Speedy 360

Laser engraving system

Mechanics

Working area	813 x 508 mm (32 x 20 inch)
Loading area standard	890 x 600 mm (35 x 23.6 inch)
Max. height of work piece	210 mm (8.2 inch) with 1.5 inch, 2.0 inch lens 197,5 mm (7.7 inch) with 2.0 inch clearance lens, 2.5 inch lens 159 mm (6.2 inch) with 4.0 inch 146,5 mm (5.7 inch) with 4.0 inch clearance lens
Working table	Multifunctional table concept, Rulers in mm or inches Electronic, programmable Z-axis with servo motor
Max. processing speed	355 cm/s (140 ips)
Acceleration	50 m/s^2 (1969 ips^2)
Motors	Brushless DC servo motors
Encoder	Incremental measuring system
Optical elements	Telescope, mirrors, lens
Lens	1.5 inch, 2.0 inch, 2.0 inch clearance, 2.5 inch, 4.0 inch, 4.0 inch clearance
Accuracy	+/- 0.015 mm (0.0006 inch), over the whole working area
Addressable accuracy	5 µm (0.0002 inch)
Accuracy to size of parts	According to material and process
Maximum material load	Static: up to 100kg (220 lbs), Dynamic: up to 30 kg (66 lbs) load over the whole working area
Interface	Ethernet, optional Wifi

Features standard

Lens	2.0 inch
InPack Technology™	Protects working head and all moving parts from dust
Exhaust	Surface exhaust via rear of the engraving cabinet, table exhaust with vacuum and cutting tables
Software	Ruby®
Operating console	Touch panel, keypad, safety-switch, system turnkey
Table	Aluminum cutting grid table
Laser Pointer	655 nm, <0,99 mWcw
Autofocus	Sonar Technology™ and software
Work area light	LED
Additional standard features	Ergonomic access to working area, OptiMotion™, coaxial air assist incl. integrated pump, harsh environment protection kit, integrated extraction slits, two Z-Home positions, air-assist nozzles (Ø3mm and Ø7 mm), lockable casters

Options

Vision Design&Position	Design and Position job in live view of work area on Ruby screen.
Temperature sensor	Should the temperature inside the engraving compartment exceed a critical value, the system will signal this to the operator by a warning sound. The operator then can take action immediately.
Gas-Kit light	Control of external supplied compressed air (free of mechanical dust, water and oil) max. flow rate 150 l/min (40 gpm) with max. 10 bar (145 psi);
Water cooling preparation	Additional parts to connect an external cooler
Screw feet	Additional to the rolls, for a good standing on the ground
Industrial interface	Start / Stop / … signals to control the operation from extern

Accessories

Vision Print&Cut	Registration marks detection and compensation system Max. working area without camera: 813 × 508 mm (32 × 20 inch) Max working area with camera: 801 × 508 mm (31.5 × 20 inch)
Ferromagnetic engraving table	Allows to mount thin materials such as paper, films or foils with magnets to ensure an even and flat surface to achieve optimal results
Vacuum table	Vacuum effect for fixation of thin or wavy materials
Acrylic cutting grid table (white)	Reflection free cutting of parts smaller than 100 mm (4 inch)
Slat cutting table	Cutting of thicker materials and parts bigger than 100 mm (4 inch); removable aluminium and acrylic slats, x-axis ruler can be removed and mounted again without re-adjustment
Honeycomb cutting table	Good compromise between the Grid and Slat table configuration. Thin support structures reduce flashback compared to a grid table. High density of the honeycomb structure provides good support for less rigid material such as thin plastic, card & paper or membrane boards; nominal comb size 12,7 mm (0.5 inch) or 6,4 mm (0.25 inch)
Rotary attachment	Cone, roll or combined version, tilt able Max. workpiece length cones: 550 mm (21.6 inch) Max. workpiece length rolls: Ø ≥ 58 mm (2.2 inch) = 679 mm (26.7 inch), Ø ≤ 58 mm (2.2 inch) = 745 mm (29.3 inch) Max. workpiece diameter cones: 207 mm (8.1 inch), depending on lens Max. workpiece diameter rolls: 96 mm (3.7 inch), depending on lens
TroCare	Comprehensive package of technical services

Laser

Laser system CO_2	Sealed-off laser, maintenance free, air cooled, wavelength 10.6 µm 60, 80, 100 and 120 W

Dimensions & weight

Width x Depth x Height	1221 x 830 (790*) x 1066 mm (48 x 32.8 (30.7*) x 42.0 inch) * top lid closed, without mounted exhaust hose connections, gas-kit light
Weight	Approx. 235 – 250 kg / 518 - 551 lbs (depending on laser power)

Safety & environment

Laser class	CDRH laser class 2
Interlock	Safety system with Individually checked Interlocks, optional with Dual-coded interlocks
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)
Certificates	CE compliant, FDA listed

Exhaust

Minimum volume required (without piping/tubing)	350 m^3/h at 3.500 Pa Two connections
Required	Atmos Duo Plus (or equivalent systems, all table concepts) Vent Set 400 (or equivalent systems; all table concepts except vacuum table/strong vacuum effect) Vent Set 500 (or equivalent systems, all table concepts incl. vacuum table/strong vacuum effect)

Cooling

Air cooling	Active air flow cooling with fan
Liquid cooling	Optional available for CO_2 laser sources 60 – 120 watts with external liquid cooler

Electrical

Voltage & power consumption	1 ~ AC 110-230V 50/60Hz, approx. 1200 W to 1900 W (depending on laser power)

Subject to change without notice. Errors and omissions reserved.
Model identification Speedy 360C-8085
October 2023