

LASERMAK CO2 FLYING OPTIC LASER CUTTING MACHINE SPECIFICATIONS

				2500.2, 5 x 1,25
RESONATOR			Watt	2500 Watt CO2 Laser GE Fanuc C2000i-B, Short Optical Path Type
MAXIUM PULSE PEAK POWER			Watt	2700
RF-EXCITATION			MHz	2
POWER STABILITY			%	± 1 (power monitor)
PULSE MODE			-	Freq: 5-2000Hz, Duty: 0-100%
LASER WAVE LENGTH			µm	10.6
BEAM MODE			-	Fanuc Low Order Mode
LASER SHUTTER			-	Mechanical Safe Shutter
LASER GAS COMPOSITION			-	CO2/He/N2
LASER GAS CONSUMPTION			Gallons/hour	2.6
COOLING WATER FLOW RATE			Gallon/minute	19.8
CNC CONTROLER & OPERATOR PANEL			-	GE Fanuc Series 16i-LB "LCD mounted" type CNC with 10.4" color screen, 512KB part program memory and all relevant laser functions, Ethernet
MAXIMUM WORKSHEET DIMENSIONS			Inch	98.4" x 49.4"
CUTTING CAPACITY (high quality)				
		MILD STEEL	Inch	0.6"
		STAINLESS STEEL	Inch	0.3"
		ALUMINIUM	Inch	0.2"
MAXIMUM BURDEN CAPACITY			lbs	2200
MACHINE AXES				5-axis (X, Y, Z, U (X2), V)
AXIAL MOVEMENTS				
	X,U AXIS	Linear Motorized Table	Inch	101"
	Y AXIS	Linear Motorized Bridge	Inch	50.8"
	Z AXIS	Servo Motorized Cutting Head	Inch	4"
	V AXIS	Linear Mot. Compensation Unit	Inch	71.9"
ACCELERATIONS				
	X,U AXIS	Linear Motorized Table	G	2
	Y AXIS	Linear Motorized Bridge	G	3
	Z AXIS	Servo Motorized Cutting Head	G	2
MAXIMUM AXIS VELOCITIES			IPM	665" (simultaneous) (X,Y single axis velocity 472 IPM)
POSITIONING ACCURACY			Inch/m	± .001"
REPETITION ACCURACY			Inch	± .0006"
SHUTTLE TABLE (Automatic Loading/Unloading Unit)			Palette	2 (30 sec)
ASSIST GAS				
Assist sensor 1		MILD STEEL	-	Oxygen (0,1-6 bar)
Assist sensor 2		STAINLESS STEEL	-	Nitrogen ((0,2-25 bar)
Assist sensor 3		ALUMINIUM	-	Dry air or nitrogen (0,2-25 bar)
CUTTING HEAD			-	Precitec HP 1.5" 25 bar
CUTTING HEAD FOCAL LENGTHS			Inch	5" – 7.5"
CAD/CAM SOFTWARE			-	Lantek Expert Cut
TOTAL ELECTRIC POWER NECESSITY			HP	67 – 94
MACHINE DIMENSIONS (L x W x H)			Inch	365.4" x 187.4" x 81.9"
MACHINE WEIGHT			lbs	36300

2500.3 x 1,5	4000.3 x 1,5
2500 Watt CO2-Laser GE Fanuc C2000iB, Short Optical Path type	4000 Watt CO2-Laser GE Fanuc C4000i-B, Short Optical Path Type
2700	5000
2	2
± 2 (power motor)	± 2 (power motor)
Freq: 5 – 2000Hz, Duty: 0-100%	Freq: 5 – 2000Hz, Duty 0-100%
10,6	10,6
Fanuc Low Order Mode	Fanuc Low Order Mode
Mechanical safe shutter	Mechanical safe shutter
CO2/He/N2	CO2/He/Ne
2.6	2.6
19.8	42.3
GE Fanuc series 16i-LB “LCD mounted” type CNS with 10.4” color screen, 512 KB part program memory and all relevant laser functions, Ethernet	GE Fanuc series 16i-LB “LCD mounted” type CNS with 10.4” color screen, 512 KB part program memory and all relevant laser functions, Ethernet
118.1” x 59”	118.1” x 59”
0.6”	0.8”
0.3”	0.5”
0.2”	0.3”
59”	59”
5-axis (X, Y, Z, U (X2) V)	5-axis (X, Y, Z, U (X2) V)
120.5”	120.5”
60.7”	60.7”
6”	6”
88.6”	88.6”
2	2
3	3
2	2
665” (simultaneous) (X, Y single axis velocity 472 IPM)	665” (simultaneous) (X, Y single axis velocity 472 IPM)
± .001”	± .001”
± .0006”	± .0006”
2 (35 sec)	2 (35 sec)
Oxygen (0,1-6 bar)	Oxygen (0,1-6 bar)
Nitrogen (0,2-25 bar)	Nitrogen (0,2-25 bar)
Dry Air or Nitrogen (0,2-25 bar)	Dry Air or Nitrogen (0,2-25 bar)
Precitec HP 1.5” 25 bar	Precitec HP 2” 25 bar
5” – 7.5”	5” – 7.5”
Lantek Expert Cut	Lantek Expert Cut
67 -94	87 – 120.6
412.6” x 208” x 80.3”	412.6” x 208” x 80.3”
42460	42900

4000.4 x 2	4000.6 x 2
4000 Watt CO2-Laser GE Fanuc C4000iB, Short Optical Path type	4000 Watt CO2-Laser GE Fanuc C4000i-B, Short Optical Path Type
5000	5000
2	2
± 2 (power motor)	± 2 (power motor)
Freq: 5 – 2000Hz, Duty: 0-100%	Freq: 5 – 2000Hz, Duty 0-100%
10,6	10,6
Fanuc Low Order Mode	Fanuc Low Order Mode
Mechanical safe shutter	Mechanical safe shutter
CO2/He/N2	CO2/He/Ne
2.6	2.6
42.3	42.3
GE Fanuc series 16i-LB “LCD mounted” type CNS with 10.4” color screen, 512 KB part program memory and all relevant laser functions, Ethernet	GE Fanuc series 16i-LB “LCD mounted” type CNS with 10.4” color screen, 512 KB part program memory and all relevant laser functions, Ethernet
157.5” x 78.8”	236” x 78.8”
0.8”	0.8”
0.5”	0.5”
0.3”	0.3”
5500	5500
5-axis (X, Y, Z, U (X2) V)	5-axis (X, Y, Z, U (X2) V)
160”	239”
80”	80”
6”	6”
118”	118”
2	2
3	3
2	2
665” (simultaneous) (X, Y single axis velocity 472 IPM)	665” (simultaneous) (X, Y single axis velocity 472 IPM)
± .001”	± .001”
± .0006”	± .0006”
2 (45 sec)	2 (65 sec)
Oxygen (0,1-6 bar)	Oxygen (0,1-6 bar)
Nitrogen (0,2-25 bar)	Nitrogen (0,2-25 bar)
Dry Air or Nitrogen (0,2-25 bar)	Dry Air or Nitrogen (0,2-25 bar)
Precitec HP 25” 25 bar	Precitec HP 2” 25 bar
5” – 7.5”	5” – 7.5”
Lantek Expert Cut	Lantek Expert Cut
87 - 121	87 – 121
528” x 229” x 82”	18820 x 229” x 90”
59950	79200

4000.6 x 2,5	6000.3 x 1,5
4000 Watt CO2-Laser GE Fanuc C4000iB, Short Optical Path type	6000 Watt CO2-Laser GE Fanuc C6000iB, Model B
5000	7000
2	2
± 2 (power motor)	± 2 (power motor)
Freq: 5 – 2000Hz, Duty: 0-100%	Freq: 5 – 2000Hz, Duty 0-100%
10,6	10,6
Fanuc Low Order Mode	Fanuc Low Order Mode
Mechanical safe shutter	Mechanical safe shutter
CO2/He/N2	CO2/He/Ne
2.7	25.3
42.3	66
GE Fanuc series 16i-LB “LCD mounted” type CNS with 10.4” color screen, 512 KB part program memory and all relevant laser functions, Ethernet	GE Fanuc series 16i-LB “LCD mounted” type CNS with 10.4” color screen, 512 KB part program memory and all relevant laser functions, Ethernet
236” x 98”	118” x 59”
0.8”	1”
0.5”	0.6”
0.3”	0.5”
11000	4400
5-axis (X, Y, Z, U (X2) V)	5-axis (X, Y, Z, U (X2) V)
239”	3060
100”	61”
6”	6”
167”	89”
2	2
3	3
2	2
665” (simultaneous) (X, Y single axis velocity 472 IPM)	665” (simultaneous) (X, Y single axis velocity 472 IPM)
± .001”	± .001”
± .0006”	± .0006”
2 (65 sec)	2 (35 sec)
Oxygen (0,1-6 bar)	Oxygen (0,1-6 bar)
Nitrogen (0,2-25 bar)	Nitrogen (0,2-25 bar)
Dry Air or Nitrogen (0,2-25 bar)	Dry Air or Nitrogen (0,2-25 bar)
Precitec HP 2” 25 bar	Precitec HP 2” 25 bar
5” – 7.5”	5” – 7.5” – 10”
Lantek Expert Cut	Lantek Expert Cut
87 - 121	134 - 161
741” x 248” x 90”	413” x 255” x 80”
85800	44440

6000.4 x 2	6000.6 x 2
6000 Watt CO2-Laser GE Fanuc C6000iB, Model B	6000 Watt CO2-Laser GE Fanuc C6000iB, Model B
7000	7000
2	2
± 2 (power motor)	± 2 (power motor)
Freq: 5 – 2000Hz, Duty: 0-100%	Freq: 5 – 2000Hz, Duty 0-100%
10,6	10,6
Fanuc Low Order Mode	Fanuc Low Order Mode
Mechanical safe shutter	Mechanical safe shutter
CO2/He/N2	CO2/He/Ne
5.3	5.3
66	66
GE Fanuc series 16i-LB “LCD mounted” type CNS with 10.4” color screen, 512 KB part program memory and all relevant laser functions, Ethernet	GE Fanuc series 16i-LB “LCD mounted” type CNS with 10.4” color screen, 512 KB part program memory and all relevant laser functions, Ethernet
157” x 79”	236” x 79”
1”	1”
0.6”	0.6”
0.5”	0.5”
7700	11000
5-axis (X, Y, Z, U (X2) V)	5-axis (X, Y, Z, U (X2) V)
160”	6060
80”	80”
6”	6”
118”	157”
2	2
3	3
2	2
665” (simultaneous) (X, Y single axis velocity 472 IPM)	665” (simultaneous) (X, Y single axis velocity 472 IPM)
± .001”	± .001”
± .006”	± .0006”
2 (45 sec)	2 (65 sec)
Oxygen (0,1-6 bar)	Oxygen (0,1-6 bar)
Nitrogen (0,2-25 bar)	Nitrogen (0,2-25 bar)
Dry Air or Nitrogen (0,2-25 bar)	Dry Air or Nitrogen (0,2-25 bar)
Precitec HP 2” 25 bar	Precitec HP 2” 25 bar
5” – 7.5” – 10”	5” – 7.5” – 10”
Lantek Expert Cut	Lantek CAD/CAM
134 - 161	134 - 161
528” x 276” x 82”	18820 x 276” x 90”
61050	80300