



iNspire series laser cutting machines

The iNspire laser cutting machines are technically advanced, precise, dynamic and efficient. They are designed for demanding mass production, e.g. for cutting out components for electric motors and complex shapes.

20

[kW]

Maximum laser source power

6

[g]

Maximum acceleration

350

[m/min]

Maximum positioning speed

0,05

[mm]

Cutting accuracy

150

[m/min]

Maximum cutting speed

0,03

[mm]

Repeatability



TECHNICAL DATA

Machine

WORK AREA

MACHINE MODEL	[um]	1530	2040	2060	2560	2580	3080	25120	25160	30120	30160
X-axis	[mm]	3060	4060	6060	6060	8070	8070	12090	16110	12090	16110
Y-axis	[mm]	1540	2040	2040	2540	2598	3098	2598	2598	3098	3098
Z-axis	[mm]	100	100	100	100	150	150	150	150	150	150
maximum weight of the sheet	[kg]	1000	1600	2400	3000	9600	11520	14400	19200	17280	23040

DIMENSIONS AND WEIGHT OF THE MACHINE¹⁾

MACHINE MODEL	[um]	1530	2040	2060	2560	2580	3080	25120	30120	25160	30160
length	[mm]	10000	11200	14000	14000	22550	22550	31330	31330	41000	42000
width	[mm]	3080	4100	4100	4750	4500	5000	4500	5770	4600	5900
height	[mm]	3060	3060	3060	3060	2700	2700	2750	2850	2800	2900
weight	[t]	18	22	36	39	66	72	144	177	287	335

¹⁾ Approximate values. The exact parameters are specified in the machine's installation plan.

Specifications of the machine

MAXIMUM SPEEDS

maximum cutting speed	[m/min]	150
parallel to the X, Y, Z axes	[m/min]	250
simultaneously	[m/min]	350

AXIS PARAMETERS

repetitiveness	[mm]	0,03
cutting precision	[mm]	0,05
accelerations	[m/s ²]	60
minimum programmable leap	[mm]	0,001

Maximum cutting thicknesses

AVAILABLE LASER SOURCE	[um]	1kW	2kW	3kW	4kW	6kW	8kW	10kW	12kW	15kW	20kW
mild steel	[mm]	10	16	20	20	30*	40*	50*	60*	60*	60*
stainless steel	[mm]	4	10	15	20	30*	40*	50*	60*	60*	60*
aluminium	[mm]	2	6	12	15	30*	35*	40*	50*	50*	50*
brass	[mm]	2	4	6	8	12	15	20	30*	30*	30*
copper	[mm]	1,5	4	6	6	10	15	20	25	25	25

Maximum thicknesses of materials to be processed. Values achieved under conditions depending on the quality of the material being processed, the quality of the cutting gases, the quality of the service and NC program and the condition of the wearing parts.
*Heavy duty (HD) laser cutter version with CatLine option.

CNC

control | Beckhoff TwinCAT CNC

Media

compressed air pressure	[bar]	6
nitrogen pressure	[bar]	25-30
oxygen pressure	[bar]	8-10

Laser source data

laser type		IPG fiber laser
available laser sources	[kW]	1-20
wavelength	[um]	1,07
beam quality	mm x mrad	3, 4-4,0
frequency	[kHz]	5