Fiber laser marking

SPEED / CONTRAST / POWER

www.technifor.com
### Next-generation fiber laser marking solution

<table>
<thead>
<tr>
<th>PERFORMANCE</th>
<th>INNOVATION</th>
<th>INDUSTRIAL AND RELIABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages of the fiber laser</strong></td>
<td><strong>&quot;Ready to integrate&quot; solution</strong></td>
<td><strong>Designed to last</strong></td>
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<tr>
<td>Compact true fiber system: fewer mechanical and optical elements, reduced maintenance</td>
<td>Complete pack, in integrable version or in work station</td>
<td>Compact head in robust, yet lightweight aluminium: conceived for ease of integration even in intensive, industrial use</td>
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<td>Long-life laser source</td>
<td>Integrated laser aiming diode: simplifies part positioning</td>
<td>Air-cooled, no high-maintenance water chiller required</td>
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<td>Efficient optical elements: low electrical consumption (300 W)</td>
<td>Universal: industrial connectivity for worldwide compatibility and ease of integration</td>
<td>Secure: electronic controls and alarms to protect laser</td>
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<tr>
<td><strong>Technifor Laser designed for marking applications</strong></td>
<td><strong>Easy to use</strong></td>
<td>Safe: armored optical fiber, integrated safety shutter</td>
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<td>Exceptional pulse properties: high energy density for the entire pulse duration</td>
<td>Extremely compact: it can be integrated in different orientations.</td>
<td><strong>Maximum up-time</strong></td>
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<td>High intensity beam: more efficient, it provides a high quality mark in a short cycle time.</td>
<td>Flexible connectivity: PC, PLC, barcode readers or stand-alone</td>
<td>Stable power: consistent high quality results</td>
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<td><strong>Identification of any part</strong></td>
<td><strong>Economical and environmentally respectful</strong></td>
<td>Controls and software dedicated to marking and traceability: management, storage and guarantee of the data to be marked</td>
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<td>Available in 3 power ranges to maximize marking capabilities:</td>
<td>Optimized function: low operating costs</td>
<td><strong>30 years of Technifor's extensive integration knowledge</strong></td>
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<tr>
<td>• <strong>TF410</strong>: economical solution, very efficient on plastics, anodized aluminium and for annealing (surface marking) stainless steel</td>
<td>Silent: &lt; 60 dB, no additional sound-proofing required</td>
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<td>• <strong>TF420</strong>: versatile, high performance solution used on aluminium, steel, titanium, cast iron. Fast high-contrast marks</td>
<td>Direct and permanent marking: no paint, solvents or stickers</td>
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<tr>
<td>• <strong>TF430</strong>: powerful solution for the most demanding applications in terms of speed and depth of marking. Used for engraving</td>
<td>&quot;Excels in speed and contrast&quot;</td>
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</tbody>
</table>

**User benefits**
- Increased productivity
- Very long lifetime
- Consistent marking quality
- Highly versatile
- Minimized integration costs
- Reduced maintenance

**FIBER Laser**

...≈ the size of a sheet of paper!
### Technical characteristics

- **Type:** Pulsed Ytterbium fiber laser
- **Power:** 10 W, 20 W, 30 W
- **Wavelength:** 1064 nm
- **Laser aiming diode:** included

#### Dimensions in mm
- L: 375
- W: 139
- H: 202

- **7 kg**

#### Accessories
- LaserTop
- Work station Class 1
- Mini-workstation Class 4 with manual or motorized 2 axis
- CHIR height adjustment system
- Part rotation device
- DataMatrix™ code reader
- Mini-workstation Class 1
- Automatic nameplate feeder
- Second focus diode
- Fume extractor
- Focal range

### Environment & power supply

- **Consumption:** 300 W nominal
- **Power supply:** 100-240 V, 50-60 Hz
- **Operating temperature:** +10 to +35°C (+50°F to +95°F)
- **Humidity:** < 80%

### Software

- **T700W marking program**

  - **Traceability functions:** serial numbers, variables, date codes, UID syntax...
  - **Industrial file management:** DXF, BMP...
  - **DataMatrix™, bar codes (39, 128, UPC...), QR codes...**
  - **Logos:** PLT, JPG, BMP format...
  - **Link to databases** (ODBC, Excel, ASCII...)
  - **Generates log files**
  - **Material library with presets**
  - **Compatible with Windows® 2000, XP, Vista, 7**

### Safety and protection

- The machine conforms to the following directives:
  - Class 4 configuration (EN 60825-1 standard)
  - CDRH US 21 CFR, sub chapter J. compliant
  - NF EN 61000-6-2 (EMC)
  - Directive 2002/95/EC (RoHS)
Applications

Speed, precision and contrast are the key points of the fiber laser marking:

+ **Surface marking**
  Identify each component with text, logo, serial number, graphics, etc.: cutting tools, plumbing fixtures, cooking appliances, electrical connectors...

+ **Engraving**
  Mark by coating removal or mark on cast, rough surfaces: ID plates, pistons, plastic casings, engine parts...

+ **DataMatrix®, QR codes, barcodes traceability**
  Accurate and repeatable marks ensure that the codes marked will be easily read throughout the process: gear parts, aerospace components, eartags...

+ **Matrix part marking**
  Mark batches of parts in one go and on the tiniest surfaces: medical prostheses and implants, electromagnets, keys and door locking systems, push buttons...

Visit us at www.technifor.com to see our complete range of micro-percussion, scribing and laser solutions.