



GENOS M4000H-e

Horizontal Machining Center

A horizontal machining center that boosts productivity through high machining capacity, agile machine operation, and excellent accuracy stability

Higher productivity through high-efficiency machining

- Equipped with a high-speed, high-torque spindle capable of handling applications from heavy-duty cutting to high-speed machining

Reduced machining time

- Machining time is reduced by minimizing non-cutting time and eliminating unnecessary motion

Stable, high-accuracy machining over extended periods

- The Thermo-Friendly Concept ensures excellent accuracy stability, enabling consistently high-accuracy machining over long operating hours

OPEN POSSIBILITIES

Machining capacity (actual data)

15,000 min⁻¹ Standard spindle (No. 40)

Material: C45

Tool	Spindle speed min ⁻¹	Cutting speed m/min	Feed rate mm/min	Cutting width mm	Cutting depth mm	Chips cm ³ /min
ø80 face mill 8 blades (cermet)	895	225	2,650	56	2.7	400
ø20 roughing end mill 7 flutes (carbide)	4,000	251	5,320	6	20	638
ø35 insert drill (carbide)	880	97	132	—	—	—
Tap M30P3.5	320	30	1,120	—	—	—

Note: The “actual data” referred to above for this brochure represent examples, and may not be obtained due to differences in specifications, tooling, cutting conditions, and others.



Spindle torque/output diagram

• Spindle speed

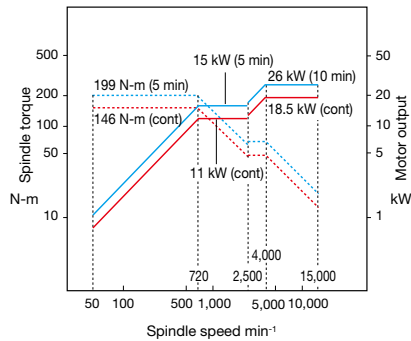
15,000 min⁻¹

• Max output

26/18.5 kW
(10 min/cont)

• Max torque

199/146 N-m
(5 min/cont)



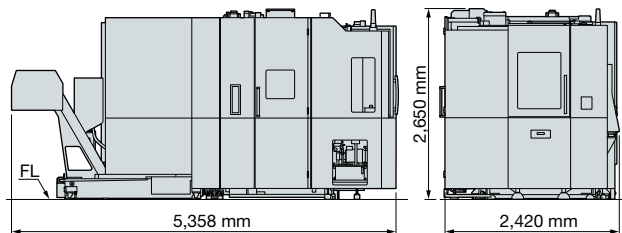
Machine performance

Rapid traverse	X, Y, Z: 60 m/min
Acceleration	Max 1 G
Tool change	*1 T-T/C-C: 1.0/2.6 sec (tool mass less than 4 kg) 1.3/2.9 sec (tool mass more than 4 kg) *2 CTC min: 2.9 sec
Pallet change	*1 6.9 sec *2 7.0 sec

*1. MAS standard measurements (formerly JIS B 6013)

*2. ISO 10791-9 (2001) (JIS B 6336-9) measurements

Dimensional drawings



Machine specifications

	Item	Unit	GENOS M4000H-e
Travels	X-axis (column left/right)	mm	560
	Y-axis (spindle up/down)	mm	560
	Z-axis (table front/back)	mm	625
	Spindle center to pallet top	mm	50 to 610
	Spindle nose to pallet center	mm	85 to 710
Pallet	Pallet size	mm	400 × 400
	Max load capacity	kg	400
	Indexing angle	deg	0.001
	Max workpiece dimensions	mm	ø600 × 900
Spindle	Speed	min ⁻¹	50 to 15,000
	Tapered bore		7/24 taper No. 40
	Bearing dia	mm	ø70
Feed rate	Rapid traverse	m/min	X, Y, Z: 60
	Cutting feed rate	mm/min	1 to 60,000
Motors	Spindle (10 min/cont)	kW	26/18.5
	Feed axes	kW	X:4.6, Y, Z: 3.5
	Table indexing	kW	3.0
Auto tool changer (ATC)	Tool shank		MAS403 BT40
	Pull stud		MAS 2
	Magazine capacity	tools	64
	Max tool dia (w/ adjacent)	mm	ø70
	Max tool dia (w/o adjacent)	mm	ø150*
	Max tool length	mm	300
	Max tool mass	kg	10
	Tool selection		Memory random
Machine Size	Height	mm	2,650
	Floor space; width × depth	mm	2,420 × 5,358
	Mass	kg	9,600
Controller			OSP-P300MA-e

* Tools with diameters between ø70 mm and ø150 mm require empty pots on both adjacent sides.

When exceeding ø110 mm, it requires two empty pots between adjacent tools.

Note: The standard specification includes a drum filter chip conveyor.



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