All Dries All Dries

lamp-pumped, high-power
Nd:YAG laser markers THE NEW GENERATION

ALLTEC's new generation of lamp-pumped Nd:YAG laser marking systems convinces by an unprecedented combination of throughput, flexibility, user-friendliness, reliability, and economy.

Throughput and flexibility

- extreme marking speeds:
 up to 30,000 mm/s resp. 1,300 characters/s
- marking also of very fast moving products: up to 15 m/s
- high laser power and excellent laser beam quality:
 - extreme intensities at the product and consequently broad application spectrum
- laser power reserves also for future applications
- laser beam properties adjustable to the application:
 - from fundamental mode for highest resolution to
 - HQ multimode for metal engraving

User-friendliness

- fully programmable: marking information plus process parameters
- Smart Graph Windows-based user interface: intuitive and functional generation of marking jobs
- no font, code or graphics restrictions
- import filters for all common data formats
- Touch Screen: operation in the line at the touch of a button
- user hierarchy: user-dependent interface, password protected to prevent unauthorized access resp. operation

Reliability

- strictly modular setup optimized for longevity, hassle-free operation, and economy
- laser unit stabilized against mechanical stress such as vibrations
- sealing of housings: safe longterm operation also in critical environments
- cutting-edge controller technology: real-time operating system, digital signal processors for fast and safe data processing and exchange, internal CAN bus, Ethernet communication between PC and marking system
- interface concept prepared also for communication in future production lines



Economy

- minimized energy consumption, reduced operating costs
- minimum maintenance
- high lifetime of laser lamps
 - simple and quick lamp exchange by the operator
- worldwide service network with fair
 ALLTEC service rates and spare part prices.



Marking Features

Marking speed

- Programmable, 0 30.000 mm/s
- Up to 1300 characters/s)^a

Line speed

0 - 15 m/s)^a

Marking field

Dependent on focusing optics: 25 x 25/ 70 x 70/ 115 x 115/ 170 x 170/ 240 x 240/ 560 x 560 mm², options

Marking formats

- Standard industrial fonts (Type 1, Windows® and True Type Fonts)
- Individual and dot-matrix fonts
- Machine readable codes (OCR, 2D-matrix, bar codes, etc.)
- Graphics, logos, symbols, etc.
- Linear, circular, angular reverse marking
- Rotation, mirroring, expansion, compression of texts, logos etc.
- Sequential and batch numbering
- Automatic date, time, shift coding, real-time clock function
- On-line marking of individual data, esp. fast multi-bin capability

Software

Smart Graph

- Graphical user interface under Windows® 2000/XP
- Full feature text/ data/ graphics/ parameter editor for generation of texts, codes, individual fonts, logos, symbols, graphics
- Easy access to standard CAD and graphics programs by convenient import functions (dwg/dxf/ai/jpg/tif/pcx/bmp etc.)
- On-the-fly marking
- **WYSIWYG**

Command languages

- Selectable, installed: English, German
- Further languages optional

User hierarchy

User-dependent interface, password protection to prevent unauthorized access/ operation

Storage

- RAM up to 256 MB
- Multi Media Card up to 256 MB







Laser & Marking Head

Laser type

- Lamp-pumped Nd:YAG laser
- Laser wavelength 1,064 nm
- Power class 100 W
- Pulse frequency programmable: cw, 100 - 65,000 Hz

Beam deflection • Digital high-speed galvanometer scanners

Focusing

Precision laser scan lens: focal length 56/100/163/254/ 420/810 mm and options

Controller

Concept

- Real-time operating system
- Digital signal processors
- Internal CAN bus
- Ethernet communication between PC and marking system

- Communication RS232 interfaces
 - Ethernet for PC networks
 - Optional CAN, Profibus
 - Bar code reader input
 - Shaft encoder input
 - More than 100 Input/ Output ports for digital direct-selection of jobs, product detectors, machine/user interlocks, alarm signals, Start/Stop signal, etc.
 - Customer specific solutions

Utilities

Power Control Module PCM

- Controller, supply, cooling unit
- Dimensions ca. W525 x D631 x H732 mm3 (without wheels)

Cooling

Internal water/ water heat exchanger, optional external water/ air heat exchanger

Electrical

230 V/ 400 V (±10 %), 50/ 60 Hz, 3 P/N/PE, < 7.0 kW incl. cooling

Environment

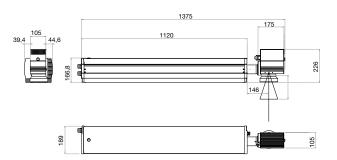
- Temperature 5 40 °C (40 105 °F)
- Humidity 10 90 %, not condensing

Sealing

Better IP54

)ª max. speeds depend on application

Due to our policy of continuous improvement, specifications are subject to change without notice.





www.videojet.co.ukuksales@videojet.com

Videojet Technologies Limited • 4 & 5 Ermine Centre • Lancaster Way Huntingdon • Cambridgeshire • PE29 6XX • United Kingdom Phone: 0870 240 5542 • Fax: 0870 242 2835