

MACHINE SPECIFICATIONS

Items	Model Name	BNJ-34S	BNJ-42S
Machining Capacity & Chuck System			
Power Chuck & Size	L/R Spindle	5" / 4" Oil Hyd.	5" / 4" Oil Hyd.
Max. Bar Capacity	L/R Spindle	φ34(1.34")/φ34(1.34")	φ42(1.65")/φ42(1.65")
Type of Collet Chuck	L/R Spindle	Stationary	Stationary
Max. Turning Length		100mm(3.94")	100mm(3.94")
Spindle			
Spindle Motor 30min./Cont. Rat.	L Spindle	VAC 7.5/5.5kW	VAC 11/7.5kW
	R Spindle	VAC 3.7/2.2kW	VAC 5.5/3.7kW
Spindle Speed Range	L Spindle	80~6,000min ⁻¹	67~5,000min ⁻¹
	R Spindle	67~5,000min ⁻¹	67~5,000min ⁻¹
Cs Axis Least Unit	L/R Spindle	±0.02'	±0.02'
L-Turret			
Type of Turret		12 St. Turret	12 St. Turret
Tool Shank Size		□20mm(3/4" Sq.)	□20mm(3/4" Sq.)
Tool Hole Diameter		φ25mm(1" Dia.)	φ25mm(1" Dia.)
Turret Indexing Time		0.2Sec./1St.	0.2Sec./1St.
Turret Indexing Method		Curvic C. & AC Servo	Curvic C. & AC Servo
Buck working R-Turret(Opt.)			
Type of Turret		6 St. Segmental Turret	6 St. Segmental Turret
Tool Shank Size		□20mm(3/4" Sq.)	□20mm(3/4" Sq.)
Tool Hole Diameter		φ25mm(1" Dia.)	φ25mm(1" Dia.)
Turret Indexing Time		0.2Sec./1St.	0.2Sec./1St.
Turret Indexing Method		Curvic C. & AC Servo	Curvic C. & AC Servo
Revolving Tools(L-Turret/ Opt.)			
No. of Revolving Tool Stations		6	6
Tool Spindle Speed Range		0~4,000min ⁻¹	0~4,000min ⁻¹
Tool Spindle Driving Motor		AC Servo 2.5kW	AC Servo 2.5kW
Machining Capacity	Drill/ Tap	φ13mm/M8×1.25	φ13mm/M8×1.25
Machine Dimensions			
Floor Space		2,665×1,455mm (105'×57')	2,655×1,455mm (105'×57')
Machine Weight		4,250kg (9,370Lbs.)	4,250kg (9,370Lbs.)

Others
 Splash Guard Interlock, Coolant, Pneumatic Unit, Machine Light, Regular Hand Tools Kit & Tool Box.

Options
 Cut-off Confirmation, High Pressure Coolant (Main Turret), R Spindle Inner Coolant and Work Ejector, Revolving Tools and Driving Unit., Spindle Brake for Main Spindle, Drill Breakage Detector, Air Blow, R Spindle Through Parts Carrier(Max.φ23 mm), Parts Catcher and Parts Conveyor, Hinge Type Chip Conveyor, Chip Box, Coolant Mist Collector and Dumper for Anti-back Fire, Coolant Reel Switch, Magazine Loaded Automatic Bar Feeder, Signal Light (3Steps), Auto Door,

NC SPECIFICATIONS MIYANO-FANUC

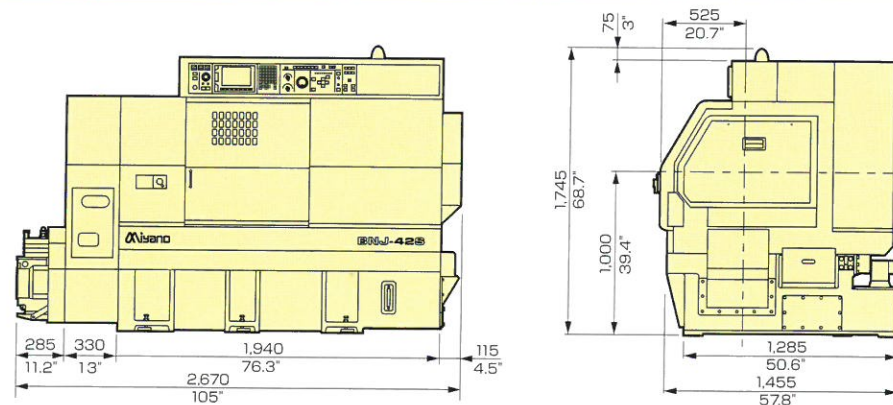
Simultaneous Control Axis	3 Axis/2 System Line, X1, Z1-Axis and X2, Z2(B), Cs1, Cs2 Axis
Min. Input Increment	0.001mm
Min. Output Resolution	X Axis : 0.0005mm, Z axis : 0.001mm
Parts Program Storage Capacity	16,000ch(40m / 131 Feet Tape Length), 63Programs
Spindle Function	Spindle Speed S5Digits Direct Specify, Constant Cutting Speed Control
Rapid Traverse Rate	18m/min. / 708 IPM(X, Z Axis), 20m/min. / 787 IPM(B Axis)
Cutting Feed Rate	F3.4 Digit Direct Specify
Cutting Feed Rate Override	0~150%(10% Steps)
Interpolation	G01, G02, G03
Threading	G32, G92
Canned Cycle	G90, G92, G94
Work Coordinate Setting	Automatic Setting, 32 Sets by the Geometry offset Function.
Tool Selection and Work Coordinate System	Tool Selection 1~32 can be Done by the First Digit of the T-4 Digit Code.
Tool Wear Offset	Last Two Digit of the T-4 Digit Code.
Direct Input of the Tool Position	Measured Value can be Directly Key in.
Input/ Output Interface	RS-232C, PC Card Slot.
Automatic Operation	1 Cycle Operation / Continuous Operation, Single Block Operation, Block Delete, Machine Lock Dry Run, Feed Hold
Others	
7.2" Monochrome LCD, Decimal Point Input, Manual Pulse Generator, Memory Protect, Start Interlock, AC Digital Servo, Polar Coordinate Interpolation, Synchronous Mixing feed Function, etc.	
Basic Options	
Chamfering/ Corner R Control, Tool Nose R Compensation, Cs Axis Control, Wear Offset, Inch/Metric Conversion, Constant Cutting Speed Control, Background Editing, Filler Tube Assembly, Alarm Display, Custom Macro B.	
NC Options	
Multiple Repetitive Canned Cycle(G70~G76), Run Hour/Parts Number Counting, Additional Parts Program Storage (Total: 80m, 160m, 320m), Cylindrical Interpolation, Rigid Tapping Function(Spindle/ Revolving Tools), Total & Preset Counter, Superpose Feed Function A, Programmable Data Input(G10), continuous multi-lead thread cutting, Tool Life Management system, Variable Lead Thread cutting.	



● **PC Card Slot**
 Data storage and loading of part programs and offset data is possible by a low cost ATA Flash memory card.

Note : The specifications are subject to change without notice.
 Machine in photo may not be exactly the same as the actual products.

EXTERNAL VIEW



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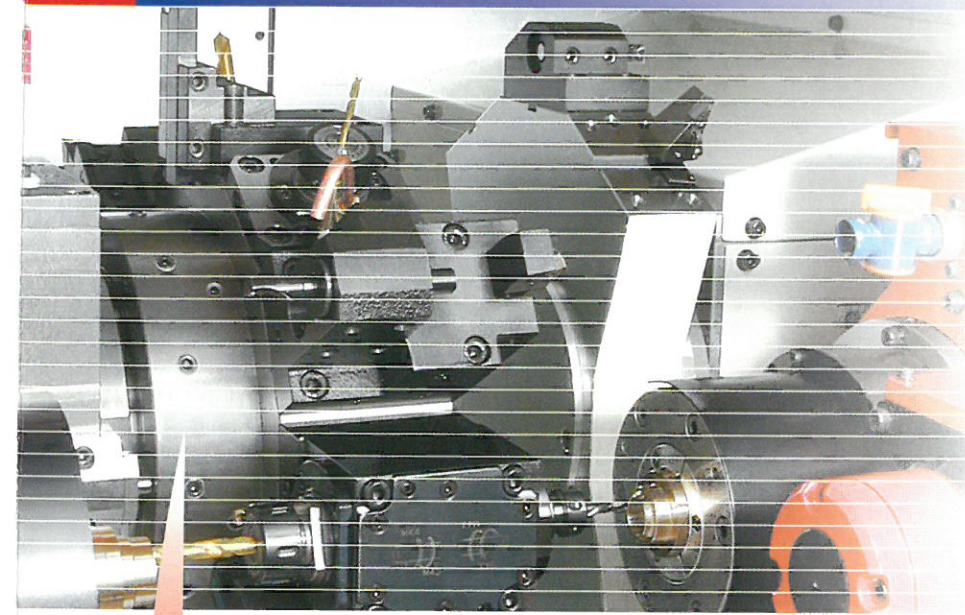
Internet Home Page <http://www.miyano-jpn.co.jp>
<http://www.miyano-usa.com>



ISO 9002
 Certificate Number: 35819



Miyano
 The World Leader in Precision



BNJ-34S BNJ-42S

CNC COMPACT TURNING CENTER
 with Two Spindles & Two Turrets



Automatic Barfeeder shown in the photo is optional equipment.

All New 2-Spindle/2-Turret Design Redefines Efficiency

All new designs for simultaneous front & back machining improves complete-work machining efficiency.

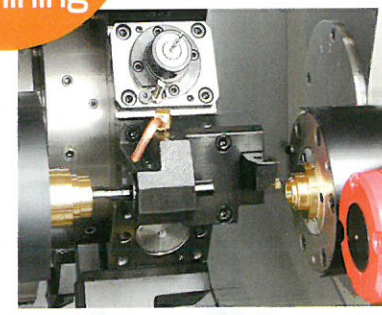
Simultaneous machining significantly reduces cycle time.

The BNJ Series features a traversable R-spindle with 2 axis movement is "X" and "Z" Which, when combined with a unique backworking turret enables simultaneous front and backside machining operations. Having the ability to perform overlapping control on the R-spindle working with L-turret and L-spindle, and

independent left & right cutting operations with the backworking turret, the cutting cycle on the backside of a symmetrical workpiece was reduced by almost 50%(excluding cut off operation). On other workpieces a saving on average of 35% can be achieved when compared to a twin spindle single turret machines.

Overlapping Control for Simultaneous Machining

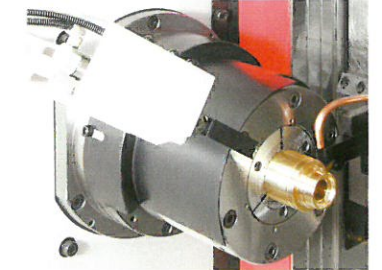
While the L-turret works with the L-spindle, the R-spindle follows the movement of the L-turret by the added command values to simultaneously machine its own work-piece.



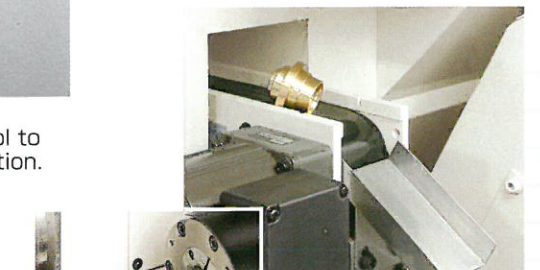
Options



Chip Conveyor with speed control to economise operation.



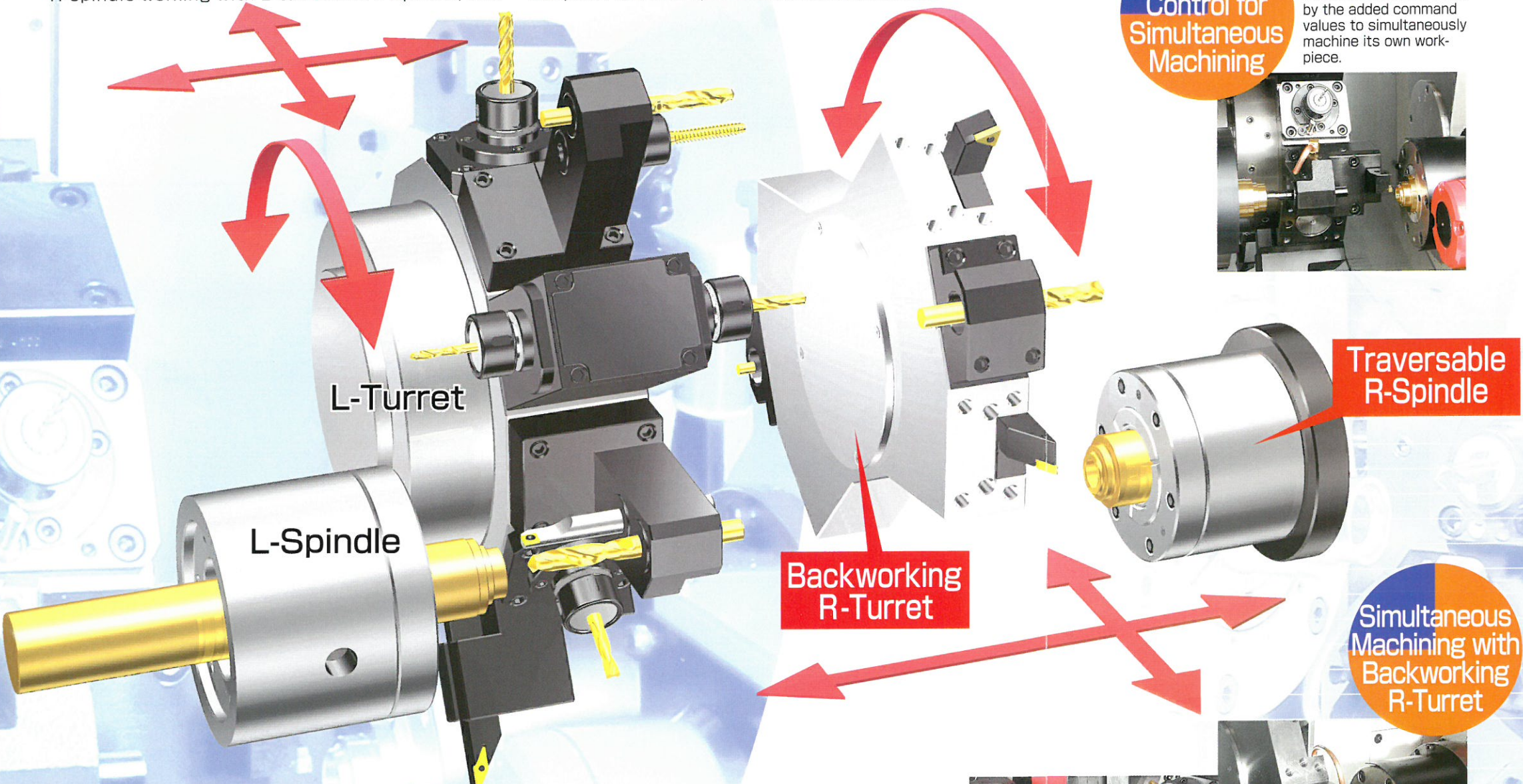
Cutoff Confirmation



Parts Catcher & Conveyor

Wide variety of tools assures optimum cutting

The BNJ offers tooling variety and options using proven tool holders developed for the BND Series, along with the latest NC functions to optimize machining efficiency.

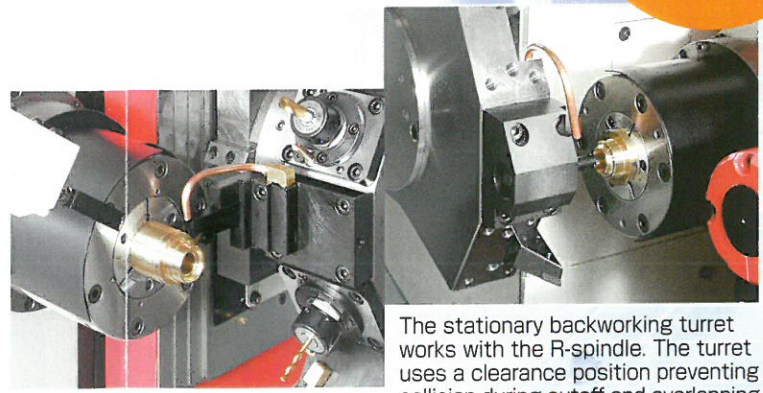
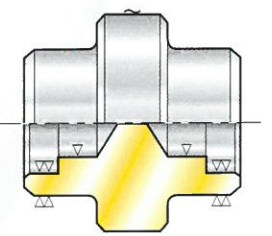


Time Saved by Overlapping Control & Backworking Turret

Machine Type	L-Sp.	Cut off	Bar Feed	Drilling	OD Rough Cut	Boring	OD Finish	Work Eject
2-Sp./1-Turret Machine	Drilling							
2-Sp./2-Turret BNJ Series	Drilling							

Approx. 50%

Work Sample



The stationary backworking turret works with the R-spindle. The turret uses a clearance position preventing collision during cutoff and overlapping machining by the R-spindle.

