



## 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



Innovating in Laser technology for over 20 years, Technifor has numerous references with large manufacturers, 2nd tier suppliers as well as high precision mechanical and medical leading companies.

## 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 within extremely short cycle times.
- **"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.

## MAXIMISE YOUR MARKING CAPABILITIES

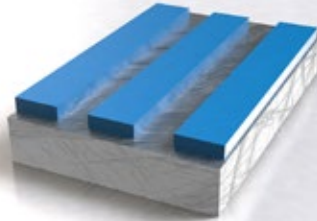
Contrasted surface mark



Foaming effect



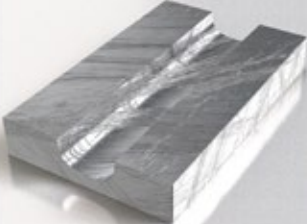
Coating removal



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 colouring
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, anodised aluminium and for annealing (surface marking) stainless steel
- **F20**: versatile, high performance solution used on aluminium, 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 an A4 sheet of paper, it can be integrated in any orientations in-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 maximises user security.

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

Compliant with most stringent global safety requirements



## Industrial design

- Heavy-duty cast construction absorbs vibration for perfect marking quality.
- IP54 marking head: protected against dust (<0.1mm) and water splashes
- 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-gauge aluminium ring

## Easy removal of the fibre torch

Safety, strength and ease of integration were considered at every stage of the equipment design.

## COST-EFFECTIVE INTEGRATION

ETHERNET TCP/IP

PROFINET

RS232

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



USB port

Accessory 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 requirements, without any specific training.

- Flat, angular and radial marking
- Font library optimised 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.

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

YOUR GLOBAL PROJECT PARTNER

TECHNIFOR 



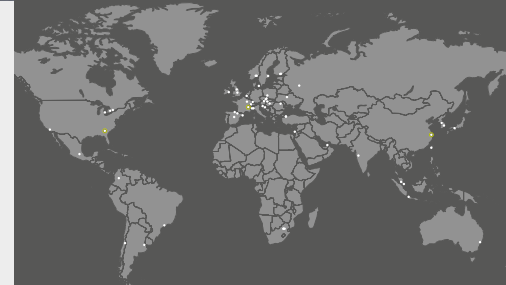
From customised tools to complete integrated solution, our expert teams are able to answer to any specific need.

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

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

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

- Integration support: motorised Z axis, funnel shaped laser protection nozzle...
- Can be configured for all part shapes: 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, aluminium...
- **DataMatrix™, QR codes, barcodes traceability...**
- **Individual part to high volume identification:** serial numbers, references, texts, logos, variables, industrial files (DXF, BMP...)...

See our complete range of laser solutions on:

[www.technifor.co.uk](http://www.technifor.co.uk)

Automotive  
Motorcycles  
Aerospace  
Iron and steel  
Medical

Business gifts  
Mechanics  
Electronics  
Plumbing  
Electrics

Armament and  
Military  
Energy  
Tooling  
...



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