

MACHINE SPECIFICATIONS

SPACE GEAR 510 Mark II



3D Specifications		2.5kW	4.0kW
Machine Structure		Hybrid	
Maximum Workpiece Dimensions		60.04 in x 120.08 in (flat plate) / 46.26 in x 106.69 in x 11.81 in (solid)	
Maximum Workpiece Weight		1,543 lb	1,785 lb
Machine Travels	<i>X axis</i>	120.87 in	
	<i>Y axis</i>	60.83 in	
	<i>Z axis</i>	11.81 in	
	<i>A axis</i>	+/- 360 degrees	
	<i>B axis</i>	+/- 135 degrees	
	<i>C axis</i>	+/- 360 degrees	
	Work Table Height		35.43 in
Maximum Material Thickness *	<i>Mild Steel</i>	0.750 in	0.875 in
	<i>Stainless Steel</i>	0.312 in	0.375 in
	<i>Aluminum</i>	0.250 in	0.375 in
Motion Drive System Design	<i>X, Y axis</i>	Ball Screw Drive	
	<i>Z axis</i>	Ball Screw Drive	
Number of Control Axes		6	
Rapid Travel Speed	<i>X, Y, Z axis</i>	944.68 ipm	
	<i>A, B axis</i>	9,600 degrees/min	
	<i>C axis</i>	12,000 degrees/min	
Positioning Accuracy	<i>X, Y axis</i>	0.0004 in/19.68 in	
Repeatable Accuracy	<i>X, Y, Z axis</i>	0.0002 in	
	<i>A, B, C axis</i>	+/- 0.01 degrees	
Maximum Processing Feedrate	<i>X, Y axis</i>	591 ipm	
Total Electrical Requirement		59.9 kVA	82.9 kVA
Installation Dimensions	<i>W x D</i>	383 in x 196 in	
Machine Unit Dimensions	<i>W x D x H</i>	302.2 in x 113.2 in x 90.6 in	
Machine Unit Weight		32,187 lb	
CNC Type		Mazak FX	
CPU		64 bit	
Display Screen		15 in Color Liquid-Crystal Display	
Memory Capacity		2 MB	
Position Detection System		Encoder	
Minimum Command Unit		0.0001 in/0.001 degree	

* Material cutting thickness is dependent on many factors including material specifications, condition and machine parameters. All specifications are subject to change.