

GIOTTO

Laser System

MARKING *

ENGRAVING *



GIOTTO Nd:YAG



LA TECNOLOGIA LASER ITALIANA NEL MONDO

COMPANY
WITH QUALITY MANAGEMENT
SYSTEM CERTIFIED BY DNV
=ISO 9001:2000=

GIOTTO

Nd:YAG DPSS



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Giotto Nd:YAG DPSS is a laser marking unit based on Nd:Yag diode pumped laser sources designed and manufactured by SEI. The laser unit is composed of a rail containing the source, the galvo scan head and the cooling unit and a case containing the cooling unit in closed loop and the electronic control. Marking is carried out without any mechanical contact and it is the result of the thermo acoustic interaction between the laser beam and the processed material (metals, plastics etc.). It is indelible and has features of high quality, speed and execution flexibility. Its main features are: A compact system, high quality laser beam, reliability, an easy integration in production lines, the constant monitoring of the vital parts.

Giotto DPSS can be configured with different options which ensure a remarkable application flexibility and enhance performances such as the dynamic control of the fire point and of the spot size. Two different types of galvo heads can be mounted for faster speed and higher focusing.

Giotto DPSS disposes of a wide range of ancillary equipments (XY tables, rotary attachment, Z axis, rotary table, automatic loader for labels) which turn it into a complete, flexible work centre. Thanks to its extremely compact size and its reliability it is easily integrated in production lines.

Giotto DPSS is driven by a Personal Computer and by the software ICARO Windows. The user can easily change the work parameters such as power, frequency, marking speed so that the required performance is obtained. Graphics in different CAD formats (*.plt, *.dxf, *.pcx, *.bmp, *.mcl, besides machine formats) can be imported and the text can directly be changed (all the windows fonts are used), graphic editing operations are also possible.



TECHNICAL SPECIFICATIONS

Laser source

Laser powers available:
Pulse repetition frequency:
Laser output mode:
Pumping:
Cooling:
Wavelength:

15-30-60-80 W DPSS
0÷100 KHz
from M2 < 1,2 to M2 < 6
Laser diode arrays
Closed loop chiller
10,6 µm

Marking head

Focal unit (flat field):
Useful work area:
Work distance:
Spot diameter:
Writing speed linear:
Writing speed (font):
Positioning speed:

VM1000			VM2000		
100	163	254 mm	100	163	254 mm
60x60	115x115	180x180 mm	35x35	110x110	180x180 mm
120	240	380 mm	120	220	380 mm
20÷75	40÷150	75÷270 µm	15÷40	30÷75	50÷150 µm
>3 m/s	>6 m/s	>8 m/s	>2 m/s	>4 m/s	>6 m/s
300car/s	600car/s	800 car/s	200car/s	400 car/s	600 car/s
~5 m/s	~10 m/s	~15 m/s	~5 m/s	~10 m/s	~15 m/s

Operating temperature:
Relative operating humidity:
Storage temperature:

10÷40° C
10÷85% RH max, non-condensing
-10÷70° C (H₂O empty circuit)

System

Control:
Sw:
Files:
Interface:
Laser safety norms:

DSP card microprocessor, 128 MB RAM, Ethernet LAN 10/100 Mbit/s.
Windos98, 2000, XPPRO, ICARO CAM SW.
PLT, DXF, BMP, PCX, TIFF, JPEG, GIF MCL, etc.
LAN net, serial RS232/485, I/O digital, Encoder
Laser system CLASS 4, CEI EN 60825-1

Options:

Z axis, Rotary table class 1, Rotary attachment 360°, Enclosure Class 1, Dynamic beam expander

CAUTION !!
INVISIBLE LASER RADIATION.
AVOID EYE OR SKIN EXPOSURE
TO DIRECT OR SCATTERED RADIATION.
CLASS 4 LASER PRODUCT

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