

## SP500 - Technical Specifications

### Mechanics

Working area	1245 x 710 mm (49 x 28 in)
Loading area	1420 x 820 mm (56 x 32 in)
Max. height of work piece	112 mm (4.4 in) slat cutting table 95 mm (3.7 in) aluminum cutting grid table and acrylic cutting grid table 98 mm (3.7 in) vacuum table 300 mm (11.8 in) with table removed on an area of 1245 x 610mm (49 x 24 in) - flatness with removed tables cannot be guaranteed
Work piece table	Slat, vacuum, aluminum cutting grid or acrylic cutting grid table – one table included as standard; electronic, programmable z-axis with servo motor
Max. processing speed	2;54 m/s (100 in/sec)
Acceleration	19 m/s <sup>2</sup> (748 in/sec <sup>2</sup> )
Motors	Brushless DC servo motors
Position sensor	Incremental encoder
Optical elements	lens and all mirrors air-flushed
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
Repeatability	<± 30 µm (0.0012 in) across the entire working area
Addressable accuracy	4.6 µm (0.0002 in)
Accuracy of part size	Results depend on material and process, exact figures for specific applications can be determined during sampling
Maximum material load	25 kg (55 lbs), even load distribution across the entire working area
Exhaust	Travelling exhaust; table exhaust (with cutting- and vacuum table)
Software	JobControl® Expert
Interface	USB for connection with Control PC
Operating elements	Keypad, system turnkey, safety switch

### Laser

Laser system	Sealed-off CO <sub>2</sub> laser
Laser power	120, or 200 watts
Cooling	Air or water cooled (depending on model)
Wavelength	10,6 µm

## Options

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	Camera compensation system for print & cut applications, available across the entire working area
Gas-Kit	Control of compressed air and process gas with max. 6 bar (87 psi) supply pressure
TroCAM Basic/Advanced	CAD / CAM software for perfect cutting results; nesting-function, lead-in/lead-out, kerf correction
Pass Through Retrofit Kit	Working area 1245 mm (40 in) x ∞ Loading area 1420 mm (56 in) x ∞
Table tops	Honeycomb cutting tabletop, aluminum cutting grid tabletop or acrylic cutting grid tabletop
Chiller	Complementary cooling unit for all power levels Advanced cooler for 200 W, with tempering function, reduced noise level, and reduced energy consumption
Workflow integration	UniDrive software package for automatic job generation via hot folder and job ticket interface, remote interface for execution control
After Sales Service	Customized service packages available

## Dimensions (W x D x H) & Weight

Machine	1920 x 1240 x x1140 (780 without base frame) mm or 75.5 x 48.8 x 45.0 (30.7 without base frame) in
Weight	520 - 580 kg / 1100 - 1300 lbs (depending on laser power)

## Safety & Environment

Laser class	CDRH laser safety; CE tested Laser class 2
Loading lid	Front side loading lid
Interlock	Two-channel interlock safety system
Ambient conditions	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)

## Electrical & Exhaust

Exhaust Operating Point	Min. 640 m <sup>3</sup> /h at 8500 Pa
Voltage and Power Requirements (Machine without chiller)	1 x 208/230V (L+N+PE) 50/60Hz (up to 120 W) 3 x 208/230V or 3 x 400V (3xL+N+PE) 50/60Hz (200 W) Max. 5.6 kW