



Laser YVO<sub>4</sub>

Integrable laser  
marking solution

TD412

# TD412

Versatile YVO<sub>4</sub> laser marking solution for the permanent identification of any component

**Nd laser technology:** diode-pumped YVO<sub>4</sub> generates exceptional **beam quality:** the near-perfect circular shaped spot makes the tracing of very fine characters possible.

The very high peak power creates strong laser-material interaction: giving a **high contrast** marking result.

The very short duration laser pulses do not overheat the parts. No deformation of thin and fragile materials, **ideal for plastics** (no burning).



## HIGH QUALITY PERMANENT MARKING

The high-resolution galvanometric head delivers **precise and repeatable results**. Spot focusing is highly precise: markings are **clean and burr-free**.

## FLEXIBLE

The **extensive frequency range** makes it possible to **adapt the rendering of the marking** to each individual application and type of material.

**Deep, surface, contrast, shaded marking**, multiple effects are possible on the **most diverse of materials:** steel, titanium, plastics, ceramics etc. and also on **highly reflective materials** (brass, gold, silver, polished stainless steel etc.).

## Flawless production:

A minimum of optical and mechanical elements offers marking stability and reduced maintenance.

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## Characteristics

- + • Low energy (<400 W)
- Silent: <57 dB
- Wide frequency range (5-200 kHz)

- Nd laser: diode-pumped YVO<sub>4</sub>
- Power: 12 W

Air cooled

- Dedicated I/O
- RS232

Pre-diagnostic screen



- Sealed head
- Double focal lens protection
- Insensitive to beam feedback from reflective materials

- 19" 4U dimension control unit
- Compatible with electrical cabinets

### Total solutions:

Available in an integrable version, workstation or customised version (turntable, automatic door etc.), the TD412 laser is **modular and evolvable** to meet the particular requirements of each individual customer.

### Full range of accessories:

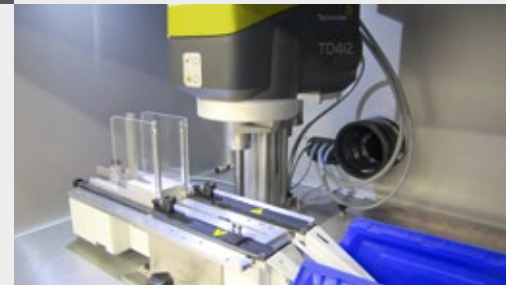
- 100-160-254-330 mm focal lenses
- Fume extractor
- Part rotation system
- Motorised Z axis
- Class 1 Workstation (door closed)
- Second focusing diode
- Automatic plate feeder
- 1D and 2D code reader

## EASY TO USE

- **Software dedicated to marking and traceability:** intuitive with a graphic interface and simulation mode, use of the T700W can be mastered in just a few clicks.
- **Integrated focusing diode:** facilitates the positioning of workpieces.
- **High-performance electronics and connectivity:** connects to PC, PLC and code readers or independent operation.

## DESIGNED TO LAST

- **Head made from robust yet light cast aluminium:** easy and long-term integration into even the harshest of industrial environments.
- **Autonomous:** air cooled with integrated fans (no external cooling unit).
- **Maximum safety:** protected optical fibre, integrated safety shutter.





The versatile TD412 satisfies the most varied of marking needs on titanium, steel, stainless steel, copper, plastic, ceramics, aluminium, brass, gold, silver etc.

- Surface marking:  
DataMatrix™ codes, serial numbers, references...
- Contrast marking:  
logos, graphics, text etc.

Excellent on plastic, marking is permanent with no burning or surface deterioration:

- ABS, PA, PC, PMA, POM, plastics coated with an additive etc.

Automotive  
Aeronautics  
Plastics  
Medical  
Plumbing

Cutlery  
Business gifts  
Electronics  
Electrics  
Semi-conductors

Mechanics  
Locks and keys  
Tooling  
...



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