

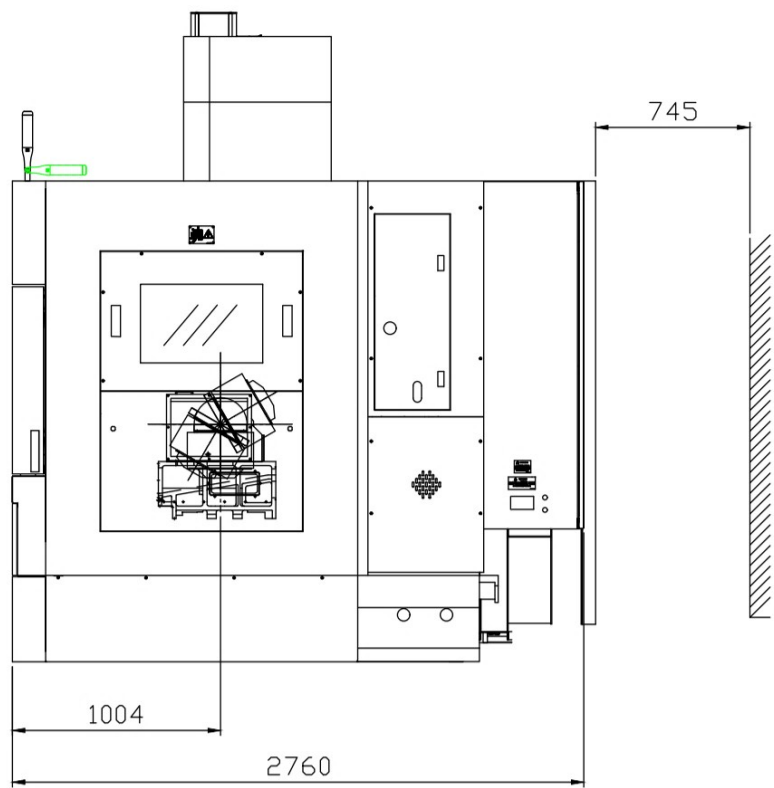
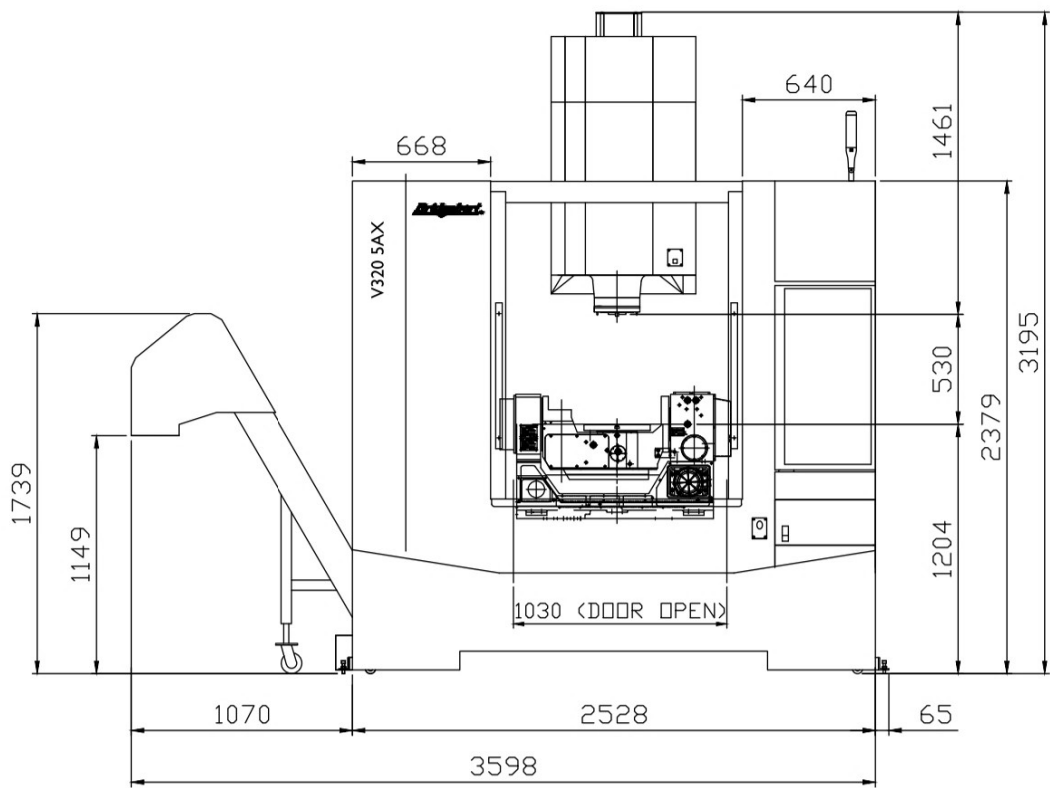
BRIDGEPORT V SERIES

PERFORMANCE
VERTICAL MACHINING CENTER

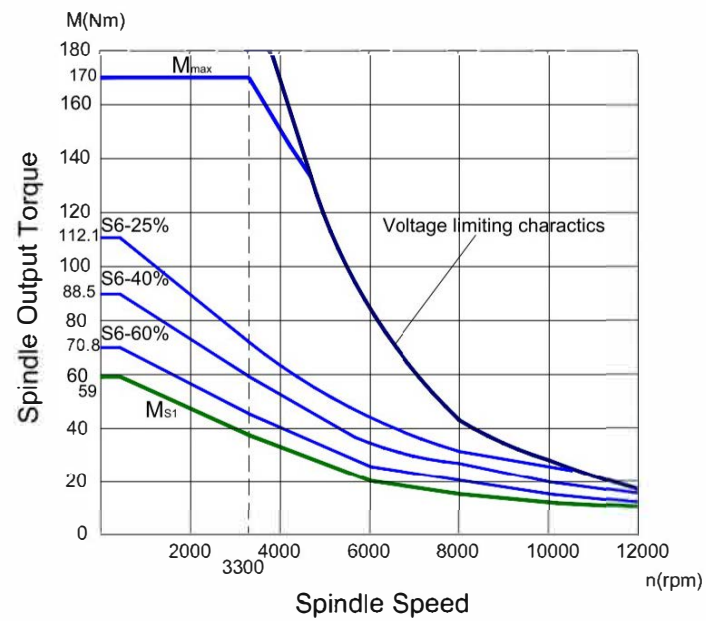
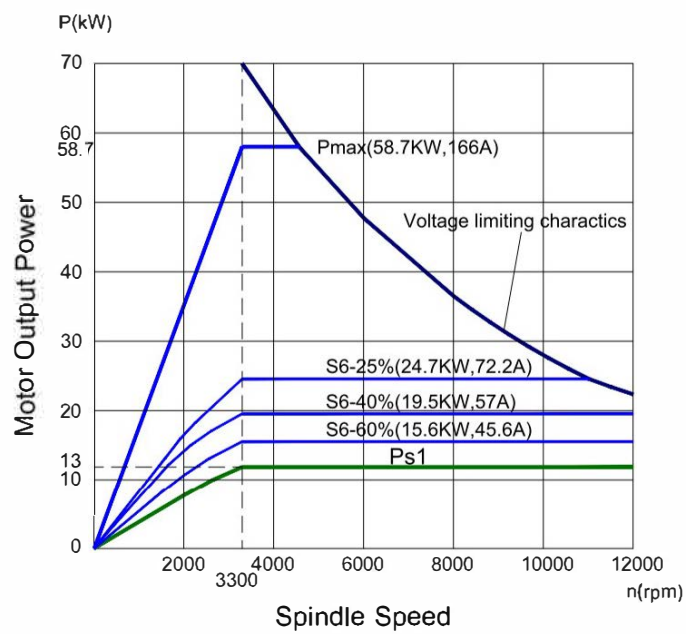
V320 5AX



■ Floor Plan Dimensions



Spindle Output Diagram



Siemens 1PH8107 Spindle Motor

Machine Specification

Machine Model	V320 5AX	unit
Travels		
X-Axis	510	mm
Y-Axis	610 (+/- 305)	mm
Z-Axis	510	mm
Max. Swing diameter	Ø 407	mm
Spindle Nose To Table @ 0 deg.	20 - 530	mm
Spindle Nose To tilting @ 90 deg.	20 - 530	mm
Y-Axis Throat Distance	628	mm
5 Axis Rotary Table		
Table Diameter Size	320	mm
Tilting Degree (A Degree)	+30° ~ -120°	
Table Rotation Degree (C Degree)	360°	
Max. Work Piece Range Diameter x Height	Ø 400 x 320	mm
Load Capacity	Vertical: 100, Horizontal: 150	kg
T-Slots (Size x Number of Slot)	12 mm x 4	
Clamp Torque in Rotary (C axis)	70 Kg-m	
Clamp Torque in Tilt (A axis)	140 Kg-m	
Spindle Transmission		
Taper	NO.40 (BBT40)	
Speed Range (Max. RPM)	10000	rpm
Lubrication	10000-Grease, 12000-Grease	
Transmission	Coupling (HT Spindle)	
Automatic Tool Changer (ATC)		
Tool Capacity	30 Tools	
Type	Swing Arm	
Pull Stud Type	1.BT or Modified BT for CAT & ANSI 2.DIN (SK)	
Tool Selection	Bi-directional	
Max. Tool Diameter (Full Drum)	75	mm
Max. Tool Diameter (Adj. Pockets Empty)	150	mm
Max. Tool Length	240	mm
Max. Tool Weight	7	kg
Axes Drives		
X-Axis Servo Motor	3.1	kW
Y-Axis Servo Motor	3.1	kW
Z-Axis Servo Motor	4.9	kW
Table Rotation Servo Motor (C axis)	1.5	kW
Table Tilting Servo Motor (A axis)	2.3	kW
X, Y, Z-Axis Rapid Traverse Rate	X, Y= 43/ Z= 36	m/ min
X, Y, Z-Axis Maximum Feedrate	16	m/ min
C Axis Rapid (Rotary)	25	rpm
A Axis Rapid (Tilt)	25	rpm

※ To keep improvement and developing new functions, Bridgeport Machine Company reserves the rights to change specifications without further notice.
※ Due to varying cutting conditions, actual results may be greater or less than those listed.

Machine Model	V320 5AX	unit
Accuracy		
X, Y, Z-Axis Positioning , Full Travel (ISO 230-2) (with scale)	0.004	mm
X, Y, Z-Axis Repeatability (ISO 230-2) (with scale)	0.003	mm
A Axis Positioning	30 (with scale) arc sec	
C Axis Positioning	20 (with scale) arc sec	
A Axis Repeatability	4 (with scale) arc sec	mm
C Axis Repeatability	4 (with scale) arc sec	mm
X, Y, Z-Axis Positioning , Full Travel (ISO 230-2) (without scale)	0.005	
X, Y, Z-Axis Repeatability (ISO 230-2) (with scale)	0.004	
A Axis Positioning	60 (with scale) arc sec	
C Axis Positioning	20 (with scale) arc sec	
A Axis Repeatability	8 (with scale) arc sec	
C Axis Repeatability	6 (with scale) arc sec	
General Specifications		
Machine Weight (Estimated)	7405	kg
Machine Overall Length (Estimated)	3663 (Include the Chip conveyor)	mm
Machine Overall Depth (Estimated)	2670	mm
Machine Overall Height (Estimated)	3195	mm
Coolant Tank Capacities	300	liter
Compressed Air Require (Min.)	6	bar
Power Requirements (Fla/ Volts/ Phase)	47 amp/ 400 volt/ 3 phase	

Standard Features

- Manual Central Grease Lubrication (X/Y/Z Axes)
- Work Light
- Spindle Taper Cleaner
- MPG Hand Wheel
- Ethernet Connection
- Stack light (3 colours)

Optional Features

- Automatic Central Grease Lubrication (X/Y/Z Axes)
- Auto Power Off
- Too/Part Probe
- Electrical Cabinet Chiller
- Spindle Oil Chiller
- Cutter Air Blast (Spindle side)
- Coolant Through Spindle
- Chip Flush System
- Chip Conveyor: Hinge/ Scraper/ Complex Type
- Linear Optical scale (X/Y/Z Axes)
- Front Door Auto door with Light Curtain



COLCHESTER MACHINE TOOL SOLUTIONS

Lowfields Way, Lowfields Business Park
Elland, West Yorkshire. HX5 9DA
<https://colchester.co.uk>
E-mail: Sales@colchester.co.uk

