

## Speedy 400

Laser engraving system

### Mechanics

Working area	1016 x 610 mm (40 x 24 inch)
Loading area standard	1096 x 698 mm (43 x 27.4 inch)
Max. height of work piece	305 mm (12 inch) with 1.5 inch, 2.0 inch lens 292,5 mm (7.7 inch) with 2.0 inch clearance lens, 2.5 inch lens 255 mm (10 inch) with 4.0 inch lens 242,5 mm (9.5 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	4.32 m/s (170 ips)
Acceleration	50 m/s <sup>2</sup> (1969 ips <sup>2</sup> )
Motors	Brushless DC servo motors
Encoder	Incremental measuring system
Optical elements	Telescope, lens and mirrors
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 in), over the whole working area
Addressable accuracy	5 µm (0.0002 in)
Accuracy to size of parts	According to material and process
Maximum material load	Static: 30 kg (66 lbs), Dynamic: up to 100kg (220 lbs) load over the whole working area
Interface	Ethernet and 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	655nm, <0,99mWcw
Autofocus	Sonar Technology™
Work area light	LED
Additional standard features	Ergonomic access to working area, OptiMotion™, coaxial air assist incl. integrated pump, harsh environment protection kit, machine integrated and partial coverable extraction slits, two Z-home positions, air-assist nozzles (Ø3mm and Ø7 mm), housing with lockable casters

### Options

Temperature sensor	Should the temperature inside the engraving compartment exceed a critical value, the laser will signal this to the operator by a warning sound. The operator then can take action immediately.
Gas-Kit light	For control of 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	For CO2 laser sources with 60 W, 80 W or 120 W, external cooler needed
Screw feet	Additional to the rolls, for a good standing on the ground
Trotec Vision Print&Cut	Registration marks detection and compensation system Max. working area without camera: 1016 x 610 mm (40 x 24 inch) Max. working area with camera: 1004 x 610 mm (39.5 x 24 inch)
Industrial interface	Stop / Stop interface to control the operation from extern

### Accessories

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)	For reflection free cutting of tasks with parts smaller than 100 mm (4 inch)
Slat cutting table	For reflection-free 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. The thin support structures reduce flashback compared to a grid table and combined with the high density of the honeycomb structure still provides good support for less rigid material such as thin plastic, card & paper or membrane boards; available with 0.5 inch (12,7 mm) or 0.25 inch (6,4 mm) nominal comb size
Rotary attachment	Cone, roll or combined version, tilt able Max. workpiece length cones: 730 mm (33.8 inch) Max. workpiece length rolls: Ø ≥ 58 mm (2.2 inch) = 889 mm (35 inch), Ø ≤ 58 mm (2.2 inch) = 958 mm (37.7 inch) Max. workpiece diameter cones: 270 mm (10.6 inch), depending on lens Max. workpiece diameter rolls: 180 mm (7 inch), depending on lens
TroCare	Comprehensive package of technical services

## Laser

Laser system CO <sub>2</sub>	Sealed-off laser, maintenance free, air cooled, wavelength 10.6 μm
Laser power CO <sub>2</sub>	60, 80, 100 and 120 W

## Dimensions & weight

Width x Depth x Height	1428 x 952* x 1050 mm (56.2 x 38.5* x 41.5 inch) * without exhaust hose connection and gas-kit light on the back of the machine, open top lid
Weight	Approx. 295 – 310 kg / 650 - 684 lbs (depending on laser power)

## Safety & environment

Laser class	CDRH laser class 2
Interlock	Dual-channel interlock safety system
Loading lid	Ergonomic down/up-lift front lid
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)	Min. 400 m <sup>3</sup> /h at 4.200 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
-------------	----------------------------------

## Electrical

Voltage & power consumption	1 ~ AC 110-230V 50/60Hz, approx. 1200 W to 2100 W (depending on laser power)
-----------------------------	--

Subject to change without notice.

Errors and omissions excepted.

Model identification Speedy 400C-8070

June 2021