



SP500 - Technical Specifications

• Mechanics

Working area	1245 x 710 mm (49 x 28 in) or optional 1245 mm (40 in) x ∞ (with pass-through)
Loading area	1420 x 820 mm (56 x 32 in) or optional 1420 mm (56 in) x ∞ (with pass-through)
Max. height of work piece	112 mm (4.4 in) slat cutting table, 95 mm (3.7) aluminum cutting grid table and acrylic cutting grid table, 98 mm (3.7) vacuum table; at removed table 300mm(12 in) at an area 1245 x 610mm (49 x 24 in) (flatness at removed tables cannot be guaranteed)
Work piece table	Multifunctional table concept: slat, aluminum, acrylic cutting grid table or vacuum table – one table included as standard; also available: honeycomb cutting tabletop, aluminum cutting grid tabletop or acrylic cutting grid Tabletop; electronic, programmable z-axis with servo motor
Speed of motion system	254 cm/sec. (100 in/sec)
Acceleration	19m/s ² (748 in/sec ²)
Motor	Brushless DC servomotor
Encoder	Increment measuring system
Optical elements	lens and all mirrors air-flushed and therefore protected from soiling (preinstalled air pump)
Lens	2.0" (standard); 2.5", 5.0" (optional), 2.5" clearance lense (optional) – gives 12,5 mm (0,5 in) more clearance than standard lenses, 3.75" rotary lens – additional clearance especially for rotary jobs
Accuracy of motion system	+/- 0,1 mm (0.004 in) (on the whole working area)
Addressable accuracy	0,0046 mm (0.0002 in)
Repeatability	<± 0,015 mm (0.0006 in)
Accuracy to size of parts	According to material an process
Maximum material load	25 kgs (55 lbs) area load over the whole working area
Exhaust	Travelling exhaust; table exhaust (with cutting- and vacuum table)

• Options

Pass-through (back)	height/width: 70 x 1420 mm (2.7 x 56.0 in) maximum material height 63mm (2.5 in)
Rotary attachment	Cones and roller version; max length of work piece: 104 cm (41 in) (roller) / 84 cm (33 in) (cones); diameter: 15 cm (0,59 in) (roller) / 25 cm (10 in) (cones)
JobControl [®] Vision	Registration mark and compensation system; max. working area: 1245 x 710 mm (49 x 28 in)
Gas-Kit (for compressed air respectively process gas)	For control of compressed air and process gas (free of mechanical dust, water and oil) max. flow rate 150 l/min (40 gpm) with max. 10 bar (145 psi) max. limit 4 bar on working head push fitting connection with out diameter) connection on the machine with hose out diameter of 6mm (0.23 in)





TroCAM Basic / Advanced	CAD / CAM software for perfect cutting results; inclusively nesting-function, lead-in/lead-out, tool paths
Extraction System lead /follow-up time	Lead- and follow-up time fully adjustable
• Control System	
Software	JobControl Expert
Laser power	Adjustable 0 – 100%
Interface hardware	USB, RS-232 (RS-232 mandatory for TroCAM and CCD-camera)
Interface software	ASCII, HPGL, AD-Logic System
• Laser features and power levels	
Laser features and power levels	Sealed-off CO ₂ laser With 40 – 200 watts, air – or water cooled (depending on model)
Wavelength	10,6µm
• Dimensions	
Width x depth x height	1920 x 1240 x x1140 (780 without base frame) mm or 75.5 x 48.8 x 45.0 (30.7 without base frame) inches
Weight	520 - 580 kgs / 1100 - 1300 lbs (depending on laser power)
Ambient conditions	Mandatory ambient temperature +15° to +25° C or 59° to 77° F Humidity 40% to max.. 70%, not condensing Dust free environment (2nd degree according to IEC 60947-1)
• Laser Safety	
Laser class	CDRH laser safety; CE tested Laser class 2 (Laser class 4 with pass-through)
Interlock	Duplicate interlock safety system
Loading lid	Front side loading lid
• Exhaust (Minimum requirements)	
Volume	Min. 640 m ³ /h at 8500 pa
• Electrical Equipment	
Power consumption	Up to 5,6 kW
Up to incl. 120 W Laser power	1x230V (L+N+PE) 50/60Hz
200 W Laser power	3x230V (3xL+N+PE) 50/60Hz

Subject to change without notice. Errors and omissions excepted.

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