SMEC

MCV 4500D

DUAL PALLET
VERTICAL MACHINING CENTER

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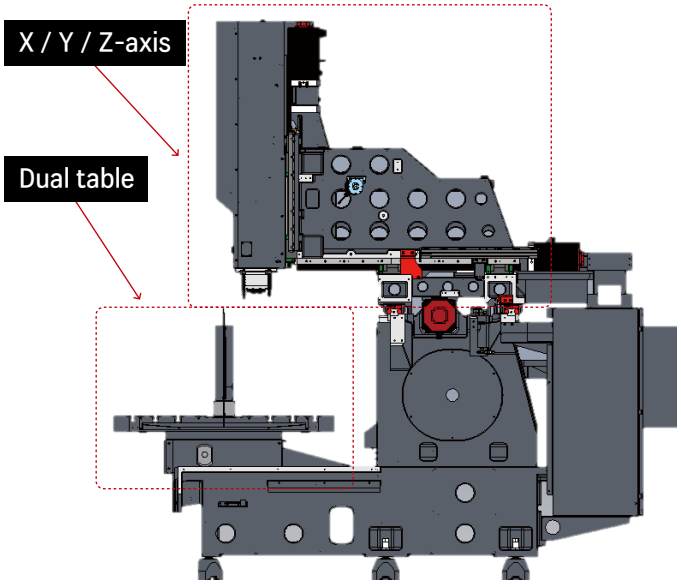
Dual Pallet Type Machining Center



Dual Pallet Type Machining Center
Ideal for Automobile Parts Production

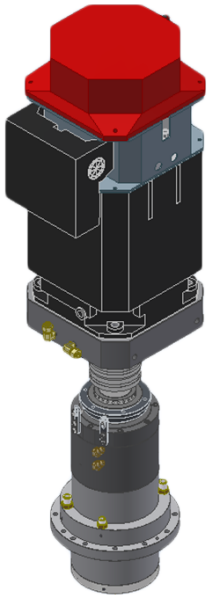
- High rigidity spindle and single piece frame design for high precision machining
- Roller type LM guide with superb response speeds
- High precision machining with low vibration, low thermal growth direct-type spindle
- Low center of gravity bed for easier parts loading/unloading and maintenance

Design



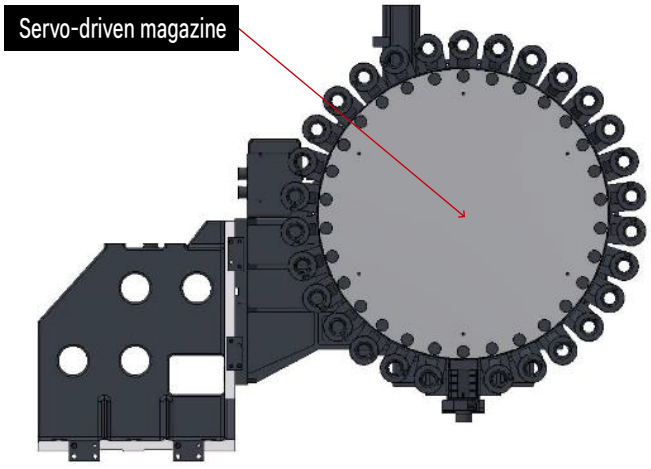
- The separate upper linear (X/Y/Z) axes + lower dual table design enhances precision and stability, while reducing the wear/damage to the slide cover and LM guides from chips and coolant, and extending ballscrew lifetime

Inline Type Spindle



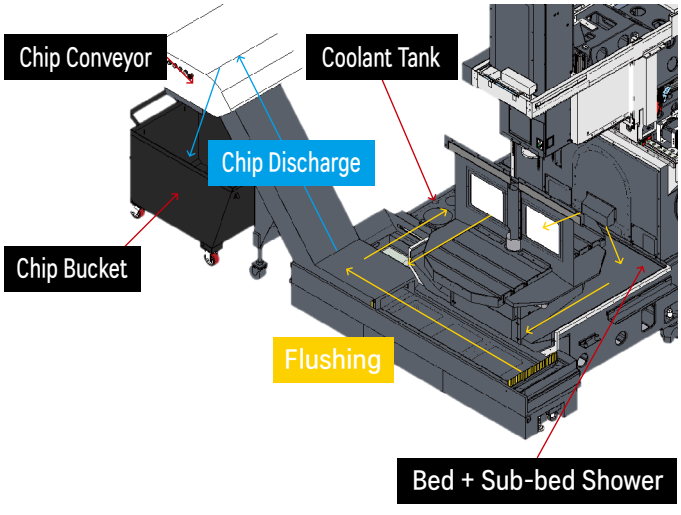
- Rigidity increased by minimizing the preload for high-speed rotation and use of the outer jacket cooling system minimizes thermal growth from the bearings

ATC



- Use of a servo-driven ATC magazine minimizes vibrations caused when preparing the next tool, ensuring high-precision machining

Coolant and Chip Removal



- Placing the chip discharge outlet under the table speeds up chip discharge, and use of a chip conveyor enables immediate chip removal
- Large capacity coolant tank allows for the use of various coolant related options
  STD : head-coolant, bed shower
  OPT : TSC, coolant gun, coolant pump power-up

MCV 4500D Specification

DESCRIPTION			MCV 4500D
Travel	X / Y / Z	mm (inch)	560(+90) / 450 / 475 (22.05(+3.55) / 17.72 / 18.71)
	Spindle nose-table surface	mm (inch)	210 ~ 685 (8.27 ~ 26.97)
Table	Table size	mm (inch)	2,700 x 610 (106.30 x 24.02)
	Max. table payload	kgf (lb)	250 (per table) (551.16)
	Table surface	mm (inch)	2 x 18H8 (0.71H8) T-slot x p125(4.93) x 3ea
Spindle	Speed	rpm	12,000
	Drive type	-	Direct
	Rated power (S1/S2/S3)	kW (hp)	11 / 15 / 18.5 (14.76 / 20.12 / 24.81)
	Rated torque (S1/S2/S3)	Nm (lbs.ft)	70 / 95.5 / 117.8 (51.63 / 70.44 / 86.89)
Feedrate	Rapid traverse rate (X/Y/Z)	m/min (ipm)	36 / 36 / 36 (1,417.32 / 1,417.32 / 1,417.32)
	Cutting feed (X/Y/Z)	mm/min (ipm)	1 ~ 15,000 (0.04 ~ 570.56)
Controller		-	FANUC 0i-MF+
ATC	Tool shank	-	BBT 40
	Tool changing method	-	Double arm swing
	Tool change time (T-T)	sec	1.3(60Hz), 1.6(50Hz)
	Tool storage capacity	ea	30(40,60)
	Toool selection method	-	Memory random
	Max. tool diameter [adjacent empty]	mm (inch)	Ø80 [Ø125] (3.15[4.93])
	Max. tool length	mm (inch)	300 (11.82)
	Max. tool weight	kgf (lb)	8 (17.64)
	Pull stud	-	MAS P40T-1
Electric power supply		kVA	41
Dimensions(L x W x H, Std Machine)		mm (inch)	3,920 x 2,513 x 3,110 (154.33 x 98.94 x 122.44)
Machine weight		kgf (lb)	9,500 (20,943.91)

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YouTube

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※ Design and specifications subject to change without notice.

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