



PUMA V400P

High Productivity Vertical Turning Center



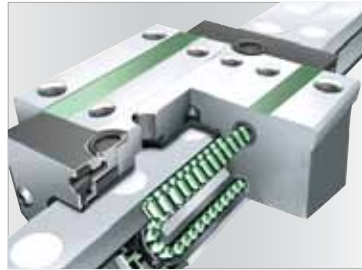
Doosan Machine Tools

Optimal Solutions for the Future

PUMA V400P

PUMA V400P is vertical turning center that has maximized productivity & serviceability, using roller type LM guide for all axis, so increased rapid traverse, acceleration and deceleration.

Rigid structure for improving productivity



Roller type LM guide and upgraded servo motor, based on meehanite cast iron bed with rigid heavy-rib structure, optimized for improving productivity

Rapid Traverse (X / Z axis)

24 m/min

Power of axis motor

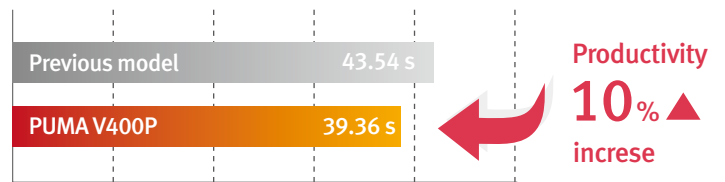
X axis **3 kW**
(4.0 Hp)

Z axis **7 kW**
(9.4 Hp)

The result of increasing productivity

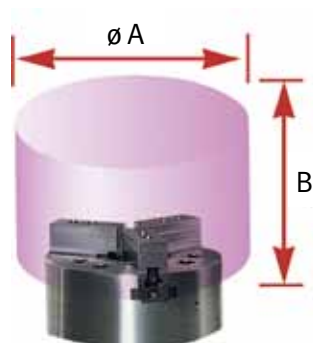


Machining time for brake disc



* Test result by own standard.

Machining range



A : Max. turning diameter

496 mm
(19.5 inch)

B : Max. turning length

461 mm
(18.1 inch)

Main Spindle



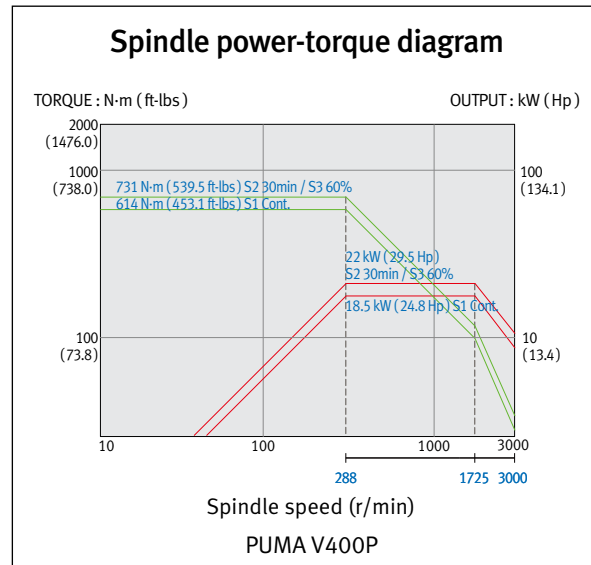
The cartridge type spindle with A2#8 spindle nose assures high capability and easy of maintenance. Especially rigid coupled bearing assembly is to support heavy weight workpiece and reduces thermal growth in long run operation.

Max. spindle speed

3000 r/min

Spindle motor power (30 min)

22 kW (29.5 Hp)



Turret



Index time
(1-station swivel)

0.15 s

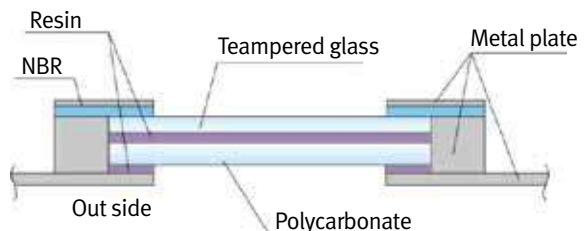
No. of tool station

12 ea

The large 12 station heavy duty turret features a large diameter Curvic coupling and heavy duty design with unsurpassed rigidity. Turret rotation, acceleration and deceleration are all controlled by a reliable high torque servo motor.

Unclamp and rotation are virtually simultaneous. Its fast index response reduces the total cycle time Double-

Safety Design



The operator safety can be enhanced through the front door with its shock absorbing laminated glass and double panel construction. The windows without grating also provide a clear view of the machine inside.

Machine Specification

Feature		Unit	PUMA V400P	
Capacity	Swing over bed	mm (inch)	610 (24.0)	
	Swing over saddle	mm (inch)	500 (19.7)	
	Recom. Turning diameter	mm (inch)	305 (12.0)	
	Max. Turning diameter	mm (inch)	496 (19.5)	
	Max. Turning length	mm (inch)	461 (18.1)	
	Chuck size	mm (inch)	305 (12)	
Travels	Travel distance	X-axis	mm (inch)	268 (10.6)
		Z-axis	mm (inch)	488 (19.2)
Feedrates	Rapid Traverse Rate	X-axis	m/min	24 (0.9)
		Z-axis	m/min	24 (0.9)
Main spindle	Max. Spindle speed	r/min	3000	
	Spindle nose	ASA	A2-8	
	Spindle bearing diameter (Front)	mm (inch)	130 (5.1)	
	Spindle through hole	mm (inch)	90 (3.5)	
Turret	No. of tool stations	ea	12	
	OD tool size	mm (inch)	25 x 25 (1.0 x 1.0)	
	Max. boring bar size	mm (inch)	50 (2.0)	
	Turret Indexing time (1 station swivel)	s	0.15	
Motors	Main spindle motor power (30min./ cont.)	kW (Hp)	22 / 18.5 (29.5 / 24.8)	
	Coolant pump motor power	kW (Hp)	0.4 / 0.9* / 1.5* / 2.2* / 3.7* / 5.5* / 7.5* (0.5* / 1.2* / 2.0* / 3.0* / 5.0* / 7.4* / 10.1*)	
Power source	Electric power supply (rated capacity)	kVA	42.2	
Machine Dimensions	Length	mm (inch)	1455 (57.3)	
	Width	mm (inch)	2075 (81.7)	
	Height	mm (inch)	3210 (126.4)	
	Weight	kg (lb)	6000 (13227.5)	
NC system			DOOSAN-FANUC i	

* options

Standard Feature

- Coolant supply equipment
- Full enclosure chip and coolant shield
- Hand tool kit, including small hand tool for operations
- Hydraulic chuck & actuating cylinder
- Hydraulic power unit
- Leveling jack screw & plates
- Lubrication equipment
- Soft jaws (total)
- Standard tooling kit (tool holders & boring sleeve)
- Work light

Optional Feature

- Air blast for chuck jaw cleaning
- Automatic door
- Automatic door with safety device
- Chip conveyor & Chip bucket
- Coolant flushing
- Dual chucking pressure
- Hardened & ground jaws
- Manual tool presetter
- Oil skimmer
- Signal tower (yellow, red, green)
- Chuck clamp confirmation
- Special chucks



Doosan Machine Tools

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* For more details, please contact Doosan Machine Tools.

* The specifications and information above-mentioned may be changed without prior notice.

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