

CITIZEN

**Miyano**

**BND51**

Fixed Headstock Type CNC Automatic Lathe



# Machine specifications

Item	<b>BND-51SY2</b>	
<b>Machining capacity</b>		
Maximum work length		320 mm
Maximum bar Dia.		51 mm Dia.
Maximum blank diameter	chucker	Max. 210 mm Dia.
<b>Spindle</b>		
Number of spindles		2
Spindle speed		50 - 5,000min <sup>-1</sup>
Draw tube Dia.	SP1	52 mm Dia.
	SP2	26 mm Dia.
Power chuck type		Hydraulic
Type of collet chuck	SP1	H-S22 Pads
	SP2	H-S16, S22 pads
Power chuck size and type	SP1	6" Through hole type
	SP2	5" Through hole type
<b>Turret</b>		
Number of turret		1
Turret stations		12 ST.
Shank size of square turning tool		20 mm Sq.
Diameter of drill shank		25mm Dia.
Turret index time		0.25 sec./ 1pos.
<b>Feed rate</b>		
Slide stroke	Xaxis	175 mm
	Zaxis	435 mm
	Yaxis	75 mm
	Baxis	530 mm
Rapid feed rate	Xaxis	18 m/ min.
	Zaxis	20 m/ min.
	Yaxis	12 m/ min.
	Baxis	18 m/ min.
<b>Revolving tool</b>		
Number of revolving tools		Max12
Tool spindle speed range		60 - 6,000min <sup>-1</sup>
Capacity	Drill	Max 13 mm Dia.
	Tap (Steel)	Max M8
	Tap (Al, Brass)	Max M8
<b>Tank capacity</b>		
Hydraulic oil tank capacity		10 L
Lubricating oil tank capacity		2 L
Coolant tank capacity		150 L
<b>Machine dimensions</b>		
Machine height		1,700 mm
Floor space		2,560 mm × 1,700 mm
Machine weight		4,750 kg
<b>Motors</b>		
Spindle motor	SP1	AC 15/ 11 kW
	SP2	AC 5.5/ 3.7 kW
Revolving tool motor		AC 2.2 kW 20 Nm
<b>Power supply</b>		
Voltage		AC 200/ 220 V ± 10%
Capacity		37 KVA
Fuse		125 A
Air supply		0.5 MPa (5 kgf/ cm <sup>2</sup> )
<b>Others</b>		
Splash guard interlock, Revolving tool driving unit, Pneumatic, Spindle brake No.1, High pressure coolant, Parts Catcher, Parts conveyor, Work ejector & inner high pressure coolant.		
<b>Optional accessories</b>		
Collet chuck system, Power chuck system, Spindle brake No.2, Chuck air blow, Automatic fire extinguisher, Automatic power shut-off, Coolant level switch, Sub spindle Inner high pressure coolant & air blow, Speed setter, Chip conveyor, Chip box, Foot switch, Total & preset counter, Coolant mist collector, Oil mist damper, Warning light, Cut-off confirmation, Large bore spindle, Bar feeder interface, Filler tube, Spindle inner bushing, RS-232C port, etc.		

<b>NC specifications</b>	
	FANUC 0i-TD
Axial control	X, Z, Y, B, Cs
Simultaneous control axis	4 axis
Minimum setting unit	0.001mm, 0.001deg, Cs axis
Minimum output unit	X: 0.0005mm, Z: 0.001mm Y: 0.001mm, B: 0.001mm, Cs: 0.001deg
Interpolation functions	G00, G01, G02, G03, G04, G32, G33
Program storage capacity	1 Mbyte (2560 m)
Spindle function	S4 digit
Cutting feed rate	F3.4 digits per revolution, F6 digits per minute directly specified
Feed rate override	0 - 150% (10% steps)
Rapid feed override	F0, 25, 50, 100%
Thread cutting	G32, G33, G92
Canned cycle	G90, G92, G94
Tool function	T AABB (AA=Tool number and geometry, BB=Wear offset number)
Tool position direct input function	by measured MDI Data input-and-output Memory card interface, USB memory interface, Auto data backup
Automatic operation	1cycle/ Automatic operation, Single block, Block delete, Machine lock, Optional block skip, Dry run, Feed hold
Others	8.4" color LCD/ MDI, Program storage capacity addition: 800pieces, A decimal point input, Manual pulse generator Memory protect, AC digital servo motor, The circle radius R command, Nose radius compensation, Constant surface speed control (G96), Back ground editing, Programmable date input (G10), Run hour/Parts count display, Multiple repetitive cycles (G70 - G76), Spindle rigid tap, Polar coordinate interpolation, Custom macro B, Canned cycles for drilling, Tool life management. etc.
NC Option	Helical interpolation, Leader puncher interface, etc.

## CITIZEN MACHINERY CO., LTD.

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<b>JAPAN</b>	CITIZEN MACHINERY CO.,LTD. 4107-6 Miyota, Miyota-machi, Kitasaku-gun, Nagano-ken, 389-0206, JAPAN	TEL.81-267-32-5901	FAX.81-267-32-5908
<b>SOUTH ASIA / KOREA</b>	CITIZEN MACHINERY CO.,LTD. 4107-6 Miyota, Miyota-machi, Kitasaku-gun, 389-0206, JAPAN	TEL.81-267-32-5916	FAX.81-267-32-5928
<b>TAIWAN</b>	CINCOM MIYANO TAIWAN CO.,LTD. 10FL., No.174, Fuh Sing N. Rd., Taipei, TAIWAN	TEL.886-2-2715-0598	FAX.886-2-2718-3133
<b>CHINA</b>	CITIZEN (CHINA) PRECISION MACHINERY CO.,LTD. 10058, XINHUA ROAD OF ZHOUCUN, ZIBO, SHANDONG, P.R. CHINA	TEL.86-533-6150560	FAX.86-533-6161379
<b>EUROPE-Germany</b>	CITIZEN MACHINERY EUROPE GmbH Mettinger Strasse 11, D-73728 Esslingen, GERMANY	TEL.49-711-3906-100	FAX.49-711-3906-106
<b>EUROPE-UK</b>	CITIZEN MACHINERY UK LTD 1 Park Avenue, Bushey, WD23 2DA, UK	TEL.44-1923-691500	FAX.44-1923-691599
<b>EUROPE-Italia</b>	CITIZEN MACCHINE ITALIA s.r.l. Via Campo Romano 11/13 - 24050 Spirano (BG), ITALY	TEL.39-035-877738	FAX.39-035-876547
<b>AMERICA</b>	MARUBENI CITIZEN-CINCOM INC. 40 Bordline Road Allendale, NJ 07401, U.S.A.	TEL.1-201-818-0100	FAX.1-201-818-1877

URL:<http://cmj.citizen.co.jp/>

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