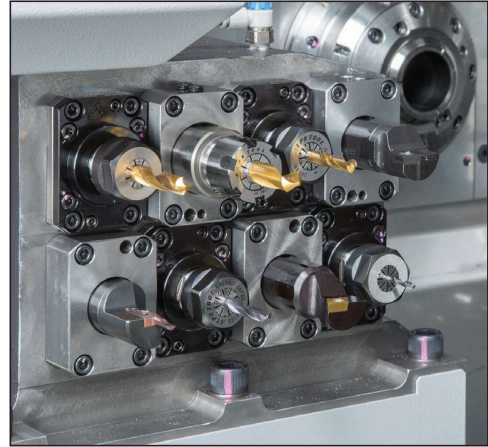


THE RIGHT INGREDIENTS FOR SUCCESS



Chuck Convertible - in Minutes



Backworking Block

Flexibility

In today's competitive global environment, your business can change daily. Your Tsugami can be reconfigured in minutes to meet new requirements. The included Chucker Kit allows you to convert your B0386-III from a Swissturn to a lathe and allows for 42 mm bar to be run through the spindle. Available functions such as thread whirling, polygon machining and angled milling ensure that your B0386-III is ready to tackle whatever job comes in the door.

Changeover

The B0386-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 horizontal tools for ease of setting. The "Program Check Function", which allows new programs to be quickly and safely proven out, is included as standard.

Overlap - Cycle Time Reduction

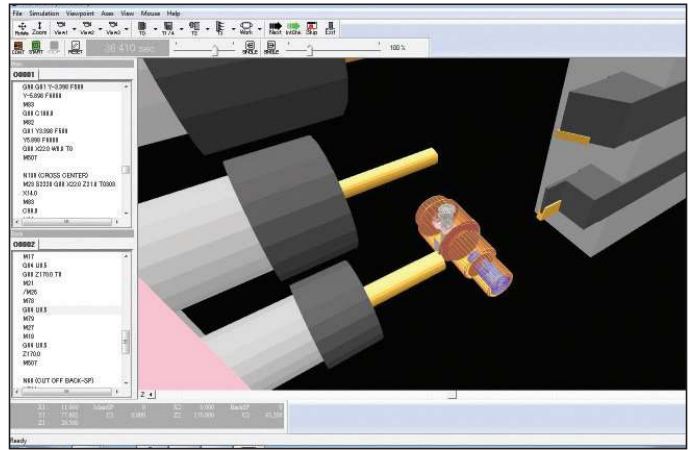
Better overlap capabilities mean more work is done internal to the cycle time. With the B0386-III Y2 axis and its driven tools, reduction in cycle time can be dramatic. Large linear guides, a three toggle clamping system, and extra ribbing under the spindles are just a few of the Tsugami B0386-III's engineering advancements made for optimal workholding, bigger drills, and heavier cuts.



Modular tooling allows you to quickly change over work zone configurations in minutes, optimizing productivity.



Tsugami B0386-III Tool Zone



Abile Part Programming Software Included

Speed

Your B0386-III features a state of the art Fanuc control for low idle times and high speed cutting. The horizontally opposed gang tool layout offers the shortest path tool to tool and therefore the quickest possible chip to chip time. The B0386-III has Y-axis and live tooling on the sub spindle tool post allowing milling operations traditionally performed on the main spindle to be carried out on the sub spindle, internal to the 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.

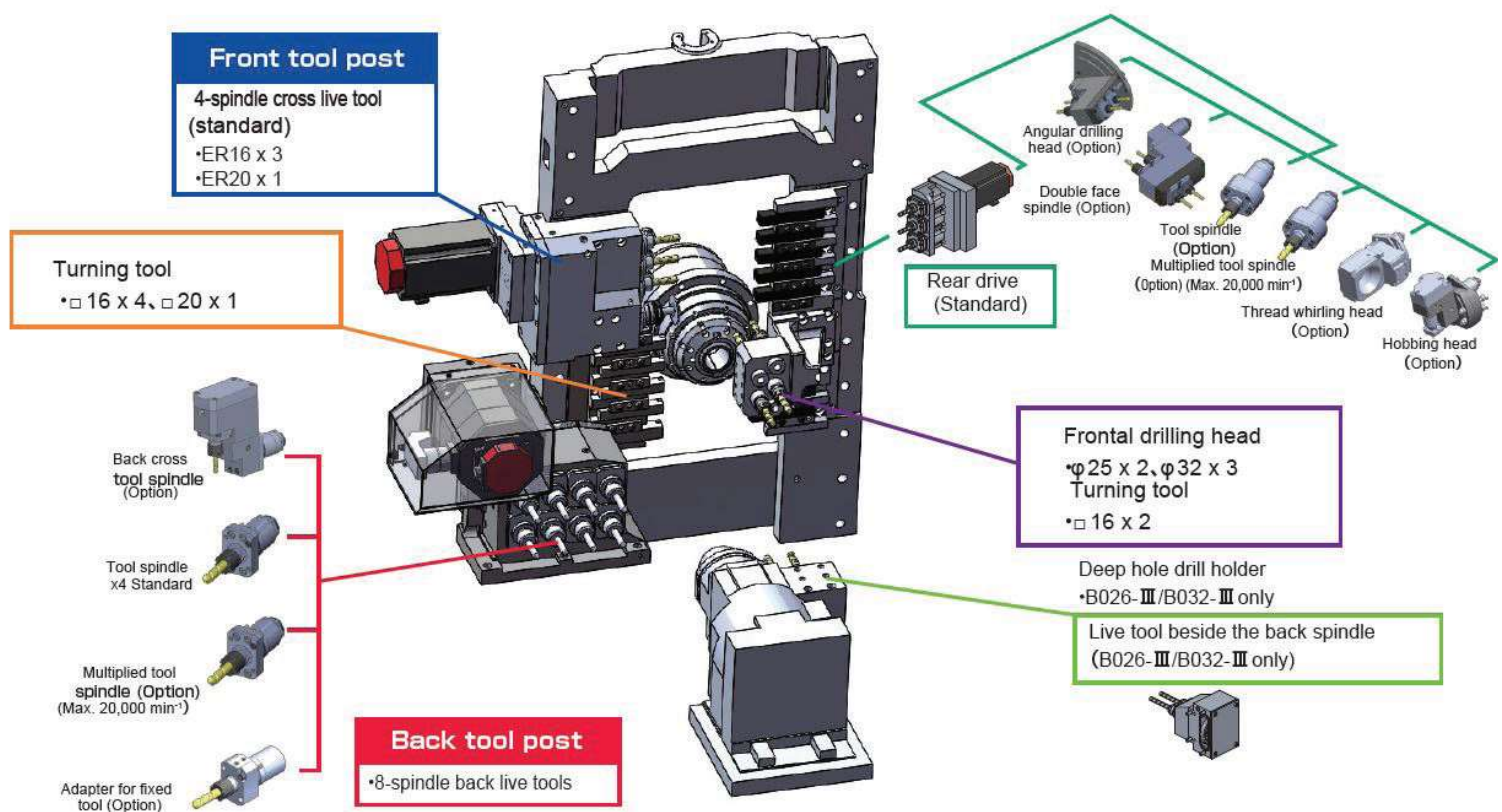
Precision

Tsugami has the most rigid gang tool post in the industry due to opposing rail slides. The B0386-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.

Reliability

The Tsugami B0386-III is built for the long haul. It features rugged construction, belt free spindles, live tools, and integral motor driven bushings. For extra peace of mind, the machines, motors, and controls are covered by an industry leading two-year parts and service warranty.

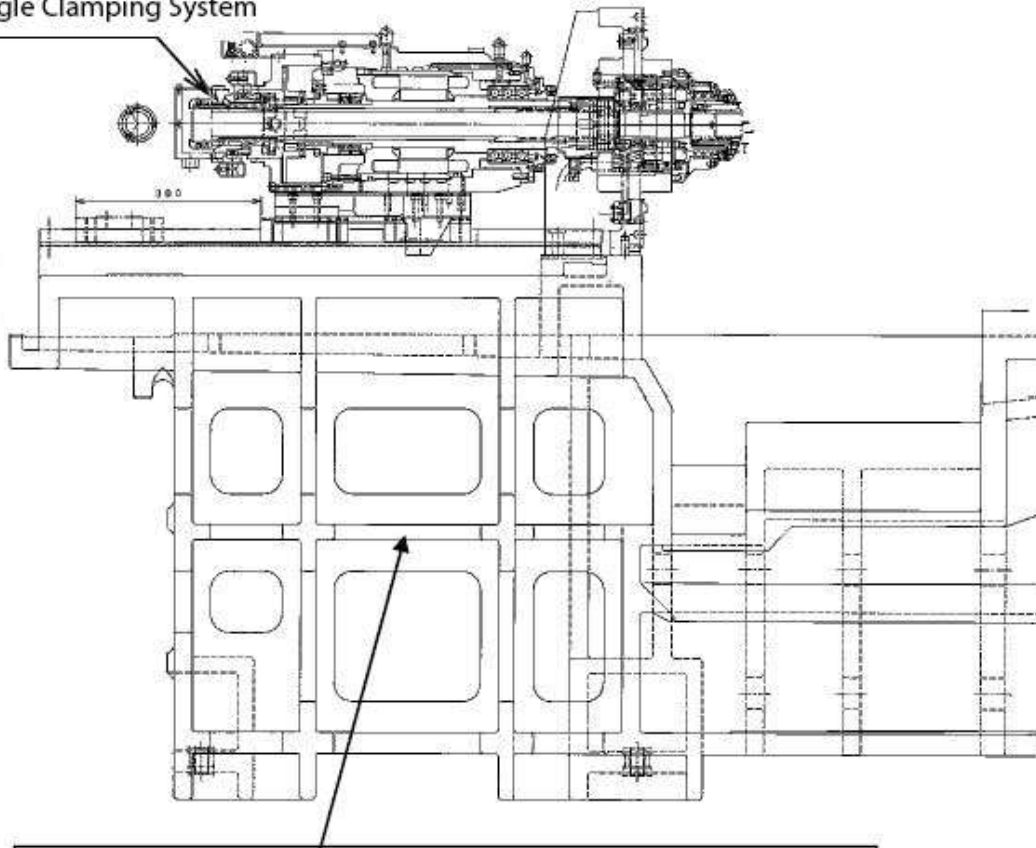
WORK ZONES / MODULAR TOOLING



B0386-III

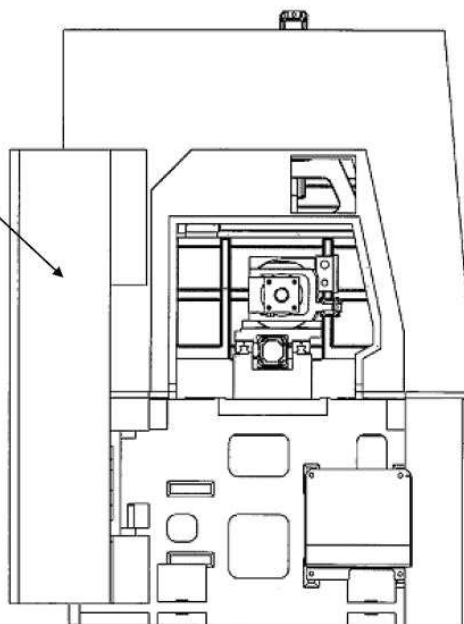
CAPABILITY, FLEXIBILITY, RELIABILITY

3 Toggle Clamping System



Ribs add more rigidity to the bed.

Control Cabinet Location



B0386-III

MACHINE STANDARD SPECIFICATIONS

	ITEMS	B0386-III
Machining Range	Max. Chucking Barstock Diameter	38 mm (with Guide bushing) / 42 mm (without Guide Bushing)
	Max. Machining Length	320 mm (with Guide Bushing), 70 mm (without Guide Bushing)
	Max. Drilling Diameter	Ø13
	Max. Tapping Diameter	M12
	Max. Back Spindle Chucking Barstock Diameter	Ø38
	Max. Back Spindle Drilling Diameter	Ø12
	Max. Back Spindle Tapping Diameter	M12
	Max. Tool Spindle Drilling Diameter	Ø10
	Max. Tool Spindle Tapping Diameter	M8
	Max. Tool Spindle Slotting Cutter Diameter	Ø45 (T4)
Machine Capability	Main Spindle Speed	200 to 6000 min
	Back Spindle Speed	200 to 7000 min
	Tool Spindle Speed	200 to 6000 min-1 (Normal speed 4800 min-1)
	Total Tool Number (Standard Spec.)	29
	Tool Size	16 mm × 100 mm (6 pcs) 20 mm × 125 mm (1 pc)
	Rapid Traverse Rate	32 m/min (X1, Z1, Y1, Y2: 24 m/min)
	Spindle Index	C1 Axis & C2 Axis
Motors	Main Spindle	7.5/11 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)
	Cross Drill of Rear Tool Post Drive	200 to 6,000min-1 (Normal spindle speed 4,800min-1)
	Rotary Tool of Back Tool Post	1.4 kW
	Rotary Guide Bushing	0.75/1.5 kW (Direct drive guide bushing)
	Y2 Axis	0.5 kW
	X1, Y1, Z1, X2, Z2 axis	0.75 kW
	Coolant Pump	0.4 kW
	Lubricating Pump	3 W

NC SPECIFICATIONS

ITEMS	B0386-III
NC Unit	FANUC 32i-B
Axis Name	X1, Y1, Z1, X2, Y2, Z2, C1, C2
Least Input Increment	0.001mm (Diametrical designation for X1, X2 axes)
Least Command Increment	X1, X2 axes 0.0005 mm, other axes 0.001 mm
Maximum Programmable Value	±8 digits
Interpolation Method	Linear/circular
Rapid Traverse Function	32 m/min (X1, Y1, Z1, Y2: 24 m/min)
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	256 Kbytes
Registerable Programs	63 (main/back in total)
Spindle Function	S4-digit
Tool Function	T4-digit