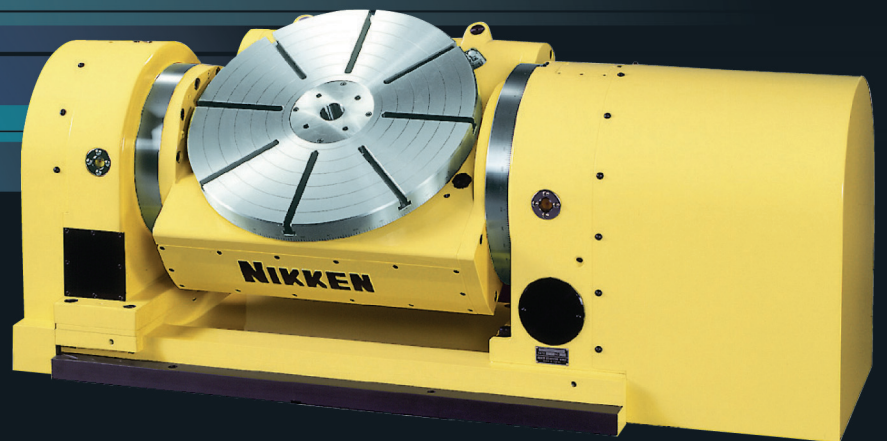
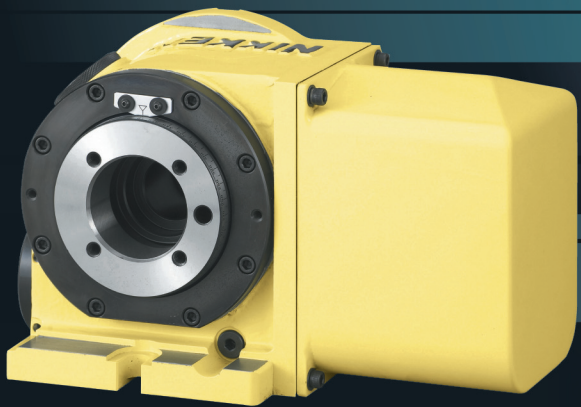


# LYNDEX NIKKEN



CNC ROTARY TABLES



# FEATURES AND BENEFITS OF NIKKEN ROTARY TABLES

Our 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.

## NIKKEN PATENTED CARBIDE WORM SYSTEMS

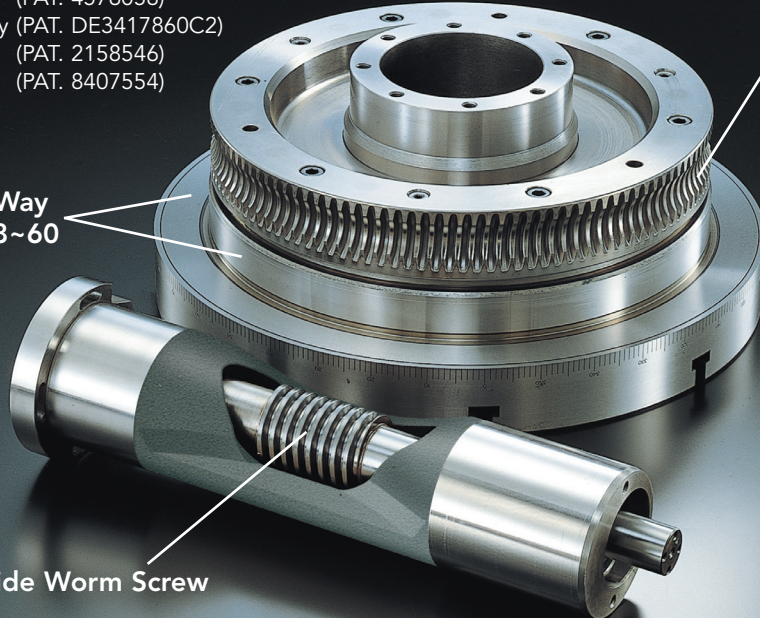
### PATENTS

Japan (PAT. 1856406)  
 USA (PAT. 4576058)  
 Germany (PAT. DE3417860C2)  
 UK (PAT. 2158546)  
 France (PAT. 8407554)

Ion Nitrided Worm Wheel  
**HV930**

Steel Way  
**HRC58~60**

Carbide Worm Screw

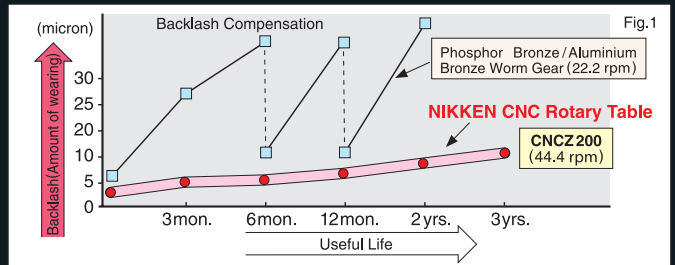
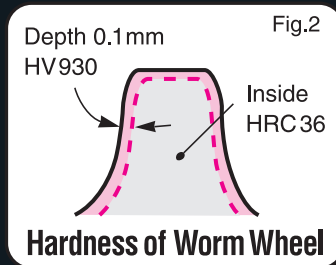


### CARBIDE WORM SCREW

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

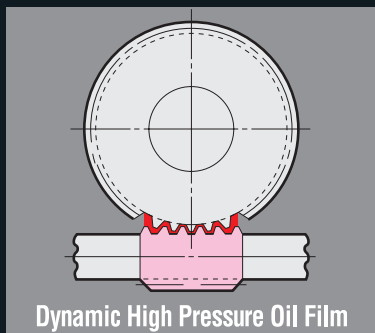
### WORM WHEEL

Specially hardened, ion-nitrided treated teeth eliminate sliding friction.



### DYNAMIC HIGH PRESSURE OIL FILM EFFECT FOR HIGH SPEED CNC ROTARY TABLE Z SERIES

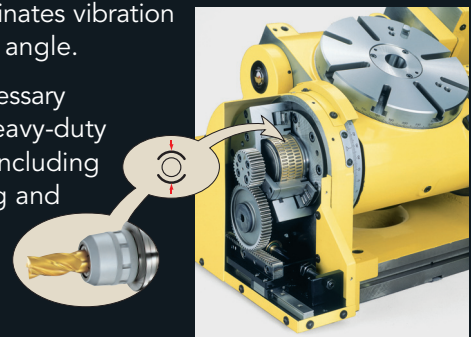
Our experience in gear cutting and study of the pressure angle of the worm screw result in the table's higher rotation speed (44.4 rpm). The rotational speed of the screw creates the pressure to force the oil between the gears, preventing any metal-to-metal contact and eliminating gear wear, as well as producing high rigidity and durability.



### EXCEPTIONAL BRAKE TORQUE (UP TO 5,000NM)

The proven tightening power of our Ultra-Lock™ Milling Chuck is applied to the brake of the tilting axis of our 5AX-tilting rotary table.

- Virtually eliminates vibration at any tilting angle.
- Provides necessary rigidity for heavy-duty operations, including heavy drilling and face milling.



# SINGLE AXIS COMPACT TYPE

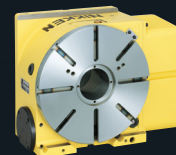


- Table size range (diameter): Ø105mm to Ø200mm.
- Suitable for a wide range of applications from a small drilling machine with simple indexing to full CNC positioning on machining centers in high production.
- Designed for indexing and rotational milling on a wide variety of workpieces.
- Various options are available to meet all workholding, fixturing and chucking requirements.
- Available in Standard and High-Speed (Z) Models.

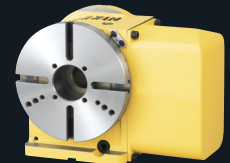
Part Number	Faceplate Dia. (mm)	Rotation Speed (rpm)	Clamp Torque (Nm)	Max. Vertical Load (kg)
CNC(Z)105	Ø105	22.2 (44.4)	205	30
CNC(Z)180	Ø180	22.2 (44.4)	303	100
CNC(Z)202	Ø200	22.2 (44.4)	303	100



CNC105

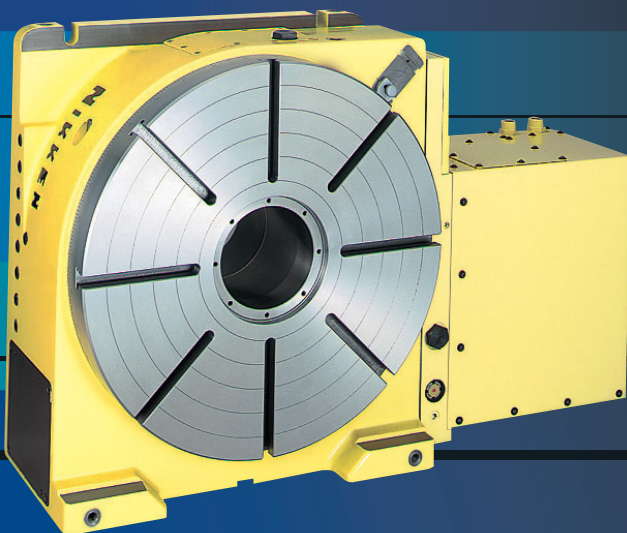


CNC180



CNC202

# SINGLE AXIS STANDARD TYPE

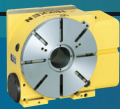


- Table size range (diameter): Ø260mm to Ø1200mm.
- Vertical and horizontal use depending upon application.
- Suitable for indexing and rotational milling on a wide variety of workpieces.
- Various options are available to meet all workholding, fixturing and chucking requirements.
- Available in Standard and High-Speed (Z) Models (up to 600mm).

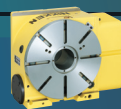
Part Number	Faceplate Dia. (mm)	Rotation Speed (rpm)	Clamp Torque (Nm)	Max. Vertical Load (kg)
CNC(Z)260	Ø260	16.6 (33.3)	1568	175
CNC(Z)302	Ø300	16.6 (33.3)	1568	175
CNC(Z)321	Ø320	22.2 (44.4)	1760	250
CNC(Z)401	Ø400	22.2 (44.4)	1760	250
CNC(Z)501	Ø500	16.6 (33.3)	4655	400
CNC(Z)601	Ø600	11.1 (22.2)	4655	400
CNC801	Ø800	11.1	4655	-
CNC1200	Ø1200	5.5	9800	-
CNCB450	Ø450	25	3870	350



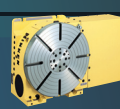
CNC260



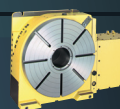
CNC302



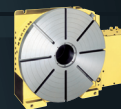
CNC321



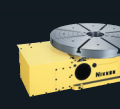
CNC401



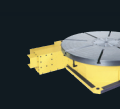
CNC501



CNC601



CNC801

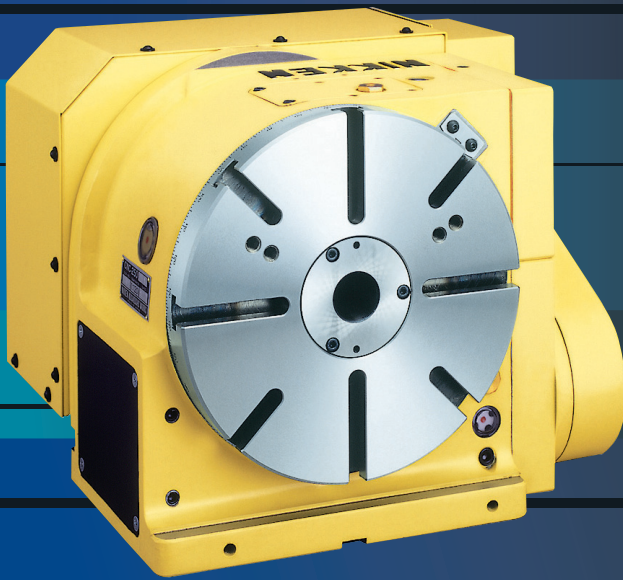


CNC1200



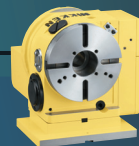
CNCB450

# SINGLE AXIS BACK SIDE MOTOR MOUNTED TYPE

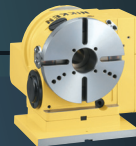


- Table size range (diameter): Ø180mm to Ø400mm.
- Designed for machine tools with limited space in the Y-axis, such as gantry type or machines with enclosed splashguards.
- Suitable for indexing and rotational milling on a wide variety of workpieces.
- Various options are available to meet all workholding, fixturing and chucking requirements.
- Available in Standard and High-Speed (Z) Models.

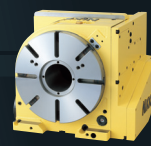
Part Number	Faceplate Dia. (mm)	Rotation Speed (rpm)	Clamp Torque (Nm)	Max. Vertical Load (kg)
CNC(Z)180B	Ø180	22.2 (44.4)	303	100
CNC(Z)202B	Ø200	22.2 (44.4)	303	100
CNC(Z)260B	Ø250	16.6 (33.3)	340/1568	175
CNC(Z)302B	Ø300	16.6 (33.3)	340/1568	175
CNC(Z)321B	Ø320	22.2 (44.4)	1760	250
CNC(Z)401B	Ø400	22.2 (44.4)	1760	250



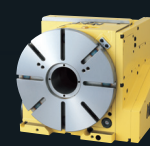
CNC180B



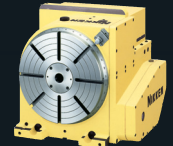
CNC202B



CNC260B

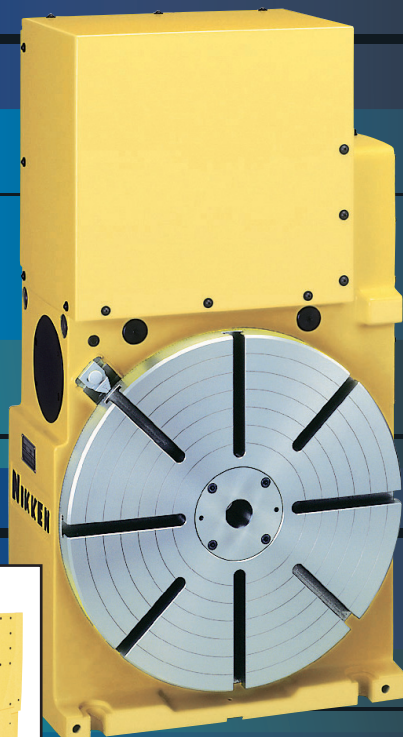


CNC302B



CNC321B, 401B

# SINGLE AXIS TOP SIDE MOTOR MOUNTED TYPE

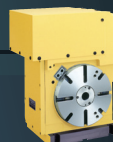


- Table size range (diameter): Ø200mm to Ø600mm.
- To avoid interference, the drive motor is mounted on the top side of the table for horizontal machines and special purpose applications.
- Suitable for indexing and rotational milling on a wide variety of workpieces.
- Various options are available to meet all workholding, fixturing and chucking requirements.
- Available in Standard and High-Speed (Z) Models.

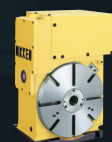
Part Number	Faceplate Dia. (mm)	Rotation Speed (rpm)	Clamp Torque (Nm)	Max. Vertical Load (kg)
CNC(Z)200T	Ø200	22.2 (44.4)	196	100
CNC(Z)260T	Ø260	16.6 (33.3)	392/1176	175
CNC(Z)321T	Ø320	16.6 (33.3)	1760	250
CNC(Z)401T	Ø400	16.6 (33.3)	1760	250
CNC(Z)501T	Ø500	16.6 (33.3)	4655	400
CNC(Z)601T	Ø600	11.1 (22.2)	4655	400



Shown with swing box assembly



CNC200T



CNC260T



CNC321T, 401T



CNC501T, 601T

# SINGLE AXIS MULTIPLE SPINDLE



- Table size range (diameter): Ø105mm to Ø250mm.
- Multi-Spindle (2, 3 and 4 spindle) CNC Rotary Table Series for productivity enhancement when machining small workpieces.
- Differing pitch between spindles is available as an option.
- Various options are available to meet all workholding, fixturing and chucking requirements.

Part Number	Faceplate Dia. (mm)	Rotation Speed (rpm)	Clamp Torque (Nm)	Max. Vertical Load (kg)
CNC100-2W	Ø105	11.1	147	15
CNC100-3W	Ø105	11.1	147	15
CNC100-4W	Ø105	11.1	147	15
CNC180-2W	Ø180	22.2	303	100
CNC202-2W	Ø200	22.2	303	100
CNC260-2W	Ø260	16.6	343/1568	175



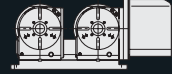
CNC100-2W



CNC100-3W



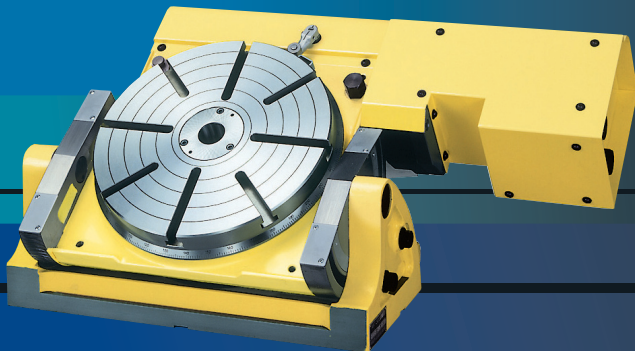
CNC100-4W



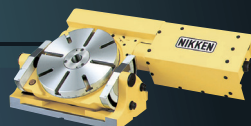
CNC180-2W, 202-2W, 260-2W

# TILTING MANUAL TYPE

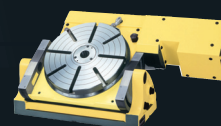
- Table size range (diameter): Ø250mm to Ø500mm.
- Table can be tilted from 0° - 90° manually and clamped in position.
- Indexing is CNC controlled to allow adaptation to all applications.
- Various options are available to meet all workholding, fixturing and chucking requirements.



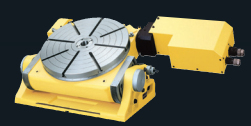
Part Number	Faceplate Dia. (mm)	Rotation Speed (rpm)	Clamp Torque (Nm)	Max. Vertical Load (kg)
NST250	Ø250	16.6	147	50
NST300	Ø300	11.1	196	100
NST500	Ø500	5.5	196	200



NST250

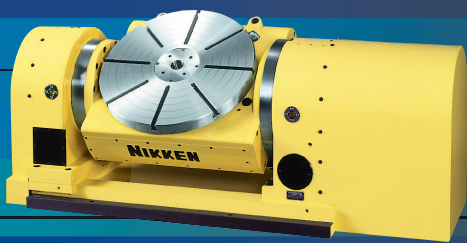


NST300



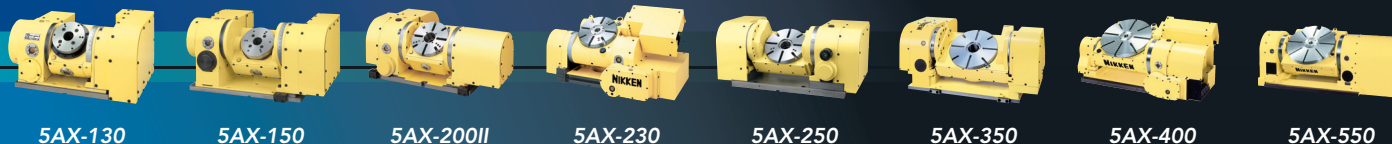
NST500

# TILTING STANDARD TYPE



- Table size range (diameter): Ø105mm to Ø550mm.
- Rotary and tilting axes are controlled by CNC.
- Powerful braking systems.
- Various options are available to meet all workholding, fixturing and chucking requirements.

Part Number	Faceplate Dia. (mm)	Rotation Speed (rpm)		Clamp Torque (Nm)	Max. Work Load (kg)
		Rotary	Tilting		
5AX-130	Ø105	22.2	11.1	205/303	25 (30°-90°)
5AX-150	Ø150	50.0	22.0	205/303	25 (30°-90°)
5AX-200II	Ø200	22.2	11.1	588/490	50 (30°-90°)
5AX-230	Ø230	11.1	5.5	490/3430	100(30°-90°)
5AX-250	Ø250	22.2	11.1	588/490	260(30°-90°)
5AX-350	Ø350	22.2	22.2	2000	200(30°-90°)
5AX-400	Ø400	11.1	5.5	1136/4018	150(30°-90°)
5AX-550	Ø550	11.1	5.5	3430/6272	300(30°-90°)



5AX-130

5AX-150

5AX-200II

5AX-230

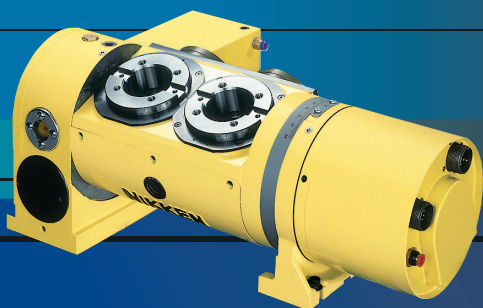
5AX-250

5AX-350

5AX-400

5AX-550

# TILTING MULTIPLE SPINDLE



- Table size (diameter): Ø105mm.
- Rotary and tilting axes are controlled by CNC.
- Powerful braking systems.
- Various options are available to meet all workholding, fixturing and chucking requirements.

Part Number	Faceplate Dia. (mm)	Rotation Speed (rpm)		Clamp Torque (Nm)	Max. Work Load (kg)
		Rotary	Tilting		
5AX-2MT-105	Ø105	22.2	11.1	147	10 (30°-90°)
5AX-4MT-120	Ø105	11.1	16.6	147/343	15 (30°-90°)



5AX-2MT

5AX-4MT

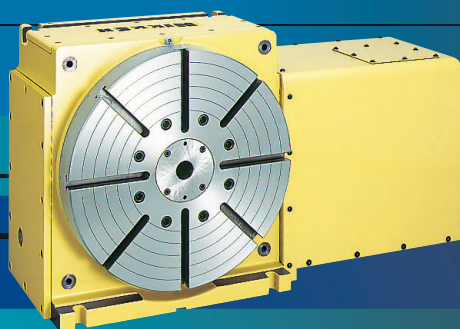
## CUSTOM EXAMPLES



5AX-2MT-200-250

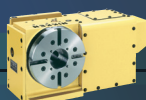
5AX-2MT-170

# ULTRA PRECISION HIRTH COUPLING INDEXER

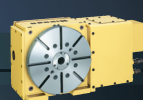


- Table size range (diameter): Ø180mm to Ø400mm.
- Precision hirth coupling: precision three-piece hirth coupling ensures smooth and fast indexing without table lifting.
- Indexing accuracy: ±2".
- High rigidity.

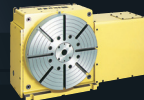
Part Number	Faceplate Dia. (mm)	Rotation Speed (rpm)	Clamp Torque (Nm)	Max. Vertical Load (kg)
NSVZ180	Ø180	11.1	910	50
NSVZ300	Ø300	11.1	2155	150
NSVX400	Ø400	22.2	5880	250
NSVX500	Ø500	16.6	5880	250
NSVX400T	Ø400	16.6	5880	250



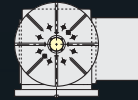
NSVZ180



NSVZ300



NSVX400

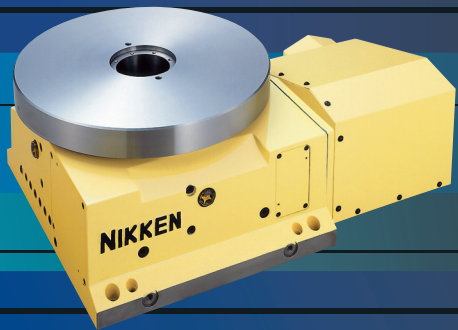


NSVX500



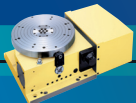
NSVX400T

# BUILT-IN APPLICATION

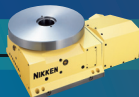


SOME OPTIONS INCLUDE:

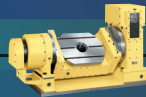
- Custom-made face plates.
- Selection of location for the oil sight glass, oil supply port and drain port.
- Multiple mounting options.
- Modified motor covers.
- Special tilting ranges (Twin Axis models only).
- Special rotary center / tilting center positioning options (Twin Axis models only).



CNC401H



CNC503H



5AX-T400

Part Number	Faceplate Dia. (mm)	Rotation Speed (rpm)		Clamp Torque (Nm)	Max. Work Load (kg)
		Rotary	Tilting		
CNC(Z)401H	Ø400	22.2 (44.4)		1470	-
CNC(Z)503H	Ø500	16.6 (33.3)		1890	-
5AX-400T	Ø400	22.2	16.6	1760	250(30°-90°)

# ACCESSORIES



ALPHA 21 CONTROLLER

## NIKKEN'S INDEPENDENT ALPHA 21 CONTROLLER

Our Alpha 21 Controller allows both indexing and feed movements for numerous applications, and saves the expense associated with specific drive motors and interface cards for direct drive control. The Alpha 21 indirectly controls the Nikken CNC Rotary Table through the use of 'M' Codes. **This controller features RS232C communication for programming via the machine controller using either block data or Macro programming.**

Our CNC Rotary Tables can also be controlled directly by the CNC machine controller (with appropriate compatible drives fitted).



AIR/HYDRAULIC TAILSTOCK



MANUAL TAILSTOCK

## TAILSTOCK

- Manual Tailstock
- Air/Hydraulic Tailstock
- Hydraulic Tailstock
- Support Table

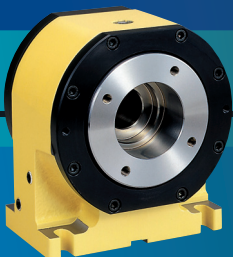
## CLAMPING ATTACHMENTS & CHUCKS

• All Compact Tables have a standardized Ø60mm hole, and offer many standard clamping attachments including:

- Rotary Cylinders
- 5C Attachments
- OD Chucks
- ID Chucks

• Manual Scroll Chucks: complete range of sizes (4" to 12") are available for all Nikken Rotary Tables.

• Power Chucks: complete range of Power Chucks (4" to 12") and Rotary Cylinders are available.



TAT-105



5C COLLET CHUCK



[www.lyndexnikken.com](http://www.lyndexnikken.com)  
800-543-6237  
CAT2005-RT