

# Laser marking system



## TD410

High Quality & Compact



A MARK WHICH DEFIES TIME

# Applications

The new diode-pumped laser TD410 provides unparalleled marking quality in a compact, cost effective configuration. It is the best solution for highly demanding, high definition marks on plastics and metals.

## VERY HIGH MARKING QUALITY

- Excellent beam quality due to axial diode pumping
- Very small spot for optimum marking precision
- Flexible to provide high quality marking on metal and plastic parts



Medical implants, surgical instruments.

## Medical Industry



## COMPACT SOLUTION WITH REDUCED MAINTENANCE

- Easy integration on line or as independent marking solution
- Possibility to adapt reading function to verify marked codes
- Very long diode lifetime
- No consumables, very low maintenance



Electrical components, Electronic boards, Sensors, Cables, Containers.

## Plastic Industry



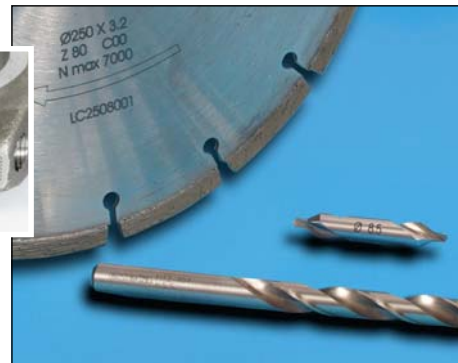
## EASY MARKING JOB PROGRAMMING

- Highly repeatable quality & permanent, reliable marking
- User friendly marking T700W Windows® software
- Marking of Bar codes, Data Matrix™ codes, logos, etc.
- Control of all traceability data: date, time, serialisation, shift codes
- Control of variable data, interfaces with external databases...
- Red positioning laser



Automotive, Aerospace, Tooling parts.

## Mechanical Industry



## AN INDUSTRIAL SOLUTION

- Unparalleled marking speed on plastics and metals
- Independent operation: computer-free use, direct link to PLC
- Air-cooled with a TEC (thermo-electric cooling) module



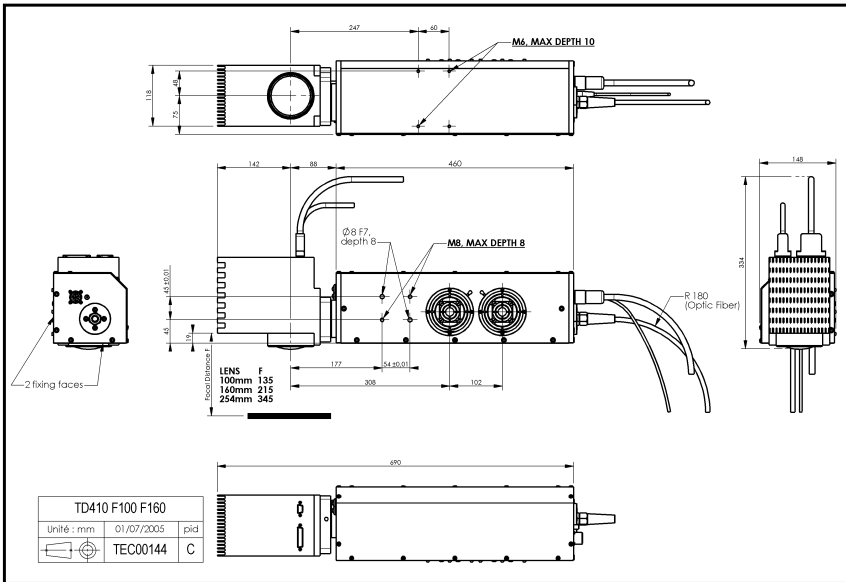
Promotional items, Clock, Cutlery, Identification plates.

## Miscellaneous Industry

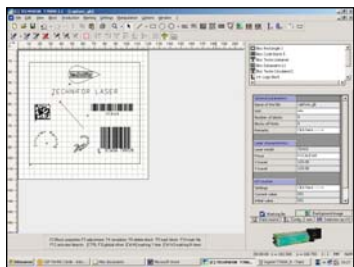
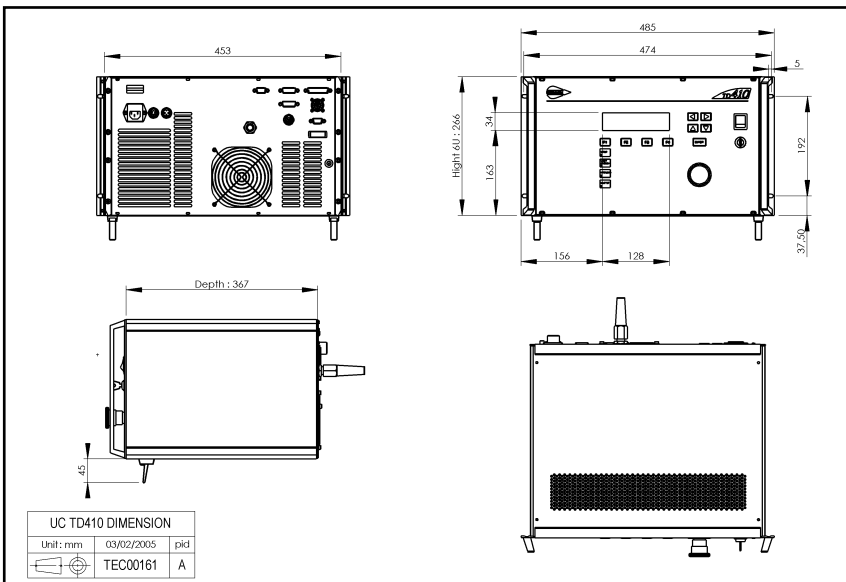


# Technical characteristics

## TD410 Laser



## TD410 Control Unit



T700W software



Adjustable head with 360° orientation

← 690 mm →



## Characteristics & performances

- Wavelength ..... 1064nm
- Peak power ..... >20kW
- Cooling technology ..... by air (Peltier effect)
- Marking area ..... 70x70 -120x120 -180x180mm
- Resolution ..... < 3µm
- Spot size ..... < 50 µm

## Weight & dimensions

- Laser module + head ..... L 770 x W 142 x H 237mm, 15kg
- Control unit ..... L 485 x W 480 x H 267mm, 20kg

## Environnement & power supply

- Power supply ..... 115/230 V single phase, 50/60 Hz
- Electric consumption ..... < 800 W
- Functioning temperature ..... 10 to 35 °C
- Humidity ..... < 80 %

## Programming

- T700W marking software - Windows 2000/XP
- Communication with control unit via RS232
- Programming by specific PC software or PLC with high level commands
- Binary I/O Control

## Marking

- Texts, logos, images
- 2D Data Matrix™ ECC200 codes
- Barcodes (EAN, 128, 39, etc.), PDF 417, QR code
- Variable or fixed data
- Direct interfacing with production databases (ODBC, Excel, ASCII)
- Data import through barcode reader
- Automatic generation of log files

## Security & Protection

- Class 4 configuration (EN60825-2 standard)
- Conformity to european and USA/Canada standards
- Class 1 marking station as option or on specific request
- Extraction system / fume and dust filtering as option

## Services

- Conception and realisation of turn-key solution on request
- Maintenance contract:
  - Warranty extension
  - On site servicing

## Circular Marking Device (DMC)

This accessory allows marking around the circumference of cylindrical parts by rotating the part during the cycle.



## Independent Class 1 workstation

This workstation is specially dedicated to the marking of various types of manually loaded parts. A 265mm path allows a precise adjustment of the working distance.

**Integrated height adjustment:** the Z-axis allows to mark fast and cost-effectively parts with different height.



## Marking areas

Field lenses can be adapted to the application request in order to obtain either a larger path (up to 180mm) or a finest marking resolution (down to 3µm).



## Mark'n Read™ : Solution for Data Matrix™ Marking and Reading

In partnership with experts in machine vision and 2D symbology readers for manufacturing environments, Technifor is in unique position to supply and support Direct Parts Marking solutions with associated reading for verifying that the correct code has been marked and for monitoring the marking quality.



## And other options:

### Fume and dust extraction system

Fumes and dust particles that might pollute the working environment are extracted and optionally filtered (specially for the marking of plastics or coated material).

**Rotating table** for part positioning while previous part is being marked.

### Automatic Plate Feeding Device (PFD)

This system can automatically feed the machine, with a facility for collating the output. Different plate types and sizes can be processed.

**Motorized positioning device** (Vertical/horizontal).



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