

8504 SpeedMarker 330



System specification

Norm	CDRH Lasersafety; Laserclass 2; CE [EN 60825-1]
Dimensions [W x H x D]	450 × 806 × 853 mm / 450 × 1102 × 853 mm (door open)
Software	Ruby©
Laser source	Pulsed Yttrium Doped Fiber Laser
Working table	T-Slot table incl. threaded positioning holes
Door	Automatic
Color	RAL 7035, RAL 9005
Power supply	110 - 240 VAC, 12 A, 50/60 Hz, L/N/PE
Max. power consumption	950 W
Interfaces	Ethernet, USB, Industrial Interface IOs 24V (3I: Marking-Start, Marking-Stop, Error-Reset / 3O: Error, Ready, Busy)
Minimum required exhaust	approx. 200 m ³ /h at 1000 Pa (without piping/tubing) - e.g.: Atmos Nano
Electrical cabinet cooling	active fan cooled
Cabinet protection level	IP 20
Total machine weight	92 kg
Max. table load	50 kg

Ambient conditions

Operation	Temperature range +15 to +35 °C; Relative humidity max. 60 %; Non-condensing
Storage	Temperature range +0 to +35 °C; Relative humidity max. 60 %; Non-condensing
Transport	Temperature range -10 to +40 °C; Relative humidity max. 70 %; Non-condensing

Laser Source

Type	MOPA					
Laser power	100 W					
Wavelength	1064 nm					
Power stability	5 %					
Pulse frequency	1 - 4000 kHz					
Pulse length	2 - 500 ns					
Beam quality	M ² < 1.6					
Max. pulse energy	1.5 mJ @ 500 ns					
Power cut off frequency	Pulse width [ns]	Cut-off frequency [kHz]	Max. frequency [kHz]	Pulse width [ns]	Cut-off frequency [kHz]	Max. frequency [kHz]
	2	2960	4000	60	200	2000
	4	2160	4000	80	180	2000
	6	1400	4000	100	160	1000
	9	960	4000	150	95	1000
	13	680	3000	200	75	1000
	20	420	3000	250	70	900
	30	300	3000	350	67	600
	45	250	2000	500	67	500

Laser head configuration

Max. marking speed	7 m/s
Pilot and triangulation laser	Diode laser $\lambda = 655$ nm; Laser class 2; < 1 mW
Lens	F210
Marking field [X/Y]	150 x 150 mm
Working distance	290 mm
Spotdiameter @ working distance	59 μ m
Marking resolution	2 μ m
Max. work area [X/Y/Z]	150 x 150 x 130 mm
Max. part dimension [X/Y/Z]	375 x 288 x 130 mm

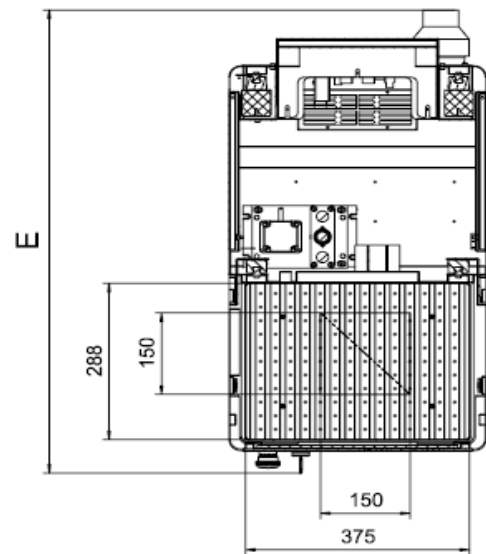
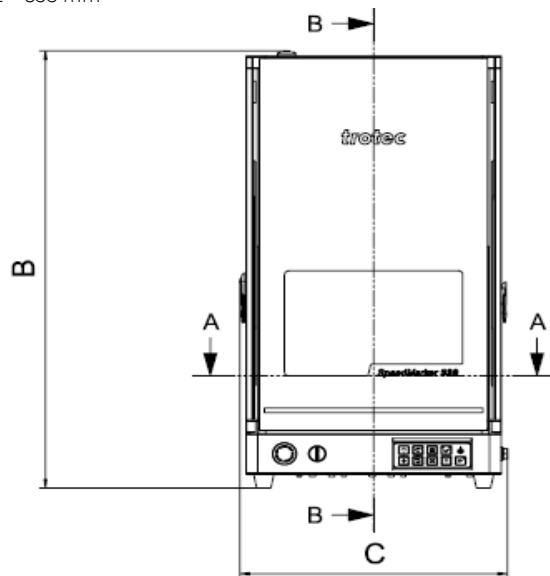
A (Focus distance) = 280 mm

B = 806 mm

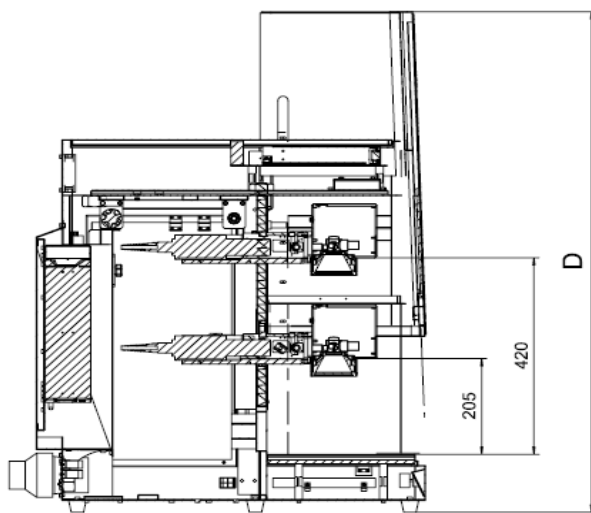
C = 450 mm

D = 1070 mm

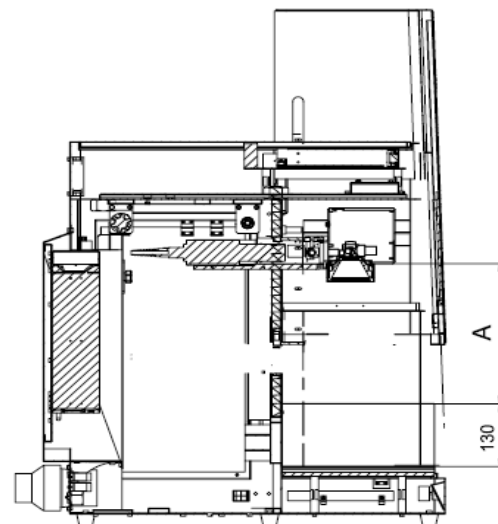
E = 853 mm



SECTION A-A



SECTION B-B



DETAIL C