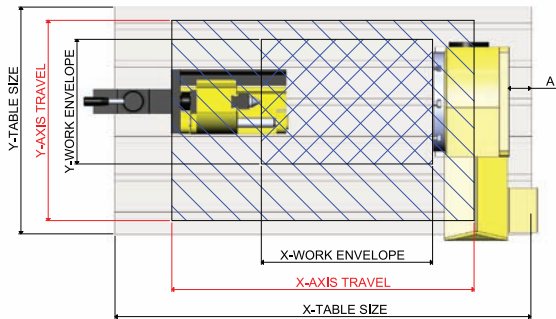
Note 1: 0.295" have been added to the work envelope as the stroke distance of the tailstock to allow for chucking/unchucking

Fig.2 – with air/hyd. tailstock (PBA Series)



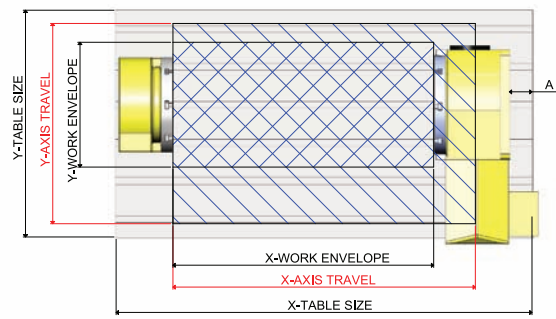
Note 2: 1.180" have been added to the work envelope as the stroke distance of the tailstock to allow for chucking/unchucking.

Fig.3 – with hydraulic tailstock (H Series)



Note 3: 1.969" have been added to the work envelope as the stroke distance of the tailstock to allow for chucking/unchucking. Tailstock has been offset by 5.9" from machine table edge for clearance of the actuation handle.

Fig.4 – with support table (TAT Series)



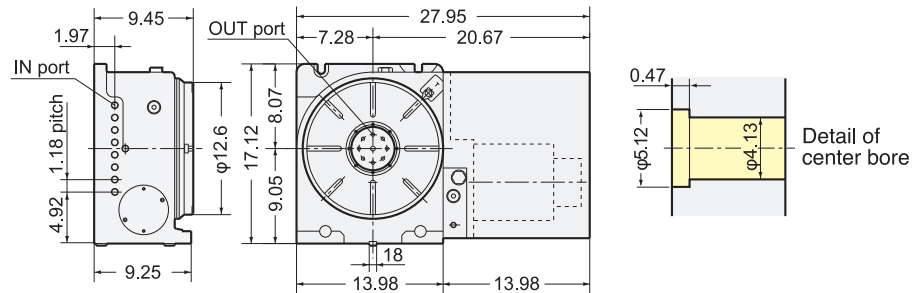
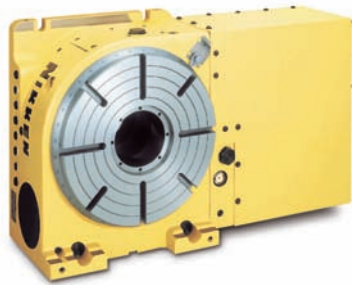
	Tailstock/ Support Table Part #	DuraVertical			NV4000	NV5000		NV6000	NV7000	
		5060	5080	5100	DCG	α1A40/50	α1B40/50	DCG 40/50	/50	
X-Y Axis Travel		23.6 x 20.9	31.5 x 20.9	41.3 x 20.9	23.6 x 15.7	31.5 x 20.1	40.2 x 20.1	35.4 x 23.6	60.6 x 29.9	
X-Y Table Size		35.4 x 23.6	43.3 x 23.6	53.1 x 23.6	27.6 x 17.7	43.3 x 23.6	52.0 x 23.6	39.4 x 23.6	66.9 x 29.9	
<b>CNC202FA-M</b>										
X-Work Envelope	fig.1	P-125S	19.82	27.69	37.54	11.95	27.69	36.35	23.76	-
	fig.2	PBA-135	17.60	25.47	35.32	9.72	25.47	34.13	21.54	-
	fig.3	-	21.18	29.05	38.90	-	29.05	37.71	29.06	-
	fig.4	TAT170	*21.18	*29.06	*38.90	13.78	*29.06	*37.72	25.59	-
Y-Work Envelope			10.24	10.24	10.24	10.24	10.24	10.24	-	
<b>CNC260FA-M/CNC302FA-M</b>										
X-Work Envelope	fig.1	P-170S	16.24	24.11	33.96	-	24.11	32.77	20.18	47.74
	fig.2	PBA-170	15.71	23.58	33.43	-	23.58	32.24	19.65	47.20
	fig.3	H-170S	8.19	16.06	25.91	-	16.06	24.72	12.13	45.59
	fig.4	TAT250	*19.29	*27.17	*37.01	-	*27.17	*35.83	23.43	50.98
Y-Work Envelope			12.99	12.99	12.99	-	12.99	12.99	12.99	

\* The overall length of the support table unit is offset from the machine table edge to match the TAT faceplate edge with the X-work envelope.

## Standard CNC Rotary Tables – Heavy Duty Machining

- Available in standard and high speed (Z) models
- Several options available for motor mounting position, including right side, back and top.

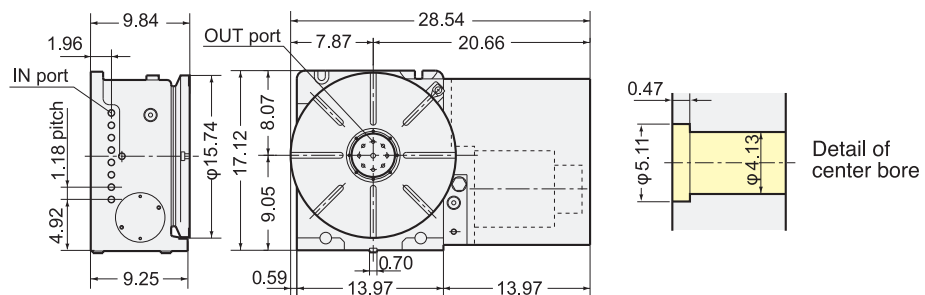
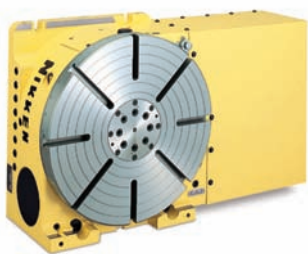
### CNC321FA-M - Ø: 12.5" ( 321 mm)



Faceplate Dia.	Brake System	Brake Torque ft lbs	Min. Increment	Rotation Speed RPM	Total Reduction Ratio	Indexing Accuracy	Net Weight lbs	Driving Torque ft lbs	Repeatability
12.5"(321mm)	hyd.	1298	0.001°	22.2	1/90	15	441	318	4 arc sec.

- Please refer to page 29 for tailstocks and table accessories details.
- Left hand mounted motor table(L type) is available; please contact us for more information.
- High-speed table model is available. The maximum rotation speed is 44.4RPM.
- Maximum work load (in lbs) is 551 (vertical), 1102.3(horizontal).

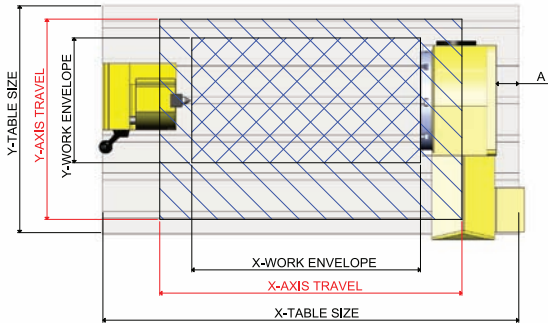
### CNC401FA-M - Ø: 15.5" ( 401 mm)



Faceplate Dia.	Brake System	Brake Torque ft lbs	Min. Increment	Rotation Speed RPM	Total Reduction Ratio	Indexing Accuracy	Net Weight lbs	Driving Torque ft lbs	Repeatability
15.5"(401mm)	hyd.	1298	0.001°	22.2	1/90	15	496	318	4 arc sec.

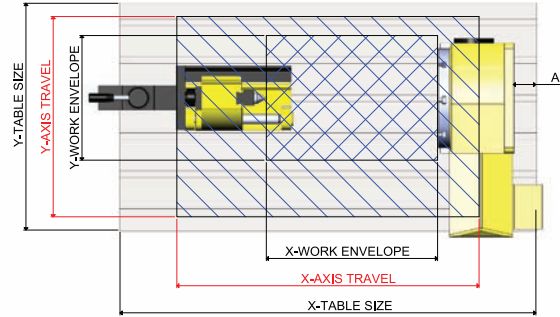
- Please refer to page 29 for tailstocks and table accessories details.
- Left hand mounted motor table(L type) is available; please contact us for more information.
- High-speed table model is available. The maximum rotation speed is 44.4RPM.
- Maximum work load (in lbs) is 551 (vertical), 1102.3(horizontal).

Fig.1 – with manual tailstock (P Series)



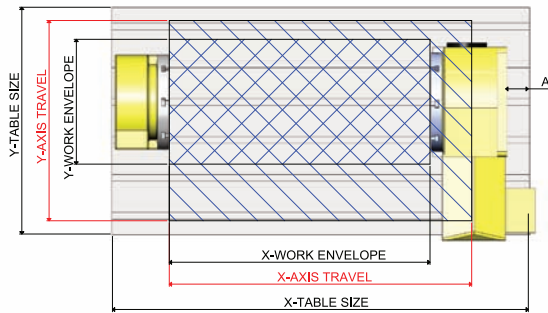
Note 1 : 0.295" have been added to the work envelope as the stroke distance of the tailstock to allow for chucking/unchucking

Fig.2 – with hydraulic tailstock (H Series)



Note 2: 1.180" have been added to the work envelope as the stroke distance of the tailstock to allow for chucking/unchucking.

Fig.3 – with support table (TAT Series)

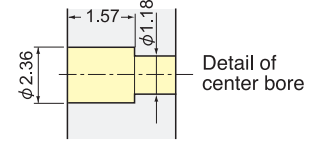
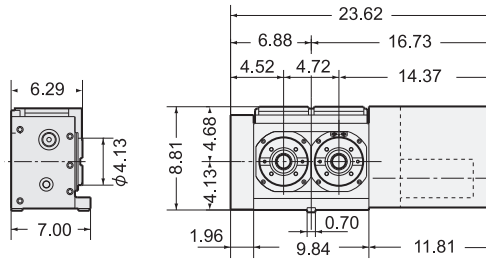


Note 3: 1.969" have been added to the work envelope as the stroke distance of the tailstock to allow for chucking/unchucking. Tailstock has been offset by 5.9" from machine table edge for clearance of the actuation handle.

		Tailstock/Support Table Part #	NV7000 /50
X-Y Axis Travel			60.6 x 29.9
X-Y Table Size			66.9 x 29.9
<b>CNC321FA-M</b>			
X-Work Envelope	fig.1	P-230S	46.16
	fig.2	H-230S	44.02
	fig.3	TAT320	45.26
Y-Work Envelope			17.72
<b>CNC401FA-M</b>			
X-Work Envelope	fig.1	P-230S	45.77
	fig.2	H-230S	43.62
	fig.3	TAT320	44.88
Y-Work Envelope			17.72

Note: Please refer to page 25 for drawing and dimensions details on Mori Seiki VS and MV Series.

## CNC100-2W-120-FAM - Ø: 4" ( 105 mm)

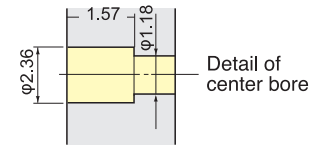
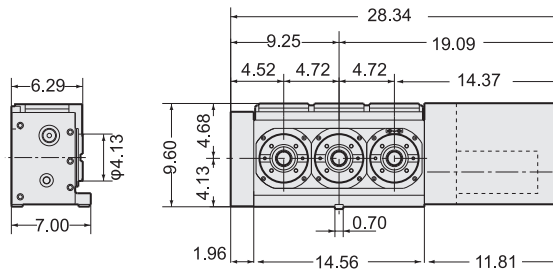


Air purge function is provided inside the motor cover as standard

Faceplate Dia.	Brake System	Brake Torque fl bs	Min. Increment	Rotation Speed RPM	Total Reduction Ratio	Indexing Accuracy	Net Weight lbs	Driving Torque fl bs	Repeatability
4"(105mm)	air	108.4	0.001°	11.1	1/180	+/- 30	154.3	53	4 arc sec.

- Please refer to page 29 for tailstocks and table accessories details. • Left hand mounted motor table(L type) is available; please contact us for more information.
- High-speed table model is available. The maximum rotation speed is 44.4RPM. • Maximum work load (in lbs) is 33(vertical), 66(horizontal).

## CNC100-3W-120-FAM - Ø: 4" ( 105 mm)

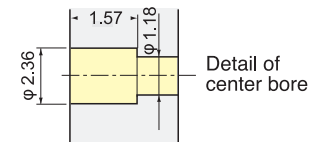
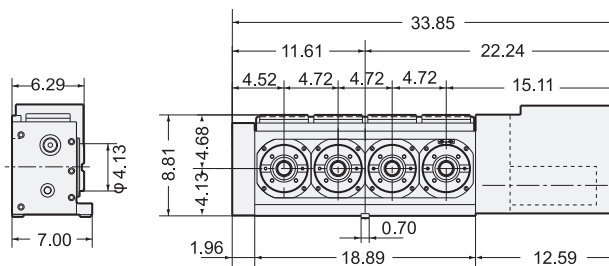


Air purge function is provided inside the motor cover as standard

Faceplate Dia.	Brake System	Brake Torque fl bs	Min. Increment	Rotation Speed RPM	Total Reduction Ratio	Indexing Accuracy	Net Weight lbs	Driving Torque fl bs	Repeatability
4"(105mm)	air	108.4	0.001°	11.1	1/180	+/- 30	198.4	53	4 arc sec.

- Please refer to page 29 for tailstocks and table accessories details. • Left hand mounted motor table(L type) is available; please contact us for more information.
- High-speed table model is available. The maximum rotation speed is 44.4RPM. • Maximum work load (in lbs) is 33(vertical), 66(horizontal).

## CNC100-4W-120-FA-M - Ø: 4" ( 105 mm)



Air purge function is provided inside the motor cover as standard

Faceplate Dia.	Brake System	Brake Torque fl bs	Min. Increment	Rotation Speed RPM	Total Reduction Ratio	Indexing Accuracy	Net Weight lbs	Driving Torque fl bs	Repeatability
4"(105mm)	air	108.4	0.001°	11.1	1/180	+/- 45	264.5	53	4 arc sec.

- Please refer to page 29 for tailstocks and table accessories details. • Left hand mounted motor table(L type) is available; please contact us for more information.
- High-speed table model is available. The maximum rotation speed is 44.4RPM. • Maximum work load (in lbs) is 33(vertical), 66(horizontal).



Fig.1 – CNC100-3W along X-axis

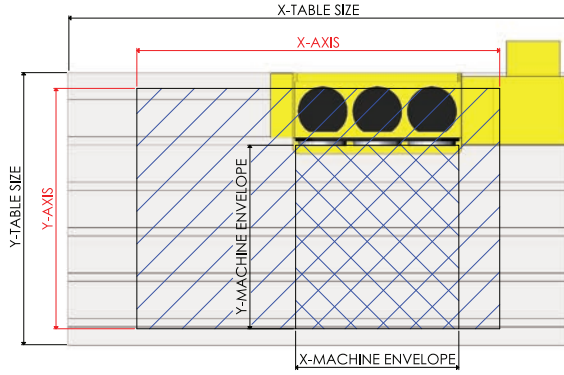


Fig.2 – CNC100-2W/3W along Y-axis

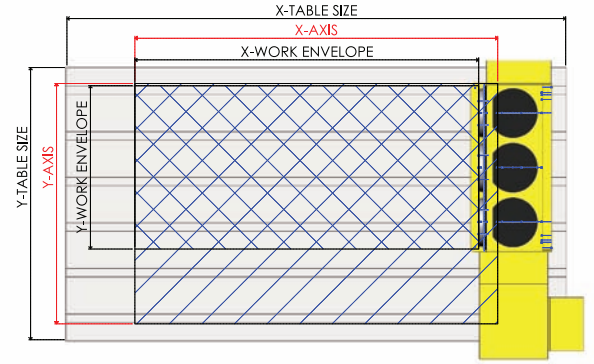
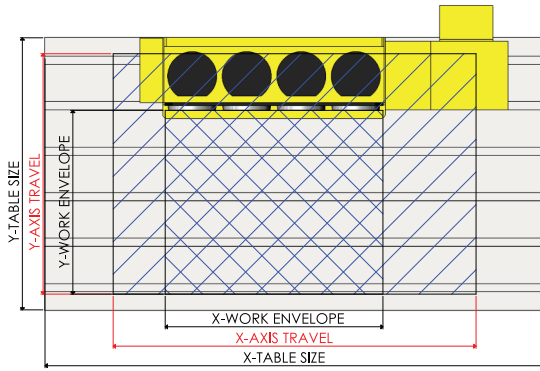


Fig.3 – CNC100-4W along X-axis



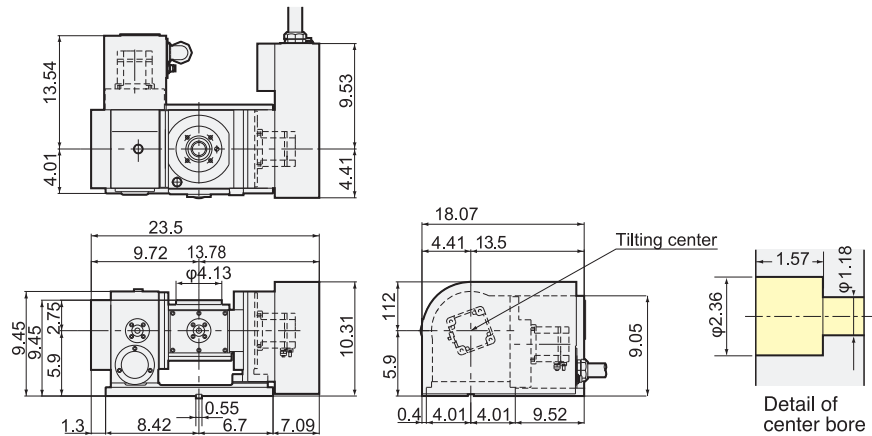
	DuraVertical			NV4000	NV5000		NV6000	
	5060	5080	5100	DCG	α1A40/50	α1B40/50	DCG 40/50	
X-Y Axis Travel	23.6 x 20.9	31.5 x 20.9	41.3 x 20.9	23.6 x 15.7	31.5 x 20.1	40.2 x 20.1	35.4 x 23.6	
X-Y Table Size	35.4 x 23.6	43.3 x 23.6	53.1 x 23.6	27.6 x 17.7	43.3 x 23.6	52.0 x 23.6	39.4 x 23.6	
<b>CNC100-2W</b>								
X-Work Envelope	fig.2	21.97	29.84	39.69	-	29.84	38.5	29.84
Y-Work Envelope		9.45	9.45	9.45	9.45	9.45	9.45	9.45
<b>CNC100-3W</b>								
X-Work Envelope	fig.1	15.94	15.94	15.94	15.94	15.94	15.94	15.94
	fig.2	21.97	29.84	39.69	-	29.84	38.5	29.84
Y-Work Envelope	fig.1	14.17	14.17	14.17	10.43	15.55	15.55	17.32
	fig.2	15.94	15.94	15.94	-	15.94	15.94	15.94
<b>CNC100-4W</b>								
X-Work Envelope	fig.3	18.90	18.90	18.90	-	18.90	18.90	18.90
Y-Work Envelope		14.17	14.17	14.17	-	15.55	15.55	17.32

## 5-Axis Solution: Tilting Rotary Tables

Nikken's Tilting Rotary Tables range is designed to offer increased productivity and versatility on all machine tools, and allows 5-axis machining on the most demanding parts.

In addition, incorporating a Nikken 5-axis rotary table on your machine tool lowers your manufacturing and investment costs compared to selecting an integrated 5-axis solution.

### 5AX-130FA-M - Ø: 4" ( 105 mm)

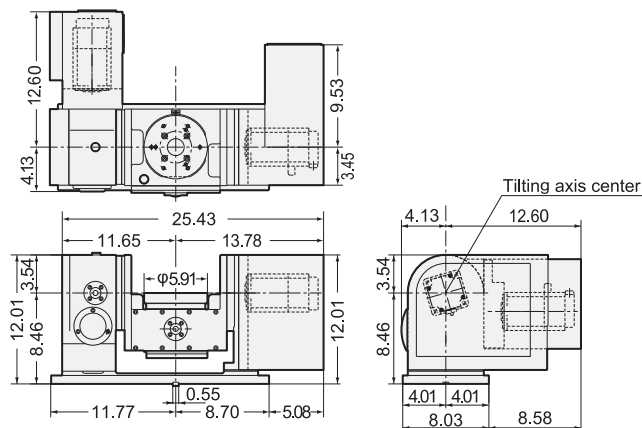
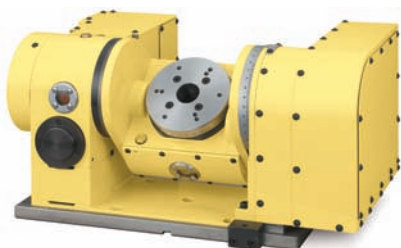


Faceplate Dia.	Brake System	Brake Torque ft lbs		Min. Increment	Rotation Speed		Total Reduction Ratio		Indexing Accuracy		Net Weight lbs	Driving Torque ft lbs	Repeatability (arc sec)	
		Rotary	Tilting		Rotary	Tilting	Rotary	Tilting	Rotary	Tilting			Rotary	Tilting
4"(105mm)	air	151	223.5	0.001°	22.2	11.1	1/90	1/180	+/- 30	60	219.3	53	4	6

• Please refer to page 29 for tailstocks and table accessories details. • Maximum work load (in lbs) is 110.2(0°-30°), 55(30°-90°).

### 5AX-150FA-M - Ø: 6" ( 150 mm)

Powerful Brake



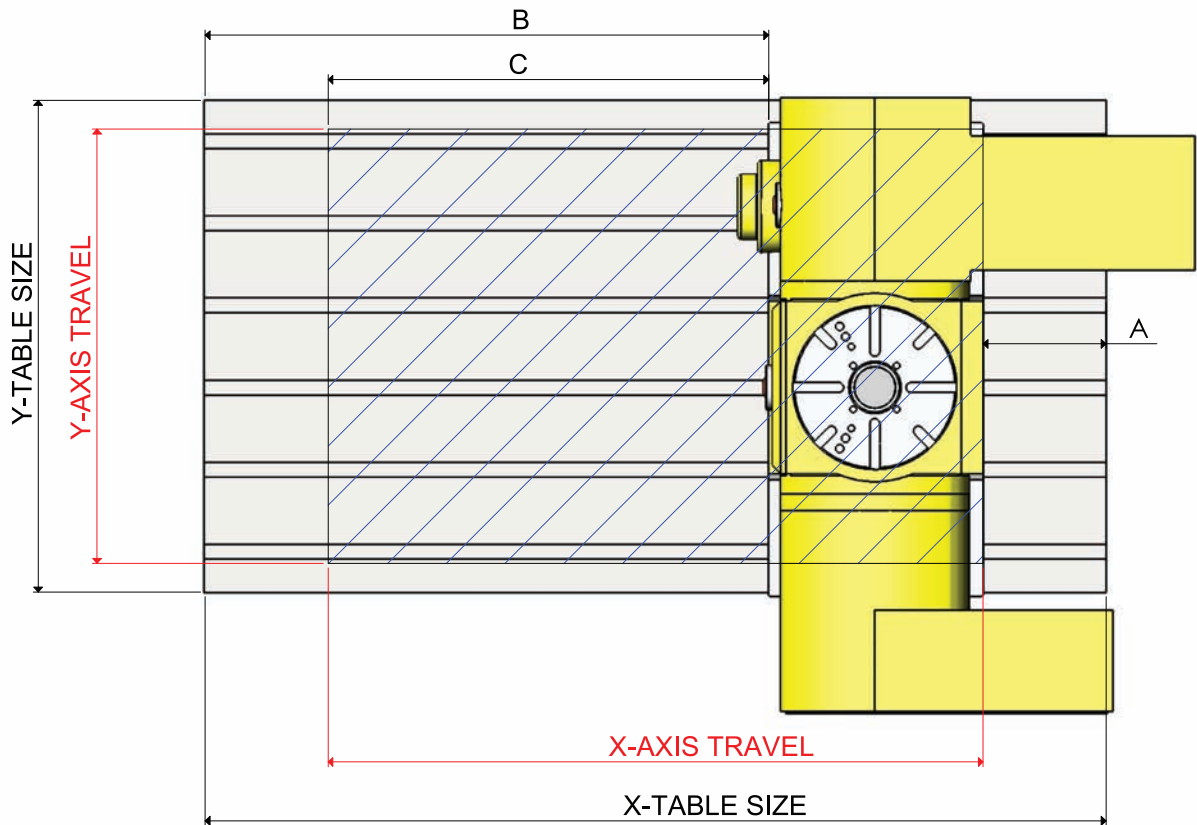
Faceplate Dia.	Brake System	Brake Torque ft lbs		Min. Increment	Rotation Speed		Total Reduction Ratio		Indexing Accuracy		Net Weight lbs	Driving Torque ft lbs	Repeatability (arc sec)	
		Rotary	Tilting		Rotary	Tilting	Rotary	Tilting	Rotary	Tilting				
6"(150mm)	air	151	223.5	0.001°	33.3	16.6	1/60	1/120	+/- 30	60	337.3	35.4	4	6

• Please refer to page 29 for tailstocks and table accessories details. • Maximum work load (in lbs) is 110.2(0°-30°), 55(30°-90°).

- Excellent full 5-axis contouring capabilities (4+1) - 5 sided work
- Eliminate multiple setups
- Significant time benefits and cost reduction thru use of only one setup
- Improve parts quality and maximize productivity



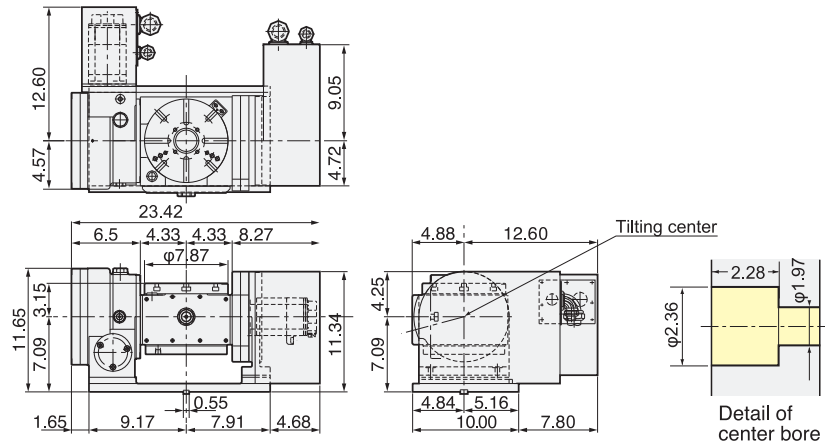
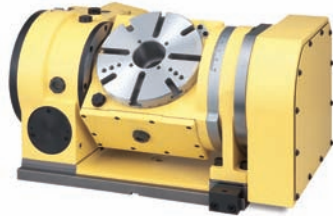
5AX-200II on a Mori Seiki NV Machine



DuraVertical & NV Series

	DuraVertical			NV4000 DCG	NV5000		NV6000 DCG 40/50
	5060	5080	5100		α1A40/50	α1B40/50	
X-Y Axis Travel	23.6 x 20.9	31.5 x 20.9	41.3 x 20.9	23.6 x 15.7	31.5 x 20.1	40.2 x 20.1	35.4 x 23.6
X-Y Table Size	35.4 x 23.6	43.3 x 23.6	53.1 x 23.6	27.6 x 17.7	43.3 x 23.6	52.0 x 23.6	39.4 x 23.6
<b>5AX-130FA-M</b>							
A	5.91	5.91	5.91	5.91	5.91	5.91	5.91
B	21.50	29.37	39.22	13.62	7.87	38.03	25.43
C	15.59	23.46	33.31	11.65	23.46	32.13	23.46
<b>5AX-150FA-M</b>							
A	5.91	5.91	5.91	5.91	5.91	5.91	5.91
B	21.50	29.37	39.22	13.62	7.87	38.03	25.43
C	15.59	23.46	33.31	11.65	23.46	32.13	23.46

5AX-201FA-M - Ø: 7.8" ( 200 mm)

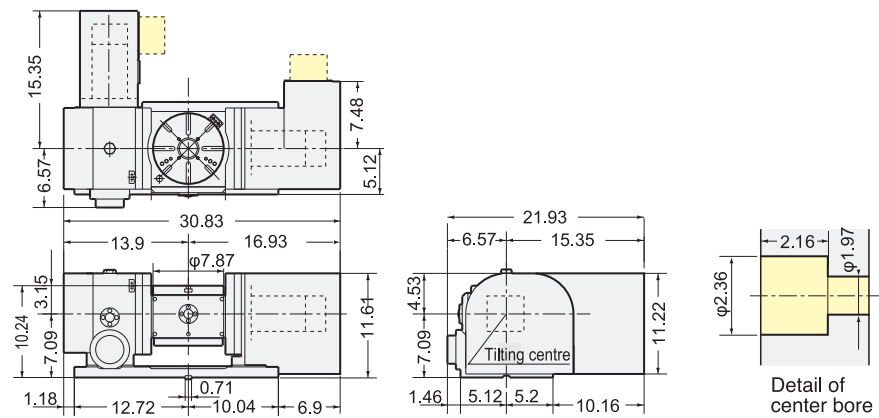


Faceplate Dia.	Brake System	Brake Torque ft lbs		Min. Increment	Rotation Speed		Total Reduction Ratio		Indexing Accuracy		Net Weight lbs	Driving Torque ft lbs	Repeatability (arc sec)	
		Rotary	Tilting		Rotary	Tilting	Rotary	Tilting	Rotary	Tilting			Rotary	Tilting
7.8"(200mm)	hyd.	433.6	451.3	0.001°	22.2	16.6	1/90	1/120	20	60	352.7	53	4	6

• Please refer to page 29 for tailstocks and table accessories details. • Maximum work load (in lbs) is 176.4(0°-30°), 110.2(30°-90°).

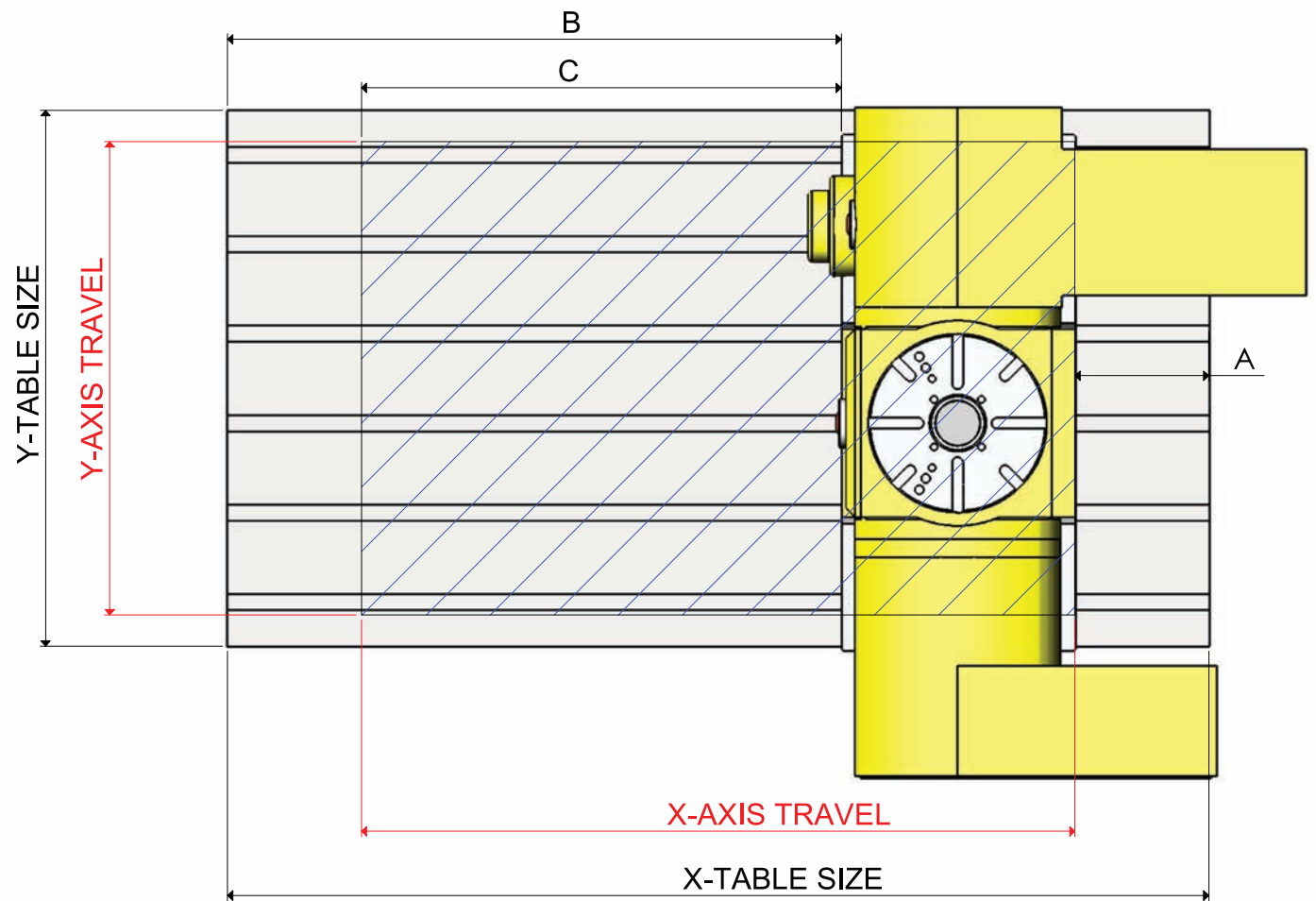
5AX-200IIFA-M - Ø: 7.8" ( 200 mm)

Powerful Brake



Faceplate Dia.	Brake System	Brake Torque ft lbs		Min. Increment	Rotation Speed		Total Reduction Ratio		Indexing Accuracy		Net Weight lbs	Driving Torque ft lbs	Repeatability (arc sec)	
		Rotary	Tilting		Rotary	Tilting	Rotary	Tilting	Rotary	Tilting				
7.8"(200mm)	hyd.	433.6	361.3	0.001°	22.2	11.1	1/90	1/180	20	60	361.4	106.2	4	6

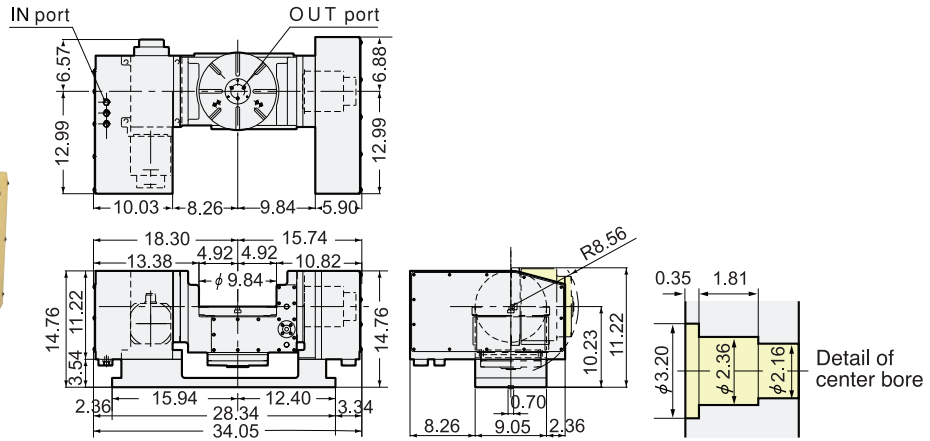
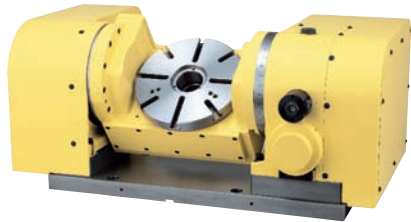
• Please refer to page 29 for tailstocks and table accessories details. • Maximum work load (in lbs) is 176.4(0°-30°), 110.2(30°-90°).



	DuraVertical			NV4000	NV5000		NV6000	NV7000
	5060	5080	5100	DCG	α1A40/50	α1B40/50	DCG 40/50	/50
X-Y Axis Travel	23.6 x 20.9	31.5 x 20.9	41.3 x 20.9	23.6 x 15.7	31.5 x 20.1	40.2 x 20.1	35.4 x 23.6	60.6 x 29.9
X-Y Table Size	35.4 x 23.6	43.3 x 23.6	53.1 x 23.6	27.6 x 17.7	43.3 x 23.6	52.0 x 23.6	39.4 x 23.6	66.9 x 29.9
<b>5AX-201FA-M</b>								
A	5.91	5.91	5.91	5.91	5.91	5.91	5.91	5.91
B	19.53	27.4	37.25	11.65	7.87	36.06	23.46	51.02
C	13.62	21.5	31.34	9.69	1.97	30.16	21.5	47.87
<b>5AX-200IIFA-M</b>								
A	5.91	5.91	5.91	-	5.91	5.91	5.91	5.91
B	19.21	27.08	36.92	-	27.08	35.74	23.15	50.71
C	13.30	21.18	31.02	-	21.18	29.84	21.18	47.56

## 5AX-250FA-M - Ø: 9.8" (250 mm)

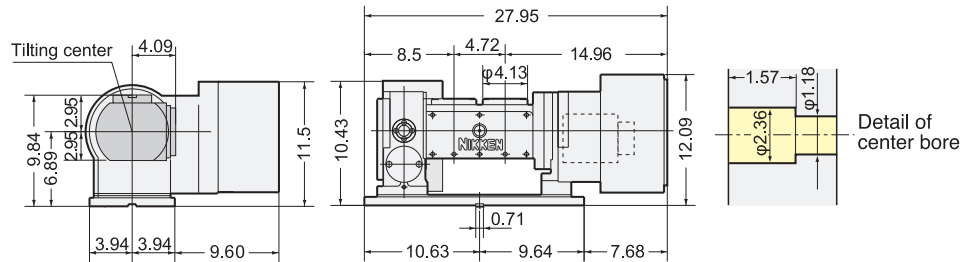
Powerful Brake



Faceplate Dia.	Brake System	Brake Torque ft lbs		Min. Increment	Rotation Speed		Total Reduction Ratio		Indexing Accuracy		Net Weight lbs	Driving Torque ft lbs	Repeatability (arc sec)	
		Rotary	Tilting		Rotary	Tilting	Rotary	Tilting	Rotary	Tilting			Rotary	Tilting
9.8"(250mm)	hyd.	433.6	361.3	0.001°	22.2	11.1	1/90	1/180	+/- 20	60	639.3	106.2	4	6

• Maximum work load (in lbs) is 176.4(0°-30°), 110.2(30°-90°).

## 5AX-2MT-105-120FA-M - Ø: 4" (105 mm)



Faceplate Dia.	Brake System	Brake Torque ft lbs		Min. Increment	Rotation Speed		Total Reduction Ratio		Indexing Accuracy		Net Weight lbs	Driving Torque ft lbs	Repeatability (arc sec)	
		Rotary	Tilting		Rotary	Tilting	Rotary	Tilting	Rotary	Tilting				
4"(105mm)	air	108.4		0.001°	22.2	11.1	1/90	1/180	+/- 30	60	253.5	26.5	4	6

• Maximum work load (in lbs) is 33(0°-30°), 22(30°-90°).

Fig.1 – 5AX-250FA-M

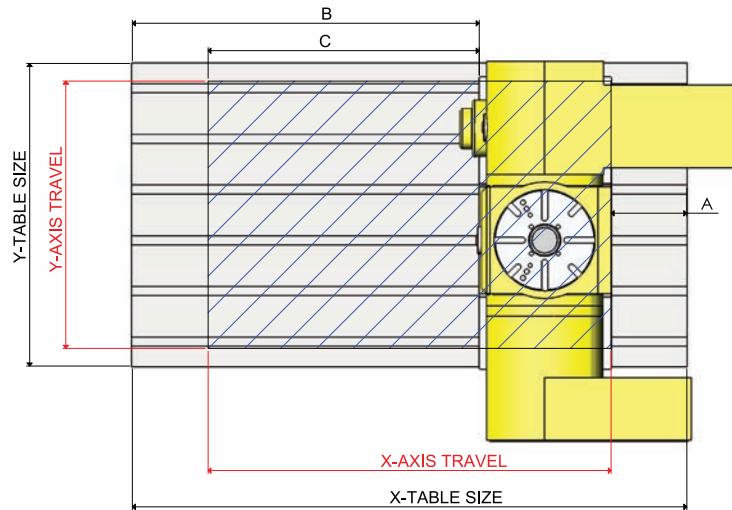
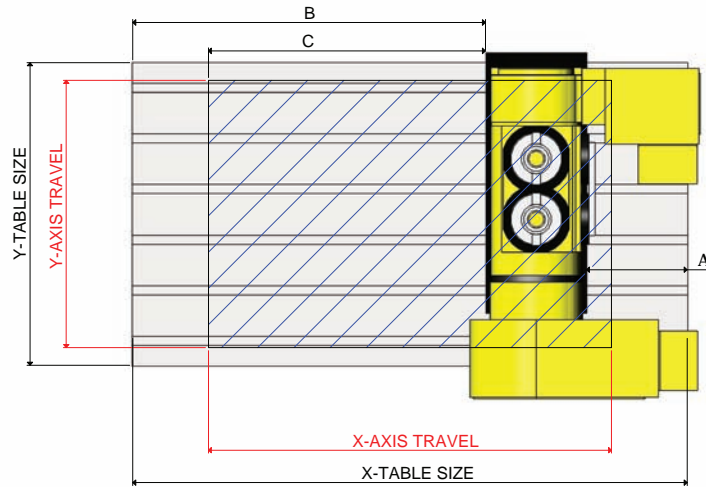


Fig.2 – 5AX-2MT-105-120FA-M



DuraVertical			NV5000		NV6000	NV7000
5060	5080	5100	α1A40/50	α1B40/50	DCG 40/50	/50

X-Y Axis Travel	23.6 x 20.9	31.5 x 20.9	41.3 x 20.9	31.5 x 20.1	40.2 x 20.1	35.4 x 23.6	60.6 x 29.9
X-Y Table Size	35.4 x 23.6	43.3 x 23.6	53.1 x 23.6	43.3 x 23.6	52.0 x 23.6	39.4 x 23.6	60.9 x 29.9

**5AX-250FA-M**

A	fig.1	5.91	5.91	5.91	5.91	5.91	5.91	5.91
B		19.68	27.55	37.40	27.55	36.22	23.62	51.97
C		13.78	21.65	31.49	21.65	30.31	17.71	48.82

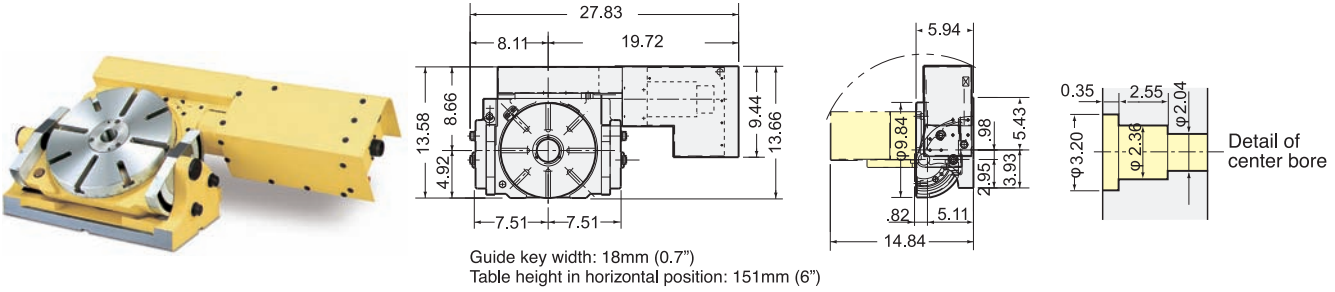
**5AX-2MT-105-120FA-M**

A	fig.2	5.91	5.91	5.91	5.91	5.91	5.91	-
B		21.65	29.52	39.37	21.49	38.19	25.59	-
C		15.75	23.62	33.46	15.59	32.28	23.62	-

## Manual Tilting CNC Rotary Table

- Table can be tilted at 0°- 90° manually
- Indexing is CNC controlled to allow adaptation to all applications
- Instantly transforming a standard 4-Axis machine into 5-Axis with manual tilting for angular positioning

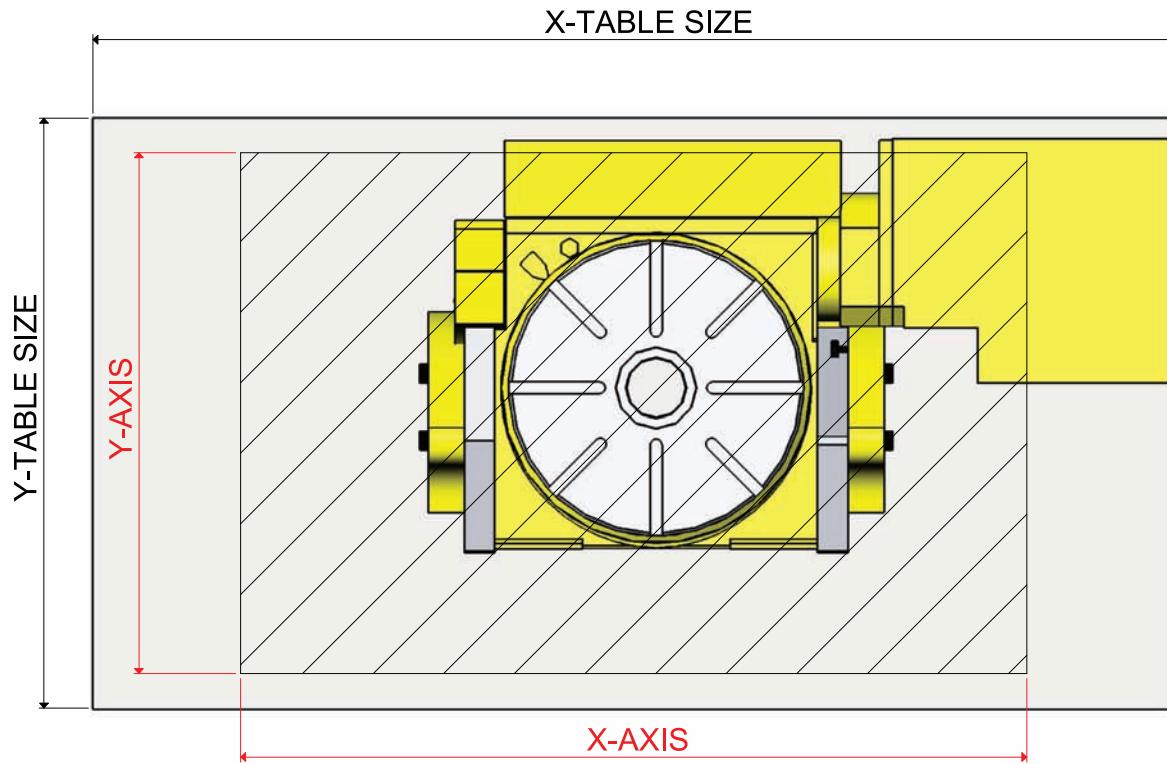
### NST250FA-M - Ø: 9.8" (250 mm)



Faceplate Dia.	Brake System	Brake Torque fl bs	Min. Increment	Rotation Speed RPM	Total Reduction Ratio	Indexing Accuracy	Net Weight lbs	Driving Torque fl bs	Repeatability
9.8"(250mm)	air	108.4	0.001°	16.6	1/120	20	165.3	106.2	4 arc sec.

• Please refer to page 29 for tailstocks and table accessories details. • Maximum work load (in lbs) is 110.2(vertical), 220.5(horizontal).

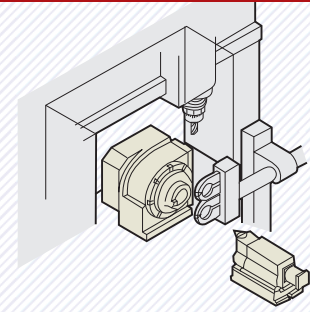




	DuraVertical			NV4000	NV5000		NV6000	NV7000
	5060	5080	5100	DCG	a1A40/50	a1B40/50	DCG 40/50	/50
<b>NST250FA-M</b>								
X-Axis Table Size	35.43	43.31	53.15	27.56	43.31	51.97	39.37	66.93
Y-Axis Table Size	23.62	23.62	23.62	17.72	23.62	23.62	23.62	29.92
X-Axis Travel	23.63	31.50	41.34	23.62	31.50	40.16	35.43	60.63
Y-Axis Travel	20.87	20.87	20.87	15.75	20.08	20.08	23.62	29.92

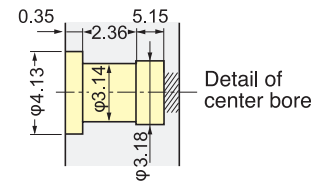
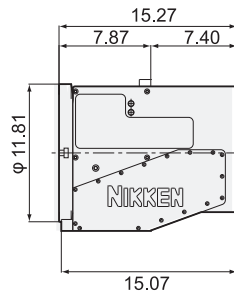
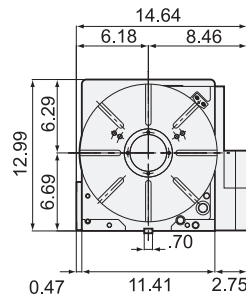
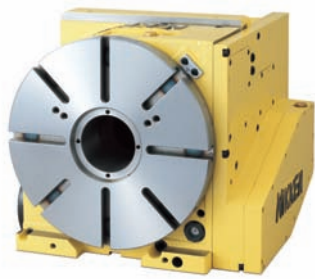
## Back Side Motor Mounted CNC Rotary Table

- Available in standard and high speed (Z) models
- Suitable for indexing and rotational milling on a wide variety of workpieces
- Designed for machine with limited space in the Y-axis, such as gantry type or machines with enclosed splash guards



VS & MV Series

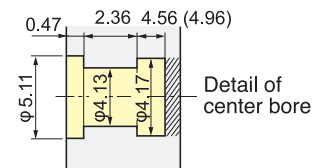
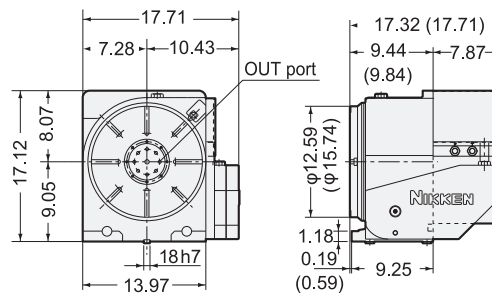
## CNC260BFA-M/CNC302BFA-M Ø: 10/12" (260/302 mm)



Faceplate Dia.	Brake System	Brake Torque ft lbs	Min. Increment	Rotation Speed RPM	Total Reduction Ratio	Indexing Accuracy	Net Weight lbs	Diving Torque ft lbs	Repeatability
10/12"(260/302mm)	air/hyd.	433.6	0.001°	16.6	1/120	20	308.6/319.6	141.6	4 arc sec.

- Please refer to page 29 for tailstocks and table accessories details. • High-speed table model is available. The maximum rotation speed is 33.3RPM.
- Maximum work load (in lbs) is 386(vertical).

## CNC321BFA-M/CNC401BFA-M Ø: 12.5/15.5" (321/401 mm)



IN ports are located in left side.  
( ) : CNC401B

Faceplate Dia.	Brake System	Brake Torque ft lbs	Min. Increment	Rotation Speed RPM	Total Reduction Ratio	Indexing Accuracy	Net Weight lbs	Diving Torque ft lbs	Repeatability
12.5/15.5"(321/401mm)	hyd.	1298	0.001°	22.2	1/90	15	573.2/617.3	318.6	4 arc sec.

- Please refer to page 29 for tailstocks and table accessories details. • High-speed table model is available. The maximum rotation speed is 44.4RPM.
- Maximum work load (in lbs) is 551(vertical).

Fig.1 – Right side motor mounted table with support table (TAT series)

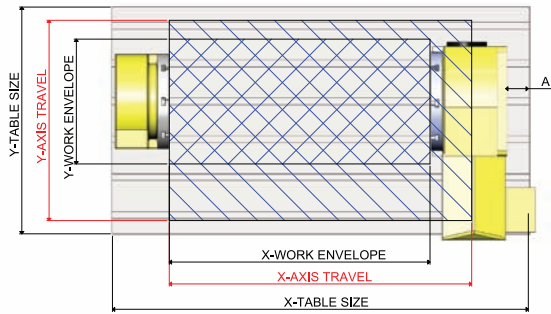
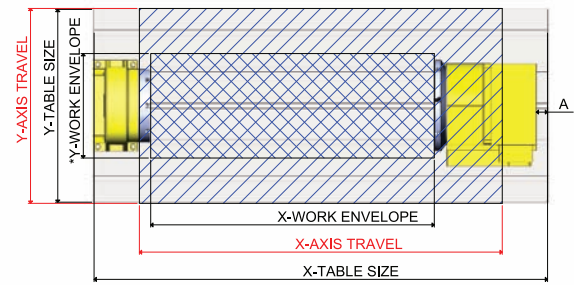


Fig.2 – Back side motor mounted table with support table (TAT series)



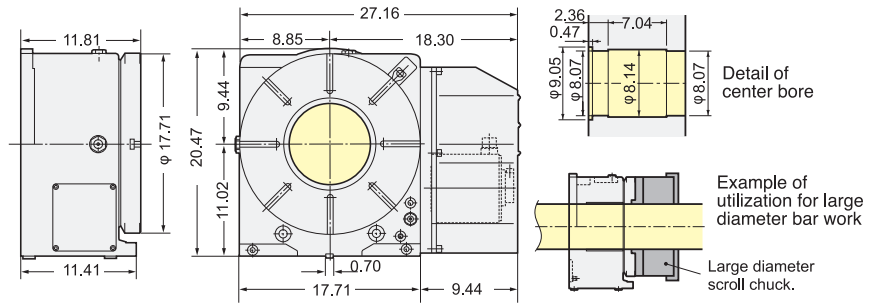
		Tailstock/Support Table Part #	VS8000	VS10000		MV-653	MV-1003	
			5060	40/50/32050	40/50/3150	40/50	B/50	L/50
X-Y Axis Travel			63.0 x 33.9	80.7 x 39.4	124.0 x 39.4	60.2 x 26.0	94.5 x 40.2	137.8 x 40.2
X-Y Table Size			78.7 x 33.5	88.6 x 39.4	131.9 x 39.4	66.9 x 26.0	110.2 x 40.2	153.5 x 40.2
<b>Right Side Motor - CNC260FA-M/CNC302FA-M</b>								
X-Work Envelope	fig.1	TAT250	60.63	70.47	115.94	50.98	**92.13	**135.44
Y-Work Envelope			12.99	12.99	12.99	12.99	12.99	12.99
<b>Right Side Motor - CNC321FA-M</b>								
X-Work Envelope	fig.1	TAT320	57.09	66.93	110.24	45.28	88.58	131.89
Y-Work Envelope			17.72	17.72	17.72	17.72	17.72	17.72
<b>Right Side Motor - CNC401FA-M</b>								
X-Work Envelope	fig.1	TAT400	56.69	66.53	109.84	-	88.19	131.50
Y-Work Envelope			17.72	17.72	17.72	17.72	17.72	17.72
<b>Back Side Motor - CNC260BFA-M/CNC302BFA-M</b>								
X-Work Envelope	fig.2	TAT250	53.23	63.07	108.54	43.58	**84.72	**128.03
Y-Work Envelope			12.99	12.99	12.99	12.99	12.99	12.99
<b>Back Side Motor - CNC321BFA-M</b>								
X-Work Envelope	fig.2	TAT320	49.21	59.05	102.36	37.40	80.71	124.02
Y-Work Envelope			17.72	17.72	17.72	17.72	17.72	17.72
<b>Back Side Motor - CNC401BFA-M</b>								
X-Work Envelope	fig.2	TAT400	48.82	58.66	101.97	37.01	80.31	123.62
Y-Work Envelope			17.72	17.72	17.72	17.72	17.72	17.72

\*\*The TAT support table will be offset from the machine table edge to match the TAT faceplate edge to the X-work envelope.

## Large Size CNC Rotary Tables for Heavy Duty Machining

- Available in standard and high speed (Z) models
- Ideal for heavy duty machining and large size workpiece cutting
- Large through hole and powerful brake system

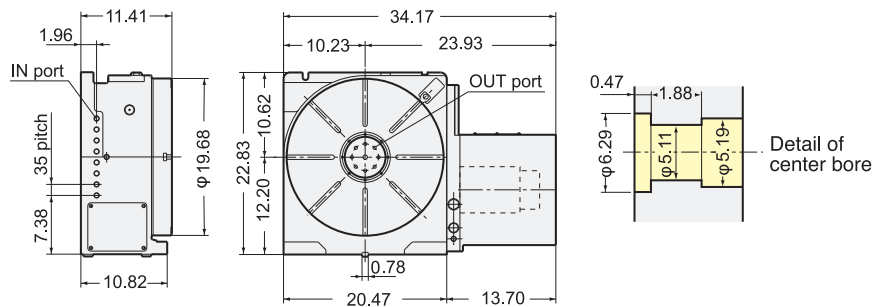
### CNCB450FA-M – Big Bore - Ø: 17.5" (450mm)



Faceplate Dia.	Brake System	Brake Torque ft lbs	Min. Increment	Rotation Speed RPM	Total Reduction Ratio	Indexing Accuracy	Net Weight lbs	Driving Torque ft lbs	Repeatability
17.5"(450mm)	hyd.	2854	0.001°	25	1/120	15	727.5	424.8	4 arc sec.

• Please refer to page 29 for tailstocks and table accessories details. • Maximum work load (in lbs) is 771.6(vertical), 1543.2(horizontal).

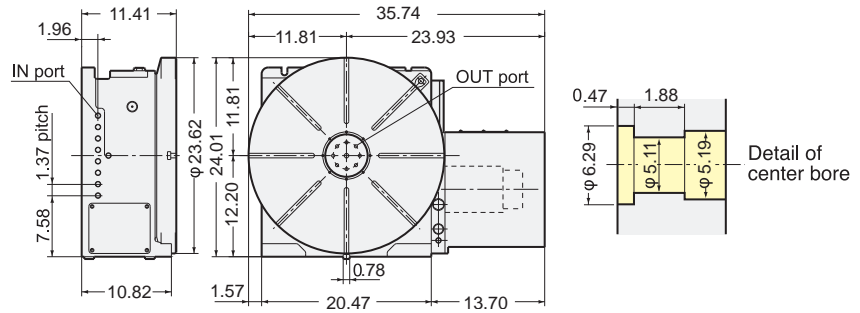
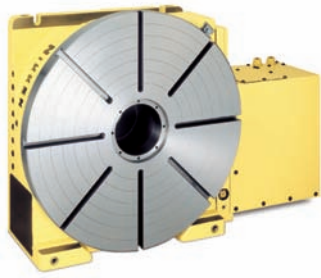
### CNC501FA-M - Ø: 19.5" (501mm)



Faceplate Dia.	Brake System	Brake Torque ft lbs	Min. Increment	Rotation Speed RPM	Total Reduction Ratio	Indexing Accuracy	Net Weight lbs	Driving Torque ft lbs	Repeatability
19.5"(501mm)	hyd.	3433	0.001°	25	1/120	15	970	424.8	4 arc sec.

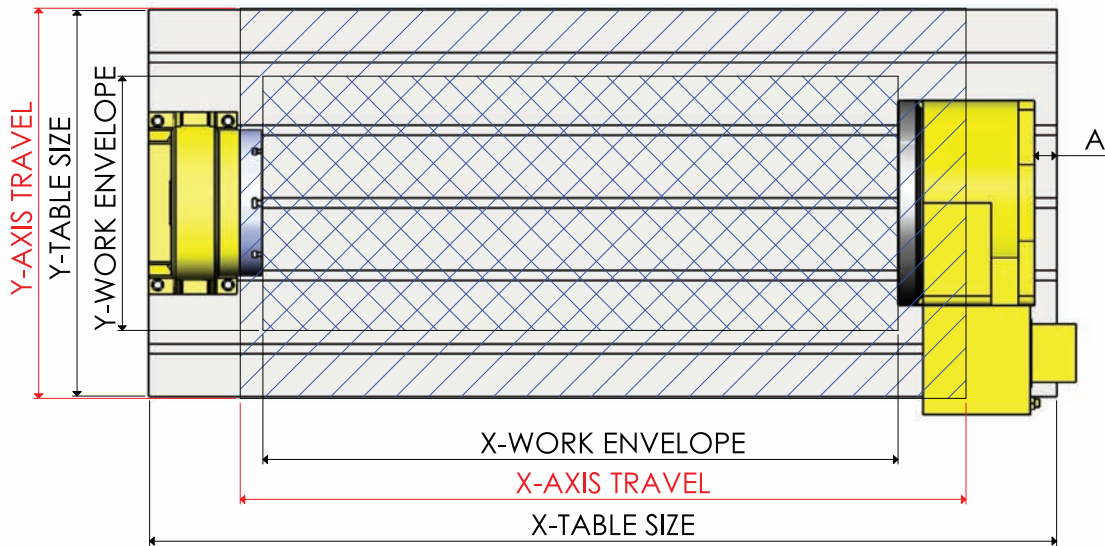
• Please refer to page 29 for tailstocks and table accessories details. • High-speed table model is available. The maximum rotation speed is 33.3RPM.  
 • Maximum work load (in lbs) is 882(vertical), 1763.7(horizontal).

# CNC601FA-M - Ø:23.5" (601 mm)



Faceplate Dia.	Brake System	Brake Torque ft lbs	Min. Increment	Rotation Speed RPM	Total Reduction Ratio	Indexing Accuracy	Net Weight lbs	Driving Torque ft lbs	Repeatability
23.5"(601mm)	hyd.	3433	0.001°	11.1	1/180	15	1036.2	673.2	4 arc sec.

- Please refer to page 29 for tailstocks and table accessories details. • High-speed table model is available. The maximum rotation speed is 22.2RPM.
- Maximum work load (in lbs) is 882(vertical), 1763.7(horizontal).



Tailstock/Support Table #	VS8000	VS10000		MV-653	MV-1003	
	5060	40/50/32050	40/50/3150	40/50	B/50	L/50

X-Y Axis Travel	63.0 x 33.9	80.7 x 39.4	124.0 x 39.4	60.2 x 26.0	94.5 x 40.2	137.8 x 40.2
X-Y Table Size	78.7 x 33.5	88.6 x 39.4	131.9 x 39.4	66.9 x 26.0	110.2 x 40.2	153.5 x 40.2

## CNC450FA-M

X-Work Envelope	-	56.69	66.53	113.78	49.41	88.19	131.50
Y-Work Envelope	-	21.65	21.65	21.65	21.65	21.65	21.65

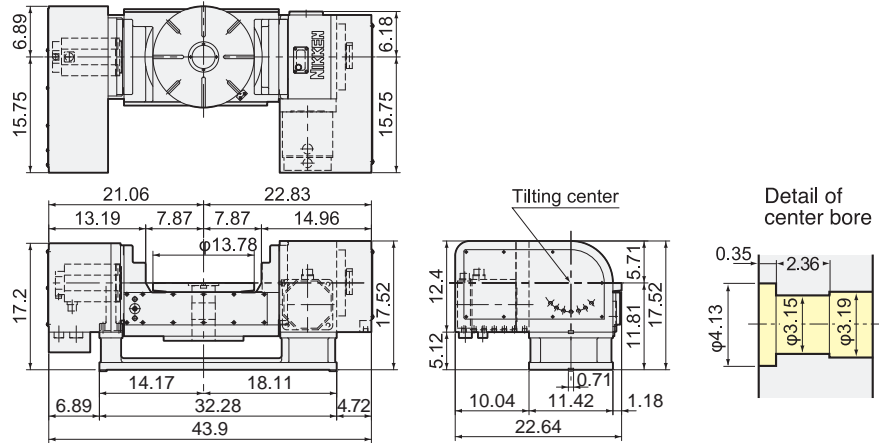
## CNC501FA-M/CNC601FA-M

X-Work Envelope	TAT500	55.12	64.96	108.27	-	86.61	129.92
Y-Work Envelope	-	*22.44	**23.82	**23.83	-	24.02	24.02

\*When the rotary table is aligned and mounted on the machine table slot, the radial swing will be reduced by 1.57" since the faceplate exceeds the machine Y Axis travel.

\*\*When the rotary table is aligned and mounted on the machine table slot, the radial swing will be reduced by .197" since the faceplate exceeds the machine Y Axis travel.

## 5AX-350FA-M - Ø: 13.7" (350mm)

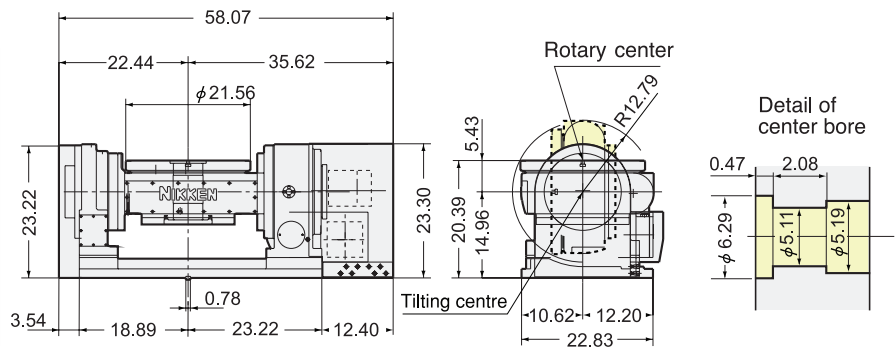


Faceplate Dia.	Brake System	Brake Torque ft lbs		Min. Increment	Rotation Speed		Total Reduction Ratio		Indexing Accuracy		Net Weight lbs	Driving Torque ft lbs	Repeatability (arc sec)	
		Rotary	Tilting		Rotary	Tilting	Rotary	Tilting	Rotary	Tilting			Rotary	Tilting
13.7"(350mm)	hyd.	1156.3	1156.3	0.001°	22.2	22.2	1/90	1/90	20	60	926	212.4	4	6

• Maximum work load (in lbs) is 441(0°-30°), 441(30°-90°).

## 5AX-550FA-M - Ø: 21.6" (550mm)

Powerful Brake



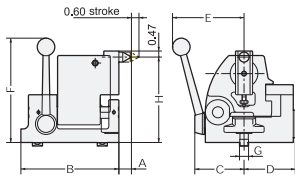
Faceplate Dia.	Brake System	Brake Torque ft lbs		Min. Increment	Rotation Speed		Total Reduction Ratio		Indexing Accuracy		Net Weight lbs	Driving Torque ft lbs	Repeatability (arc sec)	
		Rotary	Tilting		Rotary	Tilting	Rotary	Tilting	Rotary	Tilting			Rotary	Tilting
21.6"(550mm)	hyd.	2529.5	4625.3	0.001°	11.1	5.5	1/180	1/360	20	60	2535.3	637.2	4	6

• Maximum work load (in lbs) is 1102.3(0°-30°), 661.4(30°-90°).



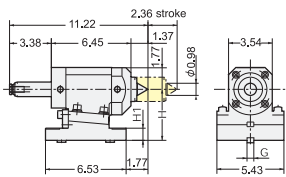
Model	Manual Tailstock stroke: 0.60" (15mm)	Air/Hyd. Tailstock stroke: 2.36" (60mm)	Hyd. Tailstock stroke: 3.93" (100mm)	Support Table Built-in brake(Hyd.)
CNC105	P-105S	PBA-105	-	TAT105
CNC180, CNC202	P-125S	PBA-135	-	TAT170
CNC260, CNC302	P-170S	PBA-170	H-170S	TAT250
CNC321, CNC401	P-230S	-	H-230S	TAT320
CNC501, CNC601	-	-	-	TAT500
CNC100-2W/3W/4W	-	PBA-105-2,3,4W	-	-
CNC260B, CNC302B	-	-	-	TAT250
CNC321B, CNC401B	-	-	-	TAT320, TAT400
5AX-130	P-150S	PBA-150	H-150S	-
5AX-150	-	-	-	-
5AX-201, 5AX-200II	P-170S	PBA-180	H-170S	-
NST250	P-150S	-	H-150S	-

## Manual Tailstock



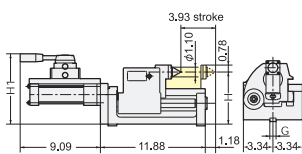
Part #	H Center Height	A	B	C	D	E	F	G	Weight (lbs)
P-105S	4.01-4.33	1.06	5.91	2.99	2.91	4.72	7.68	0.55	22
	4.02-5.31	1.06	5.91	2.99	2.91	4.72	8.27	0.55	25.5
P-150S	5.70-6.29	0.98	7.68	3.86	4.02	5.71	8.27	0.71	48.5
P-170S	6.29-7.08	0.98	7.68	3.86	4.02	5.71	8.27	0.71	49.6
P-230S	8.66-9.44	0.98	7.68	3.86	4.02	5.71	9.84	0.71	59.5

## Air/Hyd. Tailstock



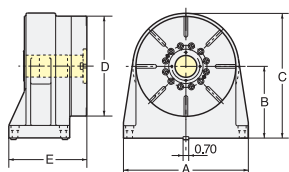
Part #	H Center Height	H1	G	Thrust		Weight (lbs)
				Air 0.5MPa	Hyd. 2mpa	
PBA-105	4.13	0.98	0.55	1176	4733	33
PBA-135	5.31	2.17	0.55	1176	4733	44
PBA-150	5.91	2.76	0.71	1176	4733	48.5
PBA-170	6.69	3.54	0.71	1176	4733	54
PBA-180	7.09	3.94	0.71	1176	4733	56

## Hydraulic Tailstock



Part #	H Center Height	H1	G	Thrust	Weight (lbs)
				Hyd. 2mpa	
H-150S	5.70-6.29	7.52	0.71	5370	61.7
H-170S	6.29-7.08	8.31	0.71	5370	77
H-230S	8.66-9.44	10.67	0.71	5370	99

## Support Table



Part #	A	B	C	D	E	Brake System	Brake Torque (ft.lbs)	Weight (lbs)
TAT105	6.10	4.13	6.89	4.13	4.45	air	202.8	35
TAT170	6.10	5.31	8.66	6.69	5.43	air	202.8	55
TAT250	9.84	6.69	11.61	9.84	5.71	air/hyd.	82.6/578.2	110
TAT320	15.75	9.06	15.35	12.60	9.84	air	1084	264.5
TAT400	15.75	9.06	16.93	15.75	9.84	air	1084	308.6
TAT500	18.90	12.20	22.05	19.69	9.84	air	1084	441

## Complete Turnkey Installation and Interface

Lyndex-Nikken is the only Rotary Table manufacturer to offer complete interface and installation on Fanuc Control. You can rely on us to accomplish a very clean and professional installation which looks as if it came directly from the factory.

Our dedicated team of application and engineering technicians are factory-trained and have accumulated years of experience and machining expertise. Over 300 rotary tables have been successfully installed on Mori Seiki machines all over the United States by our product experts.

We guarantee a seamless integration with the end-users machine tool and CNC control, whether a 4th axis or 5th axis interface is needed.

### A team of experts dedicated to provide 100% customer satisfaction

Before purchasing a rotary table, it's important to go through preliminary steps which will insure that you choose the right table to fit your machine and meet your manufacturing expectations. Lyndex-Nikken regional managers will guide you thru these different steps and assist you with table selection, brake system selection and machine fit, guaranteeing complete customer satisfaction.

### The highest quality hardware and components

We only use superior hardware and components to guarantee the best results and a trouble-free long life.

- Genuine Fanuc Parts
- Genuine Fanuc Option Parameters
- Cut Resistant Waterproof Cabling
- Cable Management

### Factory Clean Installation

Our service includes the following:

- Drive Installation
- External Cable Installation
- Parameter Changes
- Table Installation
- Communication Cables
- Documentation
- Fiber Optic Cables
- Travel Expenses
- Bulkhead Cable Set



**4th axis** installation and interface on Mori Seiki NV5000



**5th axis** installation and interface on Mori Seiki Vertical Machining Center



## Installation Process

### Step 1 - Electrical Cable Set up

1. Mount cable kit and air line plate onto sheet metal
2. Plumb the electrical cables to the electrical cabinet



### Step 2 - Amplifier

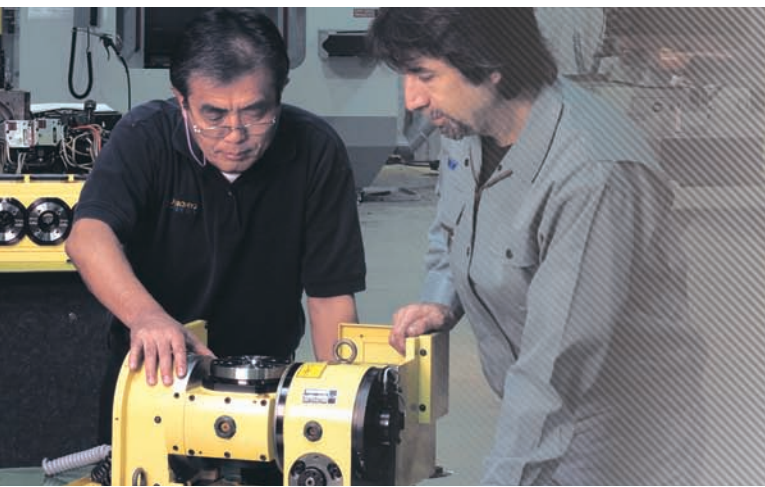
1. Mount Fanuc amplifier and fiber optic cables
2. Set parameters to turn on additional axes



### Step 3 - Rotary Table Set up

1. Install Rotary Table for fine tuning
2. Install Mori Seiki brake clamp and unclamp buttons on control panel
3. Set up and programming training





Lyndex-Nikken is dedicated to providing not only the highest quality of equipment, but also the highest quality of service and customer care

## How can we help?

Our fully equipped Service Department has over 30 years experience enabling us to offer complete and timely support for all Lyndex-Nikken products, including: CNC Rotary Tables, NC Tooling, Live and Static tools.

We fully stock all internal components to provide expedited and cost-effective maintenance program and rebuilds.

### In-House Services:

- Fault diagnosis and repair work
- Motor fitment and CNC M/C preparation
- Cable manufacture and guard modifications
- Over \$500,000 spare parts stock
- Upgrades on another machining center or such as fitting brake boosters
- Tool repair and calibrations
- Complete rotary table refurbishment
- Customer training and support

Our comprehensive technical and repair services is here to protect your investment. Please contact us to discuss any requirements in more detail: (800) 543-6237.

## Frequently Asked Questions

### What is the process for sending a rotary table in for repair?

If you are an end-user, please contact your local Lyndex-Nikken distributor to obtain a RGA (Return Goods Authorization). You will need to refer the part number of your unit and what problem you are currently facing with it. Once the distributor provides you with the RGA, you can send your rotary table to our repair facility in Illinois for evaluation. We will inspect it, then quote the distributor the repair charges. If you agree to have it repaired, contact the distributor. The distributor will issue a Purchase Order to Lyndex-Nikken for the work. Inspection fee may apply. Please ship all tables in secured crate, via truck service to ensure it is properly protected.

### What is the normal turnaround time for repairs?

Usually within 3-5 business days from date of receipt. Expedited service can be arranged.

### What motor gear oil is recommended?

Mobil Motor gear 626 or Mobil 600 XP 68

### What hydraulic oil is recommended?

DTE light #6-#10



## STATIC & LIVE TOOLING

Lyndex-Nikken offers a wide range of live and static tools for Mori Seiki CNC Lathes (NL and DuraTurn Series) and Multi-Axis Machines (NZ and NT Series). Lyndex-Nikken/Alps is the Original Equipment Manufacturer and Supplier for Mori Seiki live tooling and provides the latest technology for mill-turning operations. You can review our complete catalog online at [www.lyndexnikken.com](http://www.lyndexnikken.com), or call us for more information: (800) 543-6237.





[www.lyndexnikken.com](http://www.lyndexnikken.com)

(800) 543-6237

CAT2010-MORI-RT