



## FIBRE LASER

Complete range  
of integrable laser  
marking systems

Laser Solution  
F-series

# FIBRE LASER

HIGH SPEED, CONTRAST AND PERMANENT MARKING

Compact and robust, Technifor lasers are fully PPC (program-to-program communication) compatible to easily integrate marking requirements in your production process:

- Designed for marking applications
- Very high processing speed
- Durable marks
- Low operating cost (no consumables, low power consumption)
- Non-contact process
- Long-life fibre technology



Improving in laser technology for over 20 years, Technifor has numerous references at large manufacturers, 2nd tier suppliers as well as high precision mechanical and medical markets.

## Choose Technifor fibre technology for:

- **Reliability:** robust mechanical and optical elements makes it very stable and easy to use with lower maintenance requirements.
- **High-definition at fast speeds:** the high quality beam can be focused in a very small spot. Combined with high energy density, it produces accurate and repeatable marks in a short time.
- **"Ready to integrate" solution:** industrial connectivity, plug and play (no PC, communication modules or adapters required), worldwide compatibility and pre-programmed control routines for most PLCs considerably reduce installation, programming time and costs.

## MAXIMIZE YOUR MARKING CAPABILITIES

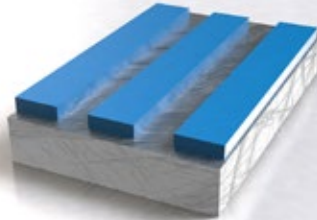
Contrasted surface mark



Foaming effect



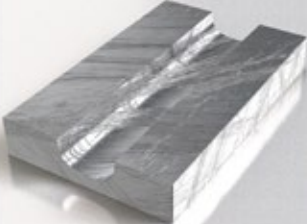
Coating removal



Engraving with contrast



Engraving without colour change



Dot by dot mark



## Identification of any part

Our Fibre Laser Solutions are available in a range of powers to obtain various laser effects on most materials (metals, plastics, ceramics, etc.).

Laser	Application
F10	Surface coloring
F20	Flexible solution
F30	High speed marking
F50	Deep marking / engraving

## Modular and scalable range

Technifor can support your **developing requirements** by easily updating the power of your marking machine without having to change the complete system.

**Highly flexible**, Fibre Laser Solution enables any type of part processing (fragile, soft, hard surfaces, coating removal):

- **F10**: economical solution, very efficient on plastics, anodized aluminum and for annealing (surface marking) stainless steel
- **F20**: versatile, high performance solution used on aluminum, steel, titanium and cast iron for fast high-contrast marks
- **F30 - F50**: powerful solution for the most demanding applications in terms of speed and depth of marking. Ideal for engraving



# FIBRE LASER

DESIGNED FOR INDUSTRIAL ENVIRONMENTS

## Designed for ease of integration

**Compact:** about the size of a sheet of paper, it can be integrated in any orientations on-line or on a robot arm.

**Efficient** even in intensive industrial use: withstands working temperatures up to 40°C.

## Secure

**Operator safety:** integrated safety shutter maximizes user security.

**Machine safety:** electronic controls and alarms protect the equipment for long life use.

Compliant with most stringent global safety requirements



## Easy removal of the fiber torch

*Safety, strength and ease of integration were designed at every level of the equipment conception.*

## Industrial design

- **Heavy-duty cast construction** absorbs vibration for perfect marking quality.
- **IP54 marking head:** protected against dust (<0.1 mm) and water splashing
- **Fan-less head:** eliminates dust and noise concerns.
- **Built-in double focal lens protection:** protected from dust and scratches thanks to a removable and cleanable protective glass, protected from knocks by a heavy-gage aluminum ring

## COST-EFFECTIVE INTEGRATION

ETHERNET TCP/IP

PROFINET

RS232

- Dedicated I/O
- Digital 8I/8O



Accessory port

USB port

## High reliability

The next-generation control unit offers **ultra-fast calculation and easy communication** with your network infrastructure.

- Independent mode (no PC needed)
- Intuitive human-machine interface (HMI) for easy and user-friendly programming
- Dust filter protected control unit
- High stability against electromagnetic influence
- 19" rack mounted unit for easy integration in industrial panels

## Full and flexible connectivity

Fibre Laser Solution sends and receives all data (ODBC, Excel, ASCII...), interacts with your PLCs and dynamically displays current operations:

- **Dedicated Inputs/Outputs** to manage the machine and automate operations
- **Multiple ports** to communicate with external devices, databases and send instructions...: RS232, USB, DB15-F, Ethernet TCP/IP
- **Profinet**: dedicated port and command instructions allow direct connection to the industrial network without any additional devices. Huge time saving and reduced installation costs



## "Ready-to-use" solution:

Interface for immediate diagnostic, easy update via USB, Ethernet for remote control operation



**LaserTRACE**  
SOFTWARE SOLUTION

**CREATE YOUR MARK, GET SET, TRACE!**

## Endless possibilities

Intuitive and easy-to-use, the user takes control of the included Lasertrace Windows® software in a few clicks.

The many modes available, from the simplest to the most advanced, provide an answer to all identification and traceability requirement, without any specific training.

- Flat, angular and radial marking
- Font library optimized for maximum productivity
- Preview of the marking
- ... and many more

+ Multilingual interface

DataMatrix™, bar codes, QR codes

Texts, serial numbers, variables, shift codes, dates, UID, logos...

+ Direct access to marking parameters



+

Library of marking presets, Background image, Link to databases (ODBC, Excel, ASCII...)



## LOGO EDITOR max

Optional add-on to quickly design or modify logos, images, symbols  
Supports all widely-used file formats (DXF, ei, bmp, gif, jpeg, eps, PDF...).

## Manage your marking process from workshop to an automated line

The Production mode allows you to automate numerous tasks easily: double entry control, log files, operator/supervisor levels, data acquisition from your existing systems (measurement devices...), from code readers...

## In-house software

Specifically designed for identification and traceability, Lasertrace has ready-made answers to existing standards and regulations.

Customizable, it leaves the possibility to tailor features and interface for a fully integrated traceability solution!

YOUR GLOBAL PROJECT PARTNER

TECHNIFOR 



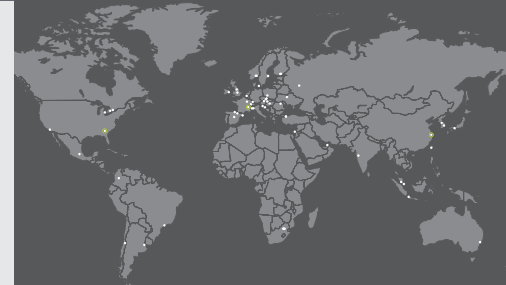
From customized tools to complete integrated solution, our multi-purpose teams are able to answer to any specific need.

Feasibility study, application advice and free sample services, **Technifor directly supports your projects** and can manage major integration programs thanks to a unique subsidiary network.

1. Stand-alone workstation
2. Integrable version
3. Automated and semi-automated versions (turntable, automatic doors, vacuum transfer..)

### Full range of accessories for an economical personalized solution

- **Integration support:** motorized Z axis, funnel shaped laser protection nozzle...
- **All part shapes adaptation:** lens range (100-160-254-300 mm), part rotation device, plate feeding systems...
- **Operator ease-of-use:** 2<sup>nd</sup> focusing diode, Class1 station (door closed)
- **Code reading:** 1D and 2D camera, handheld readers...
- **Protection and safety:** dedicated fume extraction with I/O control, start button box...



**Local support in local language**  
Experienced direct teams on the 5 continents give on-site support, training and assistance. Software interface and documentation are also available in more than 20 languages.



**Extremely versatile with applications in every industry:**

- **Surface marking:** stainless steel, titanium, plastics, ceramics...
- **Engraving:** castings, raw materials, steel, aluminum...
- **DataMatrix™, QR codes, barcodes traceability...**
- **Unit to mass identification:** serial numbers, references, texts, logos, variables, industrial files (DXF, BMP...)...

See our complete range of laser solutions on:  
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Motorcycles  
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...



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