

Glass Master

SERIES

Intravolume Laser Marking System

FEATURES

- 2D and 3D engraving within the glass
- Up to 40 dots per second engraving rate enabling high productivity
- Large monolithic marking field
- High engraving resolution
- Windows based user-friendly software
- Easy to use and intuitive interface
- Low maintenance cost
- Customizing possibilities

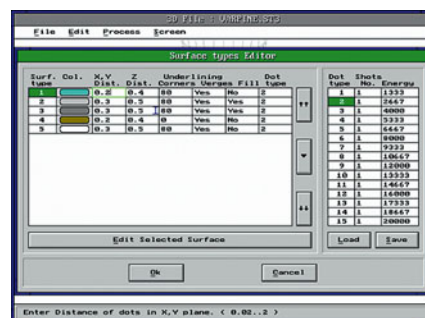


Series **GlassMaster** intravolume (subsurface) glass laser marking system is efficient tool for creation of 2D and 3D images inside of glass or other transparent material by air cooled diode pumped Nd:YAG laser. Diode pump laser technology enables to achieve higher productivity – marking speed is available up to 40 points per second. All solid-state laser design ensures less operating costs and longer maintenance free terms.

These features make the system extremely suitable for high volume manufacturing conditions in wide range applications.

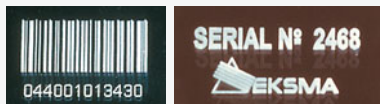
The laser is equipped with energy meter for self-control and safety shutter. Output power is calibrated periodically in order to ensure long-term repeatability of marking performances. Calibration values are stored in special files to allow manufacturer to check device status.

Original x-y-z scanning system ensures fast positioning of laser beam in all axes within large field. High positioning accuracy and small-sized dot allow creating small features of picture inside of glass.



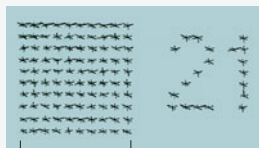
APPLICATIONS

IDENTIFICATION



marking of serial numbers, manufacturers names, bar-codes, DataMatrix codes

TRADEMARK PROTECTION



marking small, "invisible" signs or specific codes to distinguish valuable original item

SUBSURFACE MARKING



Mark inside the glass made with NL 202 SH



Polycarbonate



Polycarbonate marking

SPECIFICATIONS

General purpose	creation of 2 or 3 dimensional pictures inside of glass by laser
Size of marking field (x-y-z)	150×150×20 mm
Description of created picture	2 or 3 dimensional, picture is formed from points with controlled resolution
Size of points	from 10 to 50 µm in x-y plane
Minimum distance between points	10 µm in x-y plane
Marking speed	up to 40 points/second
Device includes	Nd:YAG laser NL202/SH (532 nm wavelength), diode pumped, air cooled, including power supply. Telescope, objective and safety shutter, x-y-z positioning system, marking object and optics moving, 150×150×20 mm travel length. PC based electronic control system, Windows XP based software for devices control and for input files conversion to marking format. Base plate for sample fixation. Pressured air control unit. Rack with safety covers, doors and switches.
Powering	220 V, 50 Hz, single phase, not more 2 kVA
Pressured air consumption	5 to 8 atm, from 2 to 4 m ³ /hour
Environment conditions	room temperature from 18°C to 25°C, air humidity no more than 65%, 24 hours per day

Specifications are subject to changes without advance notice.

Requests for custom made products are welcome !

RELATED PRODUCTS

Surf Master series laser marking system is efficient tool for creating patterns on the surface of almost any material by all solid state diode pumped frequency tripled laser.



- High up to **100 kHz** repetition rate
- High up to **3.5 W** output power
- UV **355 nm** wavelength
- Small down to **25 micron** spot size
- Large **100x100 mm** working area



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