Our customers spoke.

And we heard them, loud and clear.

When our customers give us feedback, we take it seriously. Over the years, we've heard a common refrain: many Okuma customers would love to own a 5-axis machine, but it has simply been out of their price range. Today we are answering that call with the introduction of the new **GENOS M460V-5AX**, a machine that offers unrivaled accuracy and productivity all at an affordable price point.

Made in Japan, the GENOS M460V-5AX is a machine saturated with Okuma DNA making it a technological marvel that delivers swift and efficient parts production for the tightest tolerances. With simultaneous 5-axis machining capability, our customers don't have to compromise to reduce costs. Whether they're manufacturing complex aerospace components or performing one-chuck multi-sided operations, they get superior quality and capability. No matter your machining need, the GENOS M460V-5AX comes with our intuitive, renowned OSP machine control.

That Okuma machine you've always wanted? It's now within reach.

MACHINE SPECIFICATIONS

	Item	Unit	M460V-5AX
Travels	X-axis (saddle left/right)	mm (in.)	762 (30.00)
	Y-axis (pallet front/back)	mm (in.)	460 (18.11)
	Z-axis (spindle up/down)	mm (in.)	460 (18.11)
	A-axis	deg	+20 to –110
	C-axis	deg	360
	Table surface to spindle nose	mm (in.)	100 to 560 (3.94 to 22.05)
Table	Table size	mm (in.)	ø400 (ø15.75)
	Max work size	mm (in.)	ø600 x h400 (ø23.62 x h15.75)
	Floor to table top	mm (in.)	1,050 (41.34)
	Max load capacity	kg (lb)	300 (660)
Spindle	Spindle speed	min^{-1}	15,000
	No. of spindle ranges		Infinitely Variable
	Spindle taper		CAT 40 Big+
	Bearing dia	mm	ø70 [ø70, ø60]
Feed	Rapid traverse	m/min (ipm)	X-Y: 40 (1,575) Z: 32 (1,260)
	Rapid traverse (A-C)	deg/min	A: 14,400 C: 18,000
	Cutting feedrate	mm/min (ipm)	X-Y-Z: 32,000 (1,260)
Motors	Spindle (10min/cont)	kW (hp)	22/18.5 (30/25)
	Feed axes	kW	X-Y-Z: 3.5 A: 4.2 C:3.0
ATC	Tool shank		CAT 40 Big+
	Pull stud		MAS 2 [-]
	Tool capacity	tools	48
	Max tool dia (with adjacent tool)	mm (in.)	ø90 (ø3.54)
	Max tool dia (without adjacent tool)	mm (in.)	ø125 (ø4.92)
	Max tool length	mm (in.)	240 (9.45)
	Max tool weight	kg (lb)	8 (18)
	Max tool moment	N-m (ft-lbf)	7.8 [8 kg x 100 mm] (5.7 [17.6 lb x 3.94 in.])
Machine size	Height	mm (in.)	2,946 (115.98)
	Floor space W x D	mm (in.)	2,160 x 2,810 (85.04 x 110.63)
	Weight	kg (lb)	7,700 (16,975)

[ ] Optional

STANDARD SPECIFICATIONS / ACCESSORIES

Item	Remarks
Spindle speed 50 to 15,000 min	CAT 40 Big+, 22/18.5 kW (30/25 hp)
Rapids X-Y: 40, Z: 32 m/min	(X-Y: 1,575, Z: 1,260 ipm)
Spindle/Spindlehead cooling system	Oil controller
Air cleaner (filter)	Including regulator
Spindle oil-air lubrication system	
A/C axis rotary table	0.0001 deg, includes DD encoders
C axis table	ø400, T groove 18H7 6-tool
Auto tool changer	48-tool
ATC magazine shutter	
Coolant supply system	Tank: 170 L [Effective: 100 L], pump: 250W
Coolant nozzle	Flexible nozzle 5-tool
Dual coil chip augers	Table left/right

Item	Remarks
Chip pan	Effective capacity: 60 L
ATC air blower (blast)	
Chip air blower (blast)	Nozzle type
Foundation blocks (with jack bolts)	8 pcs (with jack bolts)
3-lamp status indicator	Type C (LED signal tower)
Work lamp	LED
Full enclosure shielding	With ceiling
Tapered bore cleaning bar	
Hand tools	
Tool box	
CNC	OSP-P300MA-H
Operation panel with color LCD	
Pulse handle	

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OKUMA OPEN POSSIBILITIES

The 5-axis machine you've always wanted is now within reach.

THE GENOS M460V-5AX



OKUMA OPEN POSSIBILITIES

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HIGH-CALIBER MACHINE CONSTRUCTION, FROM TOP TO BOTTOM.

Robust performance in a smaller footprint.

With its innovative double-column structure, the GENOS M460V-5AX is a sturdy next-generation vertical machining center, but one specifically designed to take up less floor space in your shop. With a full 5-axis simultaneous control system and a thermally stable design, you are granted the ability to process even the most challenging materials and geometry. This uncompromising construction is what makes the M460V-5AX such a machining powerhouse.

Spindle: Match Your Application

From titanium, to aluminum and light alloy applications, to die/molds and small precision parts, the GENOS M460V-5AX is versatile to meet your stringent application requirements. The spindle motor design produces less vibration and power loss at the tool tip, which yields excellent surface finishes and impressive metal removal rates.

Pre-Tension Ball Screws: Exacting Performance Standards

High-precision ball screws generate linear guide movement to all three axes. They are directly coupled to Okuma servomotors, which match the electrical and mechanical prerequisites to meet performance requirements with uncompromising precision.

Massive Trunnion: Superior Accuracy and Machining Capabilities

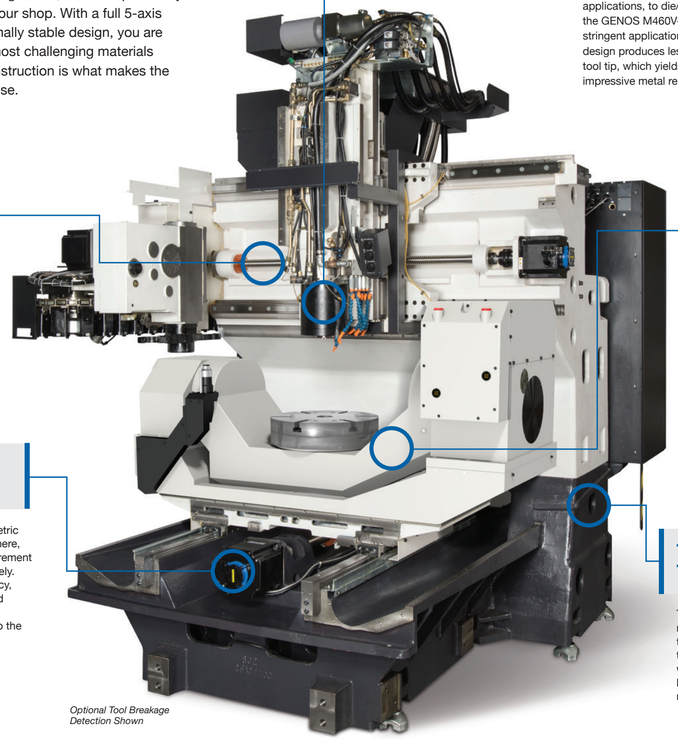
Utilizing a hypoid gear drive, the first-rate trunnion construction offers excellent positioning accuracy, rigidity, and table rotation speed in a more durable design. The only thing more impressive than the resulting accuracy is the speed with which it's delivered.

Auto Tuning System: Total Movement Accuracy

The auto tuning system measures geometric error using a touch probe and datum sphere, performing compensations using measurement results to fine-tune the movement precisely. The end result is a higher level of accuracy, scaled to perfection. In the past, this kind of tune-up required a visit from a service professional. Now you can easily tune-up the machine on your own!

Thermo-Friendly Concept: Temperature-Regulating Design

The machine's thermo-friendly structure allows it to maintain high dimensional accuracy when the room temperature changes. Also, with capability to stabilize thermal deformation due to process or interruption, warm-up time is automatically shortened, and the burden of dimensional correction during machine restart is reduced, too.



Optional Tool Breakage Detection Shown

OKUMA
OPEN POSSIBILITIES



OSP suite

TAKE CONTROL WITH THE OSP CONTROL TECHNOLOGY

Our OSP control lets you follow your instincts.

Okuma's OSP suite is an award-winning system that merges our Intelligent Technologies with various software applications to create a remarkable user experience. Designed by Okuma for Okuma machines, the OSP control is packed with maximum flexibility and efficiency, including:

- **Durable user interface**
- **Individually configurable for up to three operators**
- **One-touch access to the suite app**
- **Documentation stored on the control**

The evolution of our Intelligent Technology is also a bonus for operators. The following innovations can be managed through the OSP control:

- **Thermo-Friendly Concept**
- **Collision Avoidance System***
- **Machining Navi***
- **5-Axis Auto Tuning System**
- **SERVONAVI®**

When combined with our suite of apps, as well as the energy-saving techniques of our ECO suite, the OSP control is yet another way Okuma provides unparalleled value to our customers.

*Optional



The most machine at the best price.

We call this Affordable Excellence. There is so much to love about the GENOS M460V-5AX. To start, the Japanese-made machine offers the highest rigidity and stability possible with its double column cast iron machine bed and a high-speed spindle that comes with a two-year warranty with no shift or hour limitations. That same spindle delivers best-in-class performance, ensuring productivity and accuracy for jobs big and small. Of all the things to love most about the GENOS M460V-5AX, it's probably the price point. In today's market, you simply can't get a machine that does more at a better value.

JOIN THE OKUMA FAMILY.

While the purchase of an Okuma machine is an investment in quality and performance, there's another benefit to ownership that can't be overlooked: becoming a part of the Okuma family. Our vast distribution network, 24/7/365 CARE hotline, and inventory of OEM-certified original parts are just a few examples that illustrate the Okuma Difference. Soon you'll see that we're just as good at building relationships as we are at building machines.

For more product details, please visit www.okuma.com.

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