TSUGAMI
Rem Sales, LLC

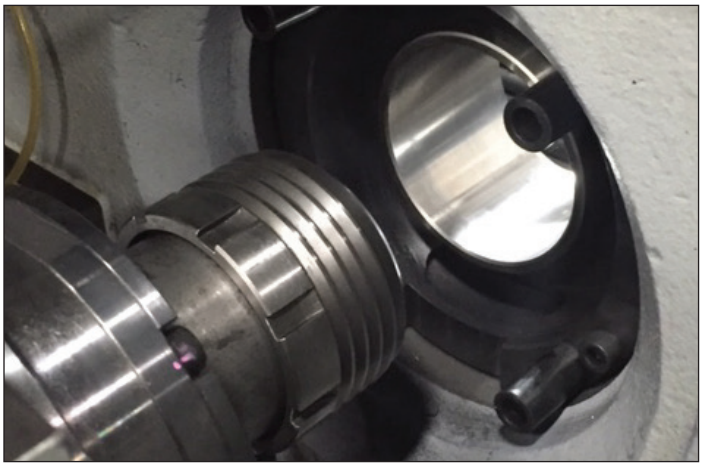
B0325B-III

CNC Precision Automatic Lathe

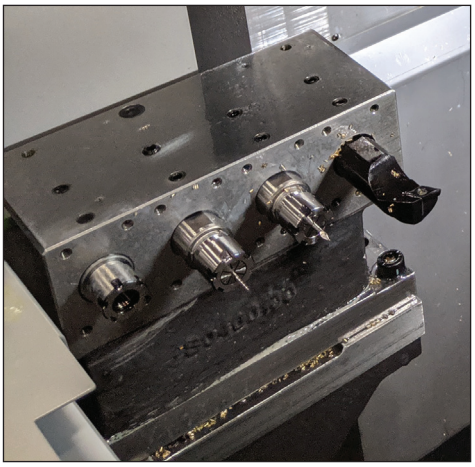
Speed. Accuracy. Rigidity.

- 32mm Machining Capacity
- Electronic Integral Motor Guide Bushing
- Easy Access Tool Zone
- Chucker Convertible – in Minutes
- Rapid Traverse Rate of 35 m/min
- FANUC 32i-B Control

THE RIGHT INGREDIENTS FOR SUCCESS



Chucker Convertible - in Minutes



Backworking Block

Flexibility

In today's competitive global environment, your business can change daily. The good news is, your Tsugami can be reconfigured in minutes to meet new requirements. The included Chucker Kit allows you to convert your Tsugami B0325B-III from a Swissturn to a lathe in no time. Twelve main side turning tool positions offers the most turning positons in its class, giving you the benefit of more flexibility for the week to week changes in your manufacturing schedule.

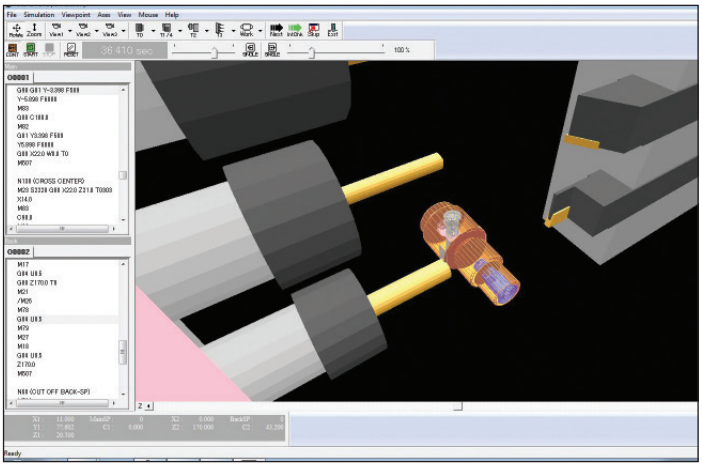
Changeover

The B0325B-III is quick and easy to change over. The machine features a wide opening door for easy access, right hand configuration, long headstock stroke for convenient access to the headstock collet and bushing, easy access to sub spindle tooling, and opposed gang tool positions for maximun flexibility. The Program Check Function, which allows new programs to be quickly and safely proven out, is included as standard.

Overlap – Cycle Time Reduction

Better overlap capabilities mean more work is done internal to the cycle time. With the B0325B-III's rigid, sub side tool block which holds 4 tool positions, reduction in cycle time can be dramatic. Large linear guides, a three toggle collet clamping system, and extra ribbing in the base are just a few of the Tsugami B0325B-III's engineering advancements made for optimal workholding, bigger drills, and heavier cuts.

Tsugami B0325B-III Tool Zone



Abile Part Programming Software Included

Speed

Your B0325B-III features a state of the art FANUC CNC control for low idle times and high speed cutting. The horizontally opposed guide rails on the gang tool layout offers quick tool to tool times and therefore the quickest possible chip to chip time. The B0325B-III has sub side tools for your traditional turning and ID work. 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.

Precision

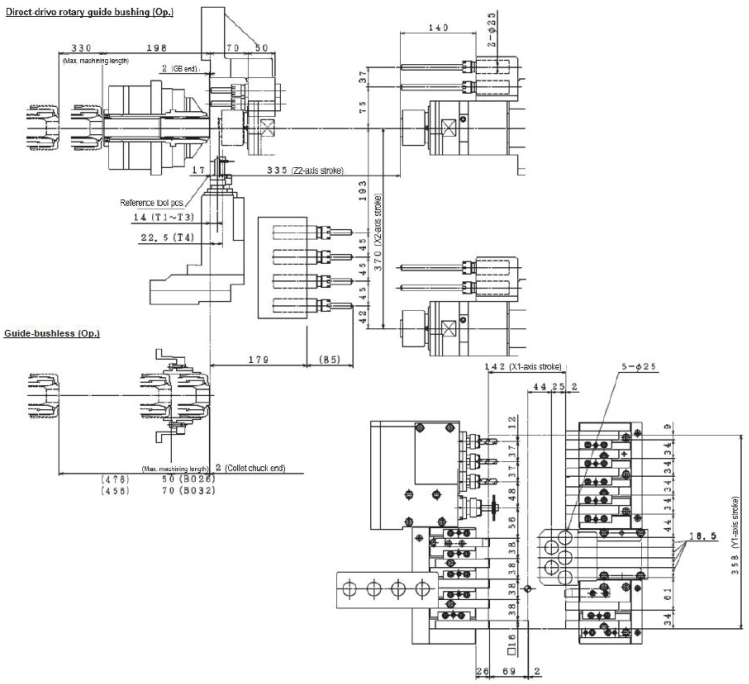
Tsugami has the most rigid gang tool post in the industry. The B0325B-III is built on a heavy duty cast iron base, has thermally symmetrical construction and features 0.1 micron resolution. A more rigid platform allows higher speeds and feeds. Thermal Displacement Compensation is included on this model.

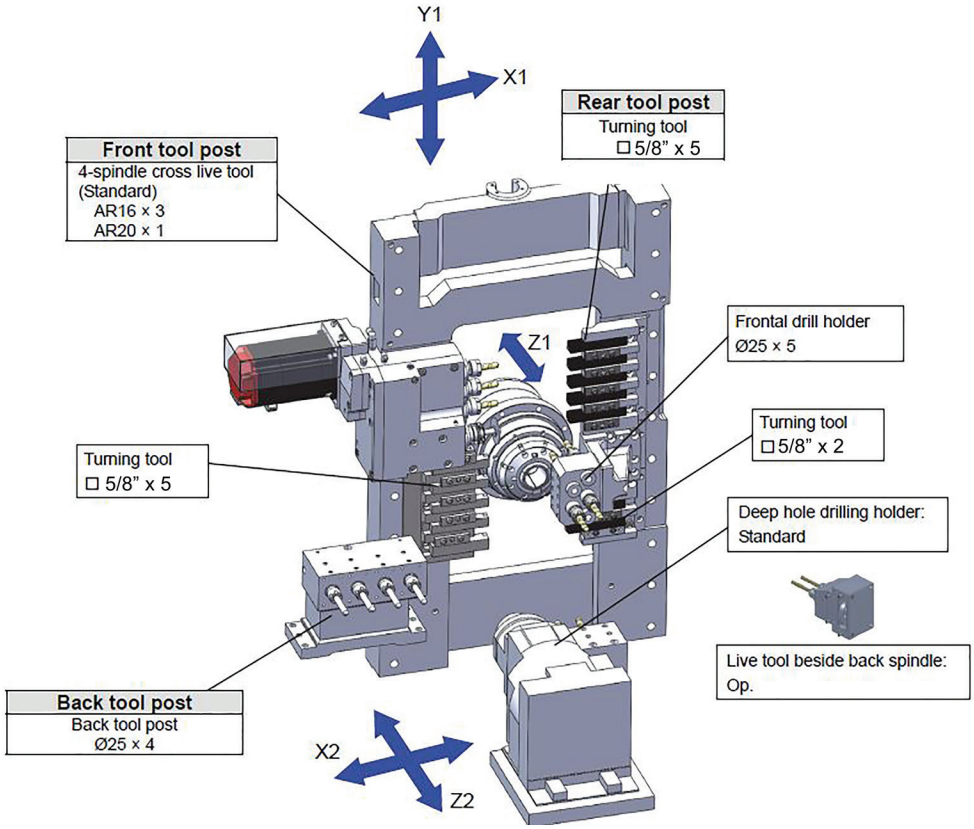
Reliability

The Tsugami B0325B-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. For extra peace of mind, the machines, motors, and controls are covered by Tsugami/Rem Sales' two-year parts and service warranty.

WORK ZONES / MODULAR TOOLING

B0265B-III/B0325B-III Tooling Zone

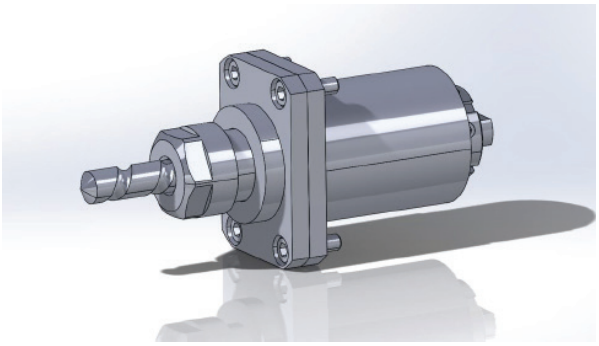




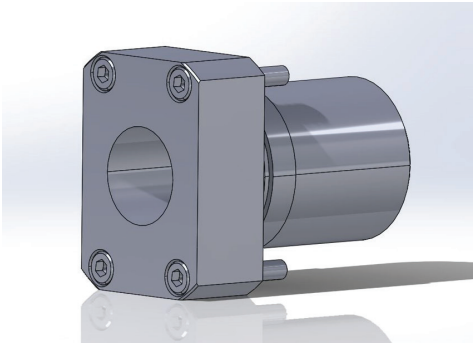
B0325B-III

Accessories

Your B0325B-III can be accessorized with various tooling options. Some of these options include:



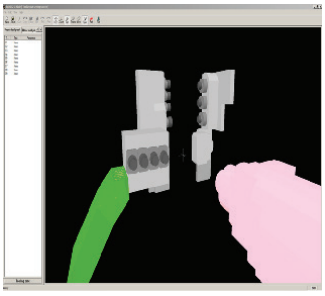
Back Tool Spindle



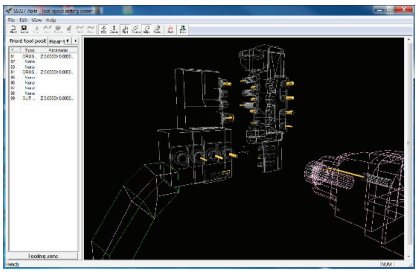
Static Adapter

Abile Programming Software

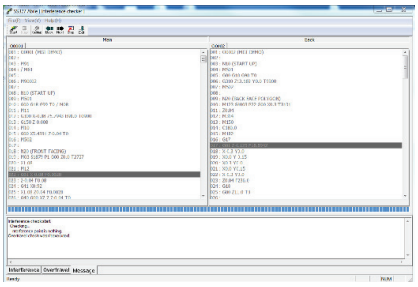
Abile is an easy to learn programming software, specifically designed by Tsugami Engineers for each machine model and included with your Tsugami machine purchase at no added cost. Abile Programming Software can be used to quickly and efficiently program basic Swiss parts on your Tsugami machine and its a great estimating tool for quoting jobs. Because of the software's ease of use, it is perfect for first time Swiss programmers. Abile can be used to program 2-path and 3-path Tsugami models and incorporates 3D graphic simulation with interference checking and overtravel detection capabilities.



Tool Setting



Program Generation



Interference Checker

MACHINE STANDARD SPECIFICATIONS

	ITEMS	B0325B-III
Machining Range	Max. Chucking Barstock Diameter	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
	Max. Tool Spindle Slotting Cutter Diameter	Ø45 (T04)
Machine Capability	Main Spindle Speed	8000rpm
	Back Spindle Speed	8000rpm
	Tool Spindle Speed	6000 min-1 (Normal speed 4800 min-1)
	Total Tool Number (Standard Spec.)	31
	Tool Size	5/8" x 5/8" (9 pcs)
	Rapid Traverse Rate	35 m/min (X1, Z1, 24 m/min)
	Spindle Index	C1 Axis & C2 Axis
Motors	Main Spindle	3.7/5.5 kW
	Back Spindle	3.7/5.5 kW
	Cross Drill of Front Tool Post	200 to 6,000min-1 (Normal spindle speed 4,800min-1)
	Rotary Guide Bushing	0.75/1.5 kW (Direct drive guide bushing)
	X1, Y1, Z1, X2, Z2 axis	0.75 kW
	Coolant Pump	0.4 kW
	Lubricating Pump	3 W
Others	Compressed air requirement	0.4 MPa or above
	Air discharge rate	100 NL/min
	Power Source Requirements	22.4 kVA
	Coolant Tank Capacity	260L
	Width x depth x height	2628 x 1280 x 1970 mm 103.5 x 50.4 x 77.5 inch
	Weight	4,000 kg / 8,814 lbs.

NC SPECIFICATIONS

ITEMS	B0325B-III
NC Unit	FANUC 32i-B
Axis Name	X1, Y1, Z1, X2, Z2, C1, C2
Least Input Increment	0.001mm (Diametrical designation for X1, 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	S4-digit
Tool Function	T4-digit

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.

Oscillation Cutting benefits:

- Productivity is increased by significantly reducing operator interruption to remove hanging or bird nesting chips.
- Creates the ultimate solution for materials that are normally difficult to break 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.

OSCILLATION CUTTING

Without Oscillation Cutting

With Oscillation Cutting

"We've seen greatly increased productivity and accuracy of our components. Our B0326-II is presently operating at full capacity 24/7 producing a highly complex part. We love the fact that we save material on the bar ends since the machine operates as a chucker and there is no need to use ground stock. Plus, the controls are easy to operate and we are able to run the machine on an unattended extended shift."

PATRICIA HIRSCH
Owner, Honor Med Maskiner Corp. | Elgin, IL

"One of the things that we've liked about Tsugami machines is that they give us the ability to run overnight, which has greatly reduced our costs and overhead in the business. What it has done for us is allowed us to go from two shifts down to one shift. We now run 4 days a week, only 8 hours a day, as opposed to 2 shifts, 10 hours a day, 4 days a week. "

EUSTACE MOORE JR.
Owner/Founder, Moore's Ideal Products | Covina, CA

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