

# START REDUCING COSTS AND WASTE

## AND INCREASE PRODUCTION



**fLASER** by **MACSA**  
No waste. Continuous. Low Cost.

**Macsa id**  
a code you can trust

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# fLASER

A FILM AND FOIL CODING LASER THAT  
WILL REDUCE COSTS AND WASTE,  
AND ENABLE CONTINUOUS OPERATION



- fLASER lasers from Macsa are film and foil coding lasers. They are used to apply variable information to flexible packaging and other foil, film and plastic coated packaging without damaging the substrate. They are cost-effective and high quality alternatives to the other traditional technologies.
- fLASER systems respond to the need of companies to reduce coding costs, reduce plastic waste and enable continuous operation. They deliver consistent, permanent, high quality codes without interruption even in harsh environments.
- By contrast traditional overprinters use thermal transfer printers. These are wasteful and need frequent maintenance, and print quality deteriorates over time.
- fLASER systems are powered by Macsa F series fiber lasers. There is an on-board computer which enables multiple message storage. Such messages can be selected directly without a network or PC connection. Messages may be created and edited using Marca message creation and laser control software.

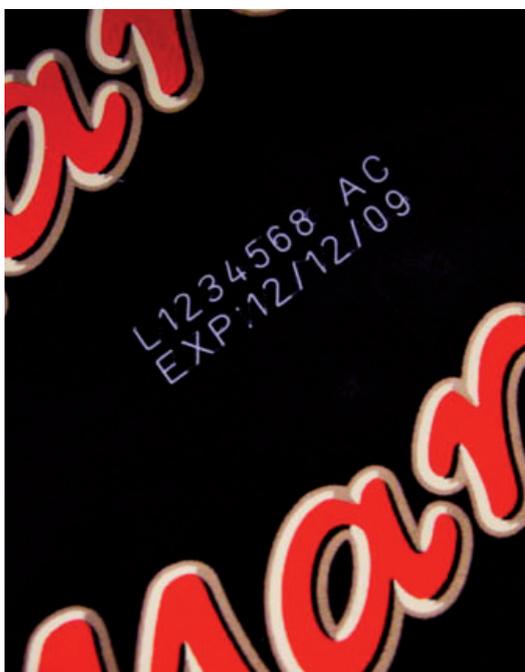
# FOR APPLYING

LOT CODES AND BEST-BEFORE DATES  
ON FLEXIBLE PACKAGING AND OTHER  
FOIL, FILM AND PLASTIC COATED  
PACKAGING SUBSTRATES



TYPICAL  
SUBSTRATES ARE:

- Flexible films especially oriented polypropylene (OPP), Polyesters, Polyimides, Polyamides, Acrylates.
- Shrink / sleeves for bottles especially polyethylene terephthalate (PET).
- Coated cardboard such as Tetra Pak type cartons with a plastic coating.
- Coated aluminium foil.
- Special multilayer acrylic labels (typically used in the automotive industry).



FLASER MARKET  
INDUSTRIES

- Food
- Beverages
- Tobacco
- Chemical
- Automotive
- Cosmetics
- Pharmaceutical
- Industrial

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# MACSA

A CODE YOU CAN TRUST



Macsa is a leading global supplier of coding and marking laser equipment and label printer applicators. It supplies customers, including multi-nationals and OEMs, in packaged goods and industrial markets world-wide.

Macsa's laser product range includes CO<sub>2</sub>, YAG and fiber lasers.

- The CO<sub>2</sub> range includes the iCON laser coder: a cost effective alternative to continuous inkjet printers; and
- The YAG and fiber ranges include the NANO industrial lasers: attractive, all-in-one alternatives to more expensive systems.

Macsa's products are easy to install and easy to use.

Macsa software enables users of Macsa's lasers to develop messages, communicate across networks and operate their lasers. They may be controlled using a touch screen controller. The iLASERBOX laser marking workstation provides a safe operating environment for small semi-manual YAG and fiber applications.

Macsa's label applicator range includes the mLABEL series of modular label and label printer applicators and the iLABEL laser print and apply labelling system.

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fLASER SYSTEMS

# PRODUCE NO WASTE

There is no waste stream of thermal transfer ribbons.

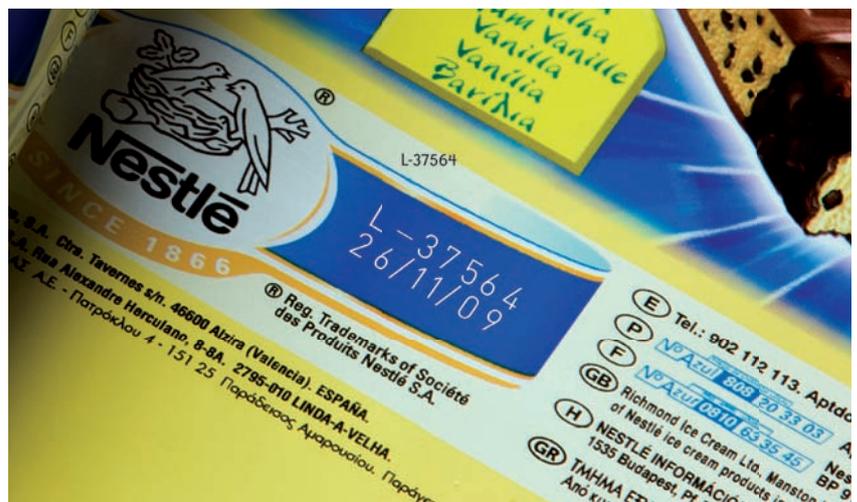


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# fLASER SYSTEMS DELI

CONSISTENT LONG TERM  
HIGH QUALITY PRINTING

There are no printheads which need cleaning or which degrade over time and need replacing.



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fLASER SYSTEMS

# OPERATE CONTINUOUSLY

There is no need to interrupt production to change ribbons or to replace printheads.



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# VER:

A PERMANENT CODE

Ink based alternatives may be scratched or rubbed off the substrate.



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FLASER SYSTEMS

# HAVE LOW OPERATING COSTS

They do not use thermal transfer ribbons and there are no printheads to be replaced. Thermal transfer printheads typically need replacing 2 or 3 times a year.



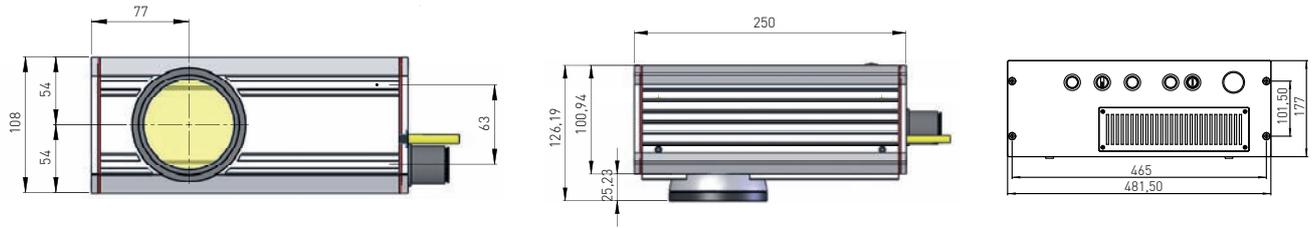
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## BETTER PRINTING IN DUSTY ENVIRONMENTS

Laser coders are not disadvantaged by dust whereas a thermal transfer printhead will need regular cleaning.



**fLASER**



SYSTEM TYPE		F-9010-C UHS	F-9020-C UHS	F-9050-C UHS					
POWER		10W	20W	50W					
WAVELENGTH		1.062µm							
MAINS SUPPLY		115V / 230 V 50/60 Hz (1 Phase + N) 1000W 350VA	115V / 230 V 50/60 Hz (1 Phase + N) 1000W 450VA	115V / 230 V 50/60 Hz (1 Phase + N) 1000W 650VA					
DIMENSIONS	Head	108 x 126 x 250mm							
	Rack	482 x 177 x 454mm (19" x 4u x 454mm)							
WEIGHT		Net weight: 23 kg - Gross weight: 30 kg							
SYSTEM		Optical isolator and collimator of the laser source, galvanometric scanners built into the marking head. Control and power electronics, drivers of the digital scanners (F-9010-C, F-9020-C and F-9050-C UHS FILM laser systems), CPU, power supplies and laser source built into the control rack.							
OPTICS				F-9010-C UHS		F-9020-C UHS		F-9050-C UHS	
	Working distance (mm)	Focal length (mm)	Marking area (mm x mm)	Beam diameter (µm)	Power density (kW/cm²)	Beam diameter (µm)	Power density (kW/cm²)	Beam diameter (µm)	Power density (kW/cm²)
	128	100	60 x 60	27 - O	3481.9-0	27 - O	6963.7-0	27 - O	17409.3-0
	205	162	100 x 100	44 - S	1326.7-S	44 - S	2653.4-S	44 - S	6633.6-S
	321	254	160 x 160	69 - O	539.7- O	69 - O	1079.4- O	69 - O	2698.4- O
	427	346	200 x 200	94 - O	290.8 - O	94 - O	581.7- O	94 - O	1454.2- O
µm: microns    S: Standard    O: Optional    Standard configuration marking at 90°									
SOFTWARE		<ul style="list-style-type: none"> <li>• ScanLinux V.5.2.7 and later for the F-9000 laser system.</li> <li>• Marca software V.5.6.9.a and later for the F-9000 laser system.</li> <li>• Internal barcode.</li> <li>• Marca Lite software.</li> </ul>							
USER INTERFACE		<ul style="list-style-type: none"> <li>• Hand held terminal</li> <li>• Touch screen</li> <li>• PC</li> </ul>							
CONTROL		<ul style="list-style-type: none"> <li>• Hand held terminal with ScanLinux software</li> <li>• Touch screen with ScanLinux software</li> <li>• Full graphics interface: includes Marca software™, dongle and ethernet cable (TCP/IP)</li> <li>• MarcaLite® software: includes Marca™ software, dongle and ethernet cable (TCP/IP)</li> </ul>							
ACCESSORIES / OPTIONS		Touch screen terminal – Hand held terminal - Beam pointer - Encoder kit – Photocell kit – Photocell – Alarm kit – Fume extractor - Mounting support - Mounting bracket U-ARM – Marking paper – Protection goggles							
ENVIRON. CONDITIONS		15° C (59° F) to 40° C (104° F) external temperature Humidity <95%, without condensation. Vibration free area							

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# fLASER by MACSA

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MACSA ID, S.A.  
T. +34 902 101 828 - F. +34 902 103 915  
Girona 46, 08242 Manresa, Barcelona SPAIN  
macsa@macsa.com - www.macsalaser.com

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