



TSUGAMI
AMERICA

B0325V-III

CNC PRECISION AUTOMATIC LATHE

- 32mm Capacity Swissturn
- 29 Tool Positions Standard, Optional 35
- Direct Drive Rotary Guide Bushing
- High Rigidity Bed
- FANUC 0i-TF Plus CNC Control

tsugamiamerica.com

B0325V-III

5-AXIS VERTICAL GANG TOOL SWISS CNC LATHE

SPEED

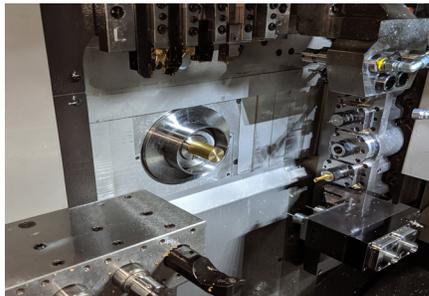
- The B0325V-III is chucker convertible with horizontally opposed guide rails on the vertical gang tool which provides the quickest possible chip to chip time.
- Optional live tooling on the sub spindle tool post can allow milling operations traditionally performed on the main spindle to be carried out on the sub spindle, drastically reducing your cycle time.
- Other features include integral spindle motors and an integral motor driven bushing for the fastest possible acc/dec times and quick C-axis positioning.

ACCURACY

- Tsugami has long been known for machine accuracy over time. The symmetrically designed castings, spindle cooling, A-frame design of the gang slide and thermal compensation on some models all work in concert to provide long term repeatable accuracy.

RIGIDITY

- The Tsugami B0325V-III is built for the long haul. It features rugged construction, massive base and axis castings, belt free integral motor spindles, live tools, and integral motor drive bushing.
- Built on a heavy duty one piece cast iron base with thermally symmetrical construction, this machine features 0.1 micron axis resolution. A more rigid platform allows higher speeds and feeds.
- For extra peace of mind, the machines, motors, and FANUC controls are covered by an industry leading two-year parts and service warranty.



B0325V-III Tool Zone



B0325V-III Backworking Block

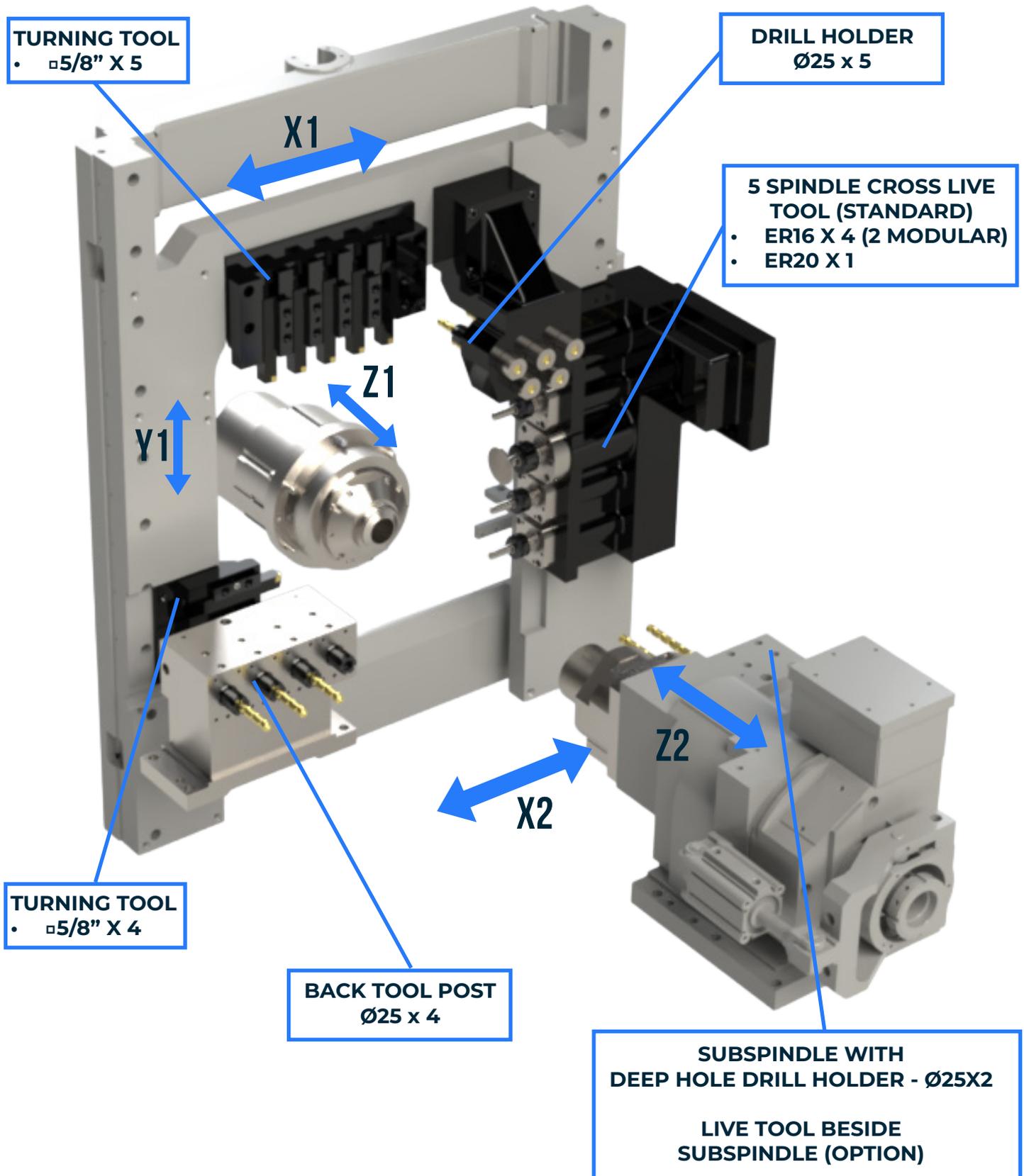


Deep Hole Drilling



Servo Driven Guide Bushing

WORK ZONES & MODULAR TOOLING



ACCESSORIES

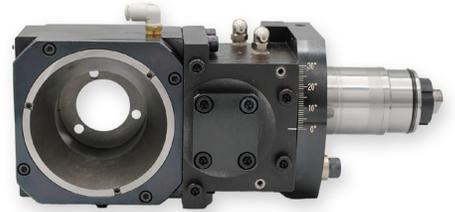
Your B0325V-III can be accessorized with various tooling options. Some of these options include:



Double Face Spindle



Quick Change Tooling



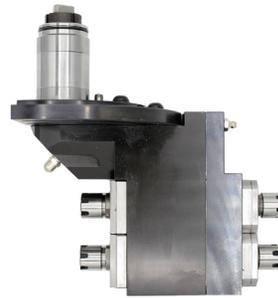
Thread Whirling Head



Back Tool Spindle*



Back Cross Tool Spindle*



Double Angular Drilling Head



Static Adapter*

**Live Backworking Kit Option Required*

Our team can create anything needed to transform your tool zone to fit your part and process.

NEED SOMETHING CUSTOM?

From the machine Make Ready process, to integrating mechanical and robotic loading and unloading systems, to custom tool creation and spindle repair, IMG is dedicated to supporting all Tsumagi users in North America!



Grinding Room



Make Ready Facility

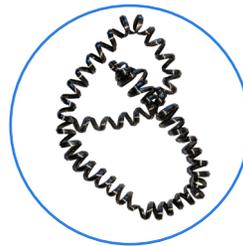


Milling Room

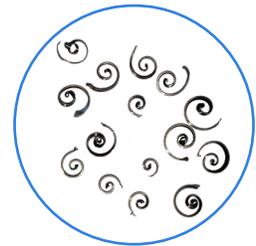
OSCILLATION CUTTING

Oscillation Cutting is a technological breakthrough that oscillates a servo axis to help break chips in tough to cut materials, reduces heat in the cut, while not diminishing tool life.

- Productivity is increased by significantly reducing operator interruption to remove hanging or bird nesting chips.
- Easy to program by special G code
- Oscillation parameters can be changed easily within the program for machining multiple features with multiple tools.
- Can be used for many machining operations including OD turning, drilling, boring, grooving, cutoff, circular interpolation, and most FANUC canned cycles.



**WITHOUT
OSCILLATION**

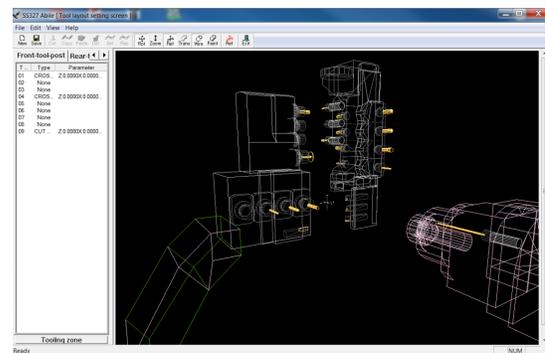


**WITH
OSCILLATION**

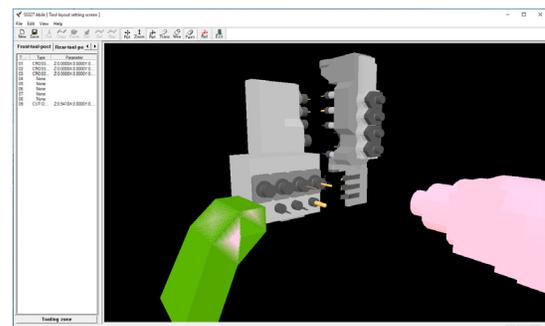
AVAILABLE ON ALL PATHS

ABILE SOFTWARE

- Developed by Tsugami, Abile is capable of programming moderately complex machined parts. Abile incorporates all basic machines featured and several material types with predetermined feed rates.
- Abile allows first time users to quickly become proficient with Swiss processing despite having limited knowledge. Abile comes free with your machine purchase and requires no license fees, maintenance agreements, or seat limitations.
- Abile allows you to generate a 2 or 3-path part program, complete, with specific and editable codes in standard FANUC G Code format. Abile automatically generates machine process and provides component run times.



Program Generator



Tool Setting

MACHINE STANDARD SPECIFICATIONS

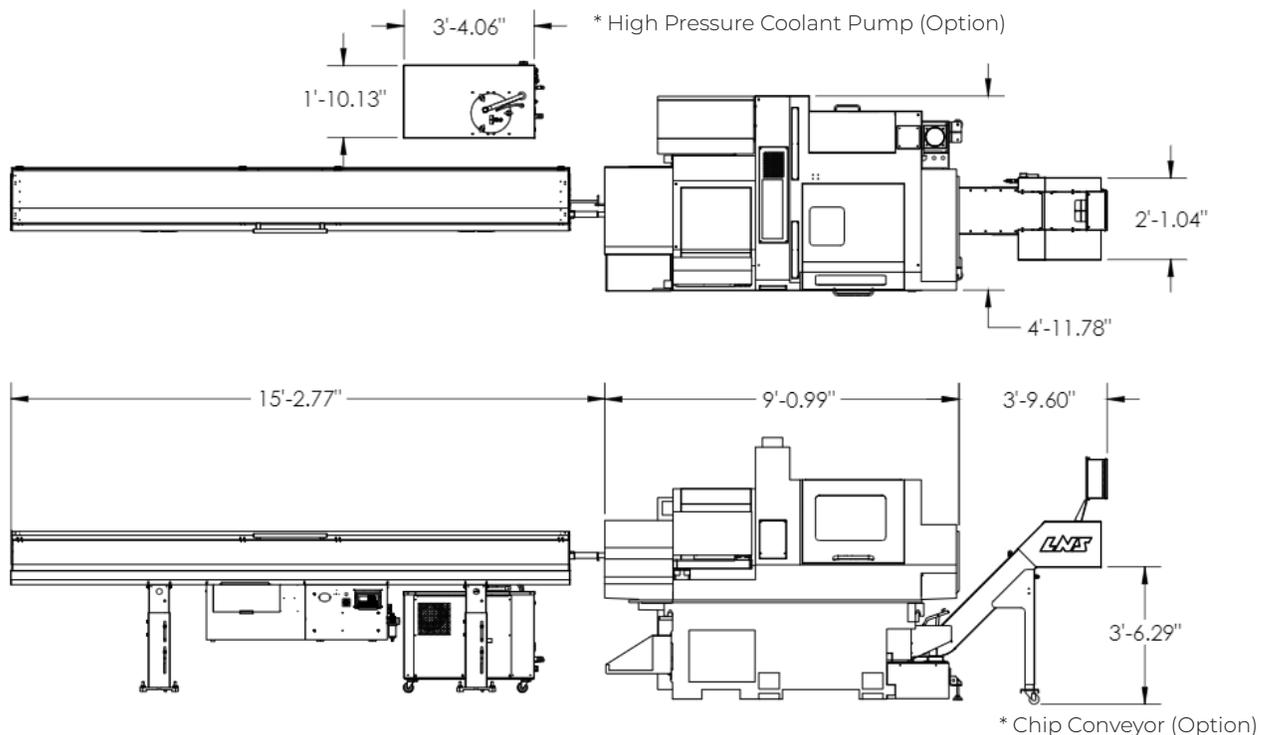
	ITEMS	B0325V-III
MACHINING RANGE	Max. Chucking Barstock Diameter	1.25 in (32 mm)
	Max. Machining Length	330 mm (with Guide Bushing) 70 mm (without Guide Bushing)
	Max. Drilling Diameter	Ø12
	Max. Tapping Diameter	M10
	Max. Back Spindle Chucking Barstock Diameter	Ø32
	Max. Back Spindle Drilling Diameter	Ø10
	Max. Back Spindle Tapping Diameter	M10
	Max. Tool Spindle Drilling Diameter	Ø8
	Max. Tool Spindle Tapping Diameter	M6
MACHINING CAPABILITY	Max. Tool Spindle Slotting Cutter Diameter	Ø45 (T23)
	Main Spindle Speed	8,000 rpm
	Back Spindle Speed	8,000 rpm
	Tool Spindle Speed	6000 min-1 (Normal speed 4800 min-1)
	Total Tool Number (Standard Spec.)	29
	Tool Size	5/8" x 5/8" (8 pcs)
	Rapid Traverse Rate	32 m/min (X1, Z1, 24 m/min)
	Spindle Index	C1 Axis & C2 Axis
	MOTORS	Main Spindle
Back Spindle		3/5 Hp (2.2/3.7 kW)
Cross Drill of Front Tool Post		200 to 6,000min-1 (Normal spindle speed 4,800min-1)
Rotary Guide Bushing		1 Hp/ 2 Hp (0.75/1.5 kW)
X1, Y1, Z1, X2, Z2 axis		1 Hp (0.75 kW)
Coolant Pump		0.5 Hp (0.4 kW)
Lubricating Pump		3 W
OTHER	Compressed air requirement	0.4 MPa or above
	Air discharge rate	100 NL/min
	Power Source Requirements	14.3 kVA
	Coolant Tank Capacity	260L
	Width x depth x height	88 x 60 x 81 in 2,240 x 1,515 x 2,050 mm
Weight	10,031 lbs. (4,550 kg)	

NC SPECIFICATIONS

ITEMS

B0325V-III

NC Unit	FANUC Oi-TF Plus
Axis Name	X1, Y1, Z1, X2, Z2, C1, C2
Least Input Increment	0.001mm (Diometrical designation for X1, Y1, X2 axes)
Least Command Increment	X1, X2, Y1 axes 0.0005 mm, other axes 0.001 mm
Maximum Programmable Value	±8 digits
Interpolation Method	Linear/circular
Feedrate Function	1 - 6,000 mm/min
Feedrate Override	0 to 150%, 10% step
Dwell	G04, 0 to 99999.999
ABS/INC Command	G04, 0 to 99999.999
Tool Offset Value	±4 digits
Tool Offset Pairs	99
LCD/MDI	10.4" color LCD
Display Language	English
Part Program Storage	Size 1mb
Registerable Programs	63 (main/back in total)
Spindle Function	S Code 4 digit
Tool Function	T Code 4 digit



Since 1978, Tsugami America (formerly known as Tsugami/Rem Sales) has been the exclusive source for Precision Tsugami CNC machine tools in North America. Headquartered in Windsor, CT, Tsugami America provides machine tools and engineering expertise through an extensive network of authorized distributors and technical centers. Technical support and customer service are available throughout North America. Our distributors' trained service personnel provide technical support throughout the long life-cycle of our Tsugami machine tools, and work hand-in-hand with Tsugami America's engineers to deliver common-sense solutions to everyday problems.

Our application engineers help customers tackle and solve the toughest high-precision manufacturing challenges, on-time and on-budget. We have a 40-year history and reputation of serving the needs of small parts manufacturers in North America with the highest level of expertise and customer care. Our industry-respected, knowledgeable staff is comprised of both long-time employees and fresh faces all who share a commitment to provide you, our customers, with the competitive advantage to "do more with less" every day.

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