

Widest range of laser technologies by MACSA

Macsa id<sup>®</sup>  
a code you can trust

# LASERSHAPE<sup>™</sup> AND STAND OUT FROM THE CROWD

INLINE LASER CUTTING,  
CODING & SCORING



# A CODE YOU CAN TRUST

Coding, tracing and marking solutions worldwide

Macsa ID provides solutions to meet your coding, identification and traceability needs and to serve manufacturing companies from such as food, cosmetics, pharmaceutical, automotive and electronics.

Macsa ID provides solutions to meet your coding, identification and traceability needs with...



HARDWARE



SOFTWARE



SERVICES



CONSUMABLES

## TECHNOLOGICAL LEADERSHIP



**LASER TECHNOLOGY INNOVATION**  
with patents registered in more than 30 countries



**10% WORLD WIDE MARKET SHARE**  
in coding and marking laser



**ANUAL INVESTMENT OF 10% OF TURNOVER IN R&D**



**1st COMPANY IN THE WORLD TO DEVELOP A DYNAMIC LASER**  
for coding in production lines



**1st FIBER LASERS**  
for on-line coding



**EFFICIENCY AND OPTIMIZATION**  
Macsa's solutions and equipment are 4.0 industries ready



**1st ULTRAHIGH SPEED LASER FOR CODING.**  
BiDiLase: 1000m/min with 100unique QR codes/second

# The most complete range of CO2, Fiber and DPSS lasers on the market



## CO2

Available from  
10 to 560W

### PRECISION

Several features including Macsa's proprietary VCS to ensure high print quality even on high-speed production lines.



### ADAPTABILITY

Wide range of essential and extra accessories to optimise the laser's performance.



## Fiber

From 20W to 200W

### VERSATILITY

Integrated into any production line, it can encode over a wide range of materials using 3D printing options.



### SIMPLICITY

Videos and support material to facilitate its installation and integration.



## DPSS

From 6 to 20W  
(also Green & UV available)

### RELIABILITY

Production environments can test the reliability of laser systems. SPA2 lasers are designed to operate reliably in dusty or damp environments even when subject to extreme temperatures.



### CONNECTIVITY

The lasers include the TCP/IP protocol in order to have complete control of the system from most standard communications. The new SPA2 platform includes the integration of the most widely used industrial communication protocols such as Profinet and OPC-UA. These are both available in all models upon request.



### NO CONSUMABLES

A clean technology that does not produce waste.

### ENVIRONMENT FRIENDLY

No harmful emissions are generated, thus benefitting the work environment and the planet.

### CLEAN

For a cleaner and healthier workspace.

### ENERGY EFFICIENT

Maximum quality and coding speed with just the right amount of energy.

# SOLUTIONS RANGE

After becoming the laser company in the world with the widest range of laser technologies, we have become specialist in the solutions applicable to the converting and packaging sectors.

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### CONVERTING

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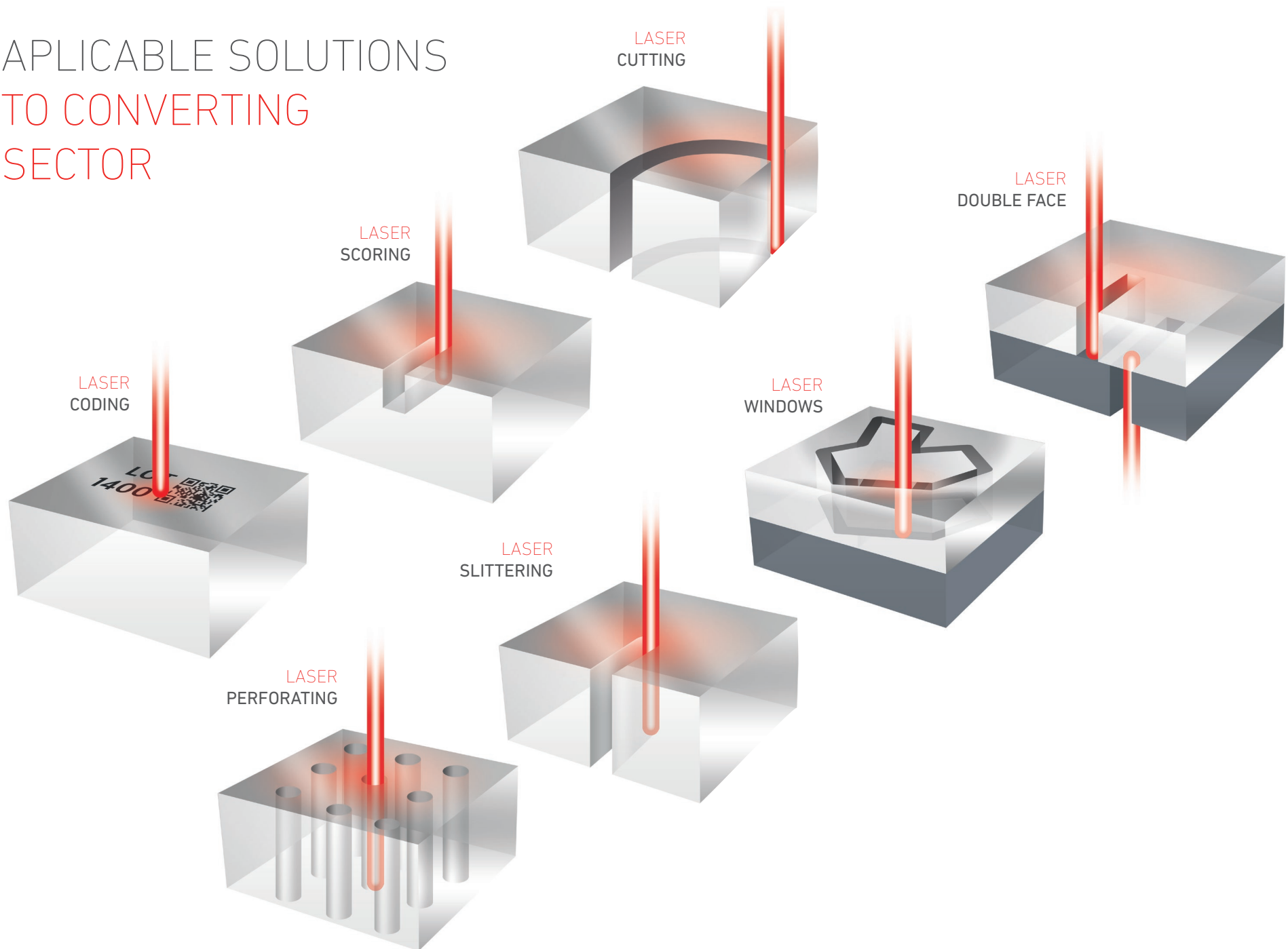
### PACKAGING

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# APPLICABLE SOLUTIONS TO CONVERTING SECTOR



# LASER INTEGRATION IN CONVERTING LINES



## CONVERTING



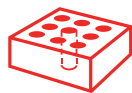
CODING



SCORING



CUTTING



PERFORATING



SLITTING

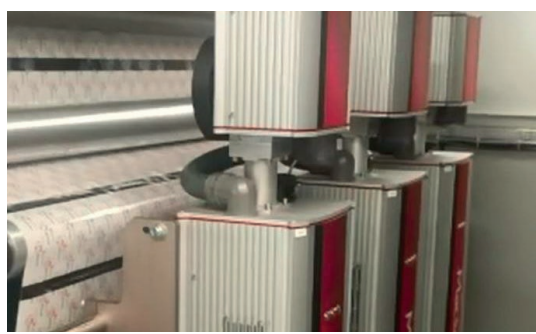
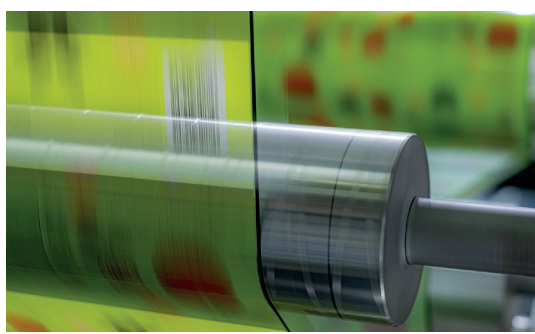
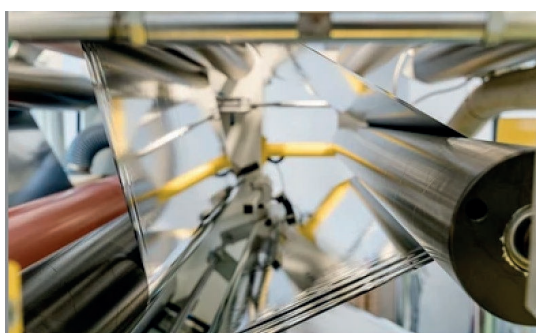
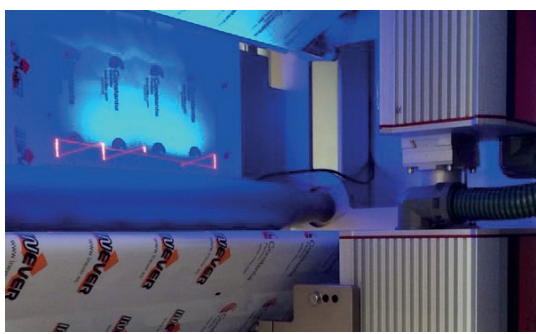


WINDOW



DOUBLE FACE





# BiDiLase, THE CODEMASTER THAT OTHERS CANNOT KEEP UP WITH

Macsa offers a complete solution that provides a unique passport to each package.

GENERATES  
**100 UNIQUE**  
codes / second

CODING AT  
**1000**  
m/min



**SCAN & BE  
INFORMED**



(01) 10012345678902  
(10) MDL200841432T  
(11) 200324  
(17) 240324



BiDiLase is the most innovative and disruptive laser solution for coding and marking in the world for its:



## UNRIVALLED SPEED

More than 100 QR codes per second

It is the fastest laser in the world with a speed of 1000 m/min. It can code faster than any production line need.



## SERIALIZATION

UNIQUE QR codes

Personalise your brand experience with unique QR codes for each and every one of your end consumers thanks to Integra Promo&Serialization software.



## PERFECT QUALITY

Class A high definition

High definition and microprecision without loss of quality and without the issues related to ink devices.



## PREMIUM SCANNABILITY

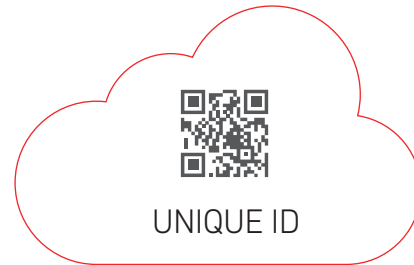
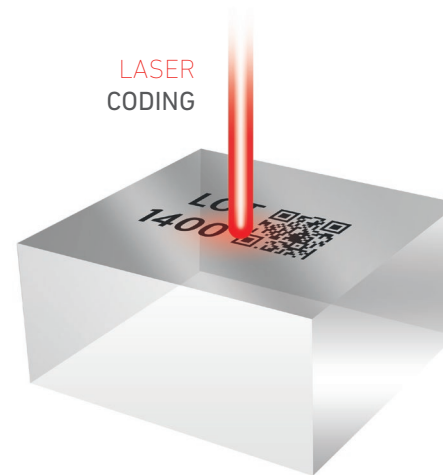
Flawless readability

Smartphone optimized dot size provides your users with the optimum 2D Codes readability.

# BiDiLase, YOUR PARTNER FOR SMART PACKAGING

BiDiLase provides each product with a unique QR/DM code that enables interaction throughout the complete value chain.

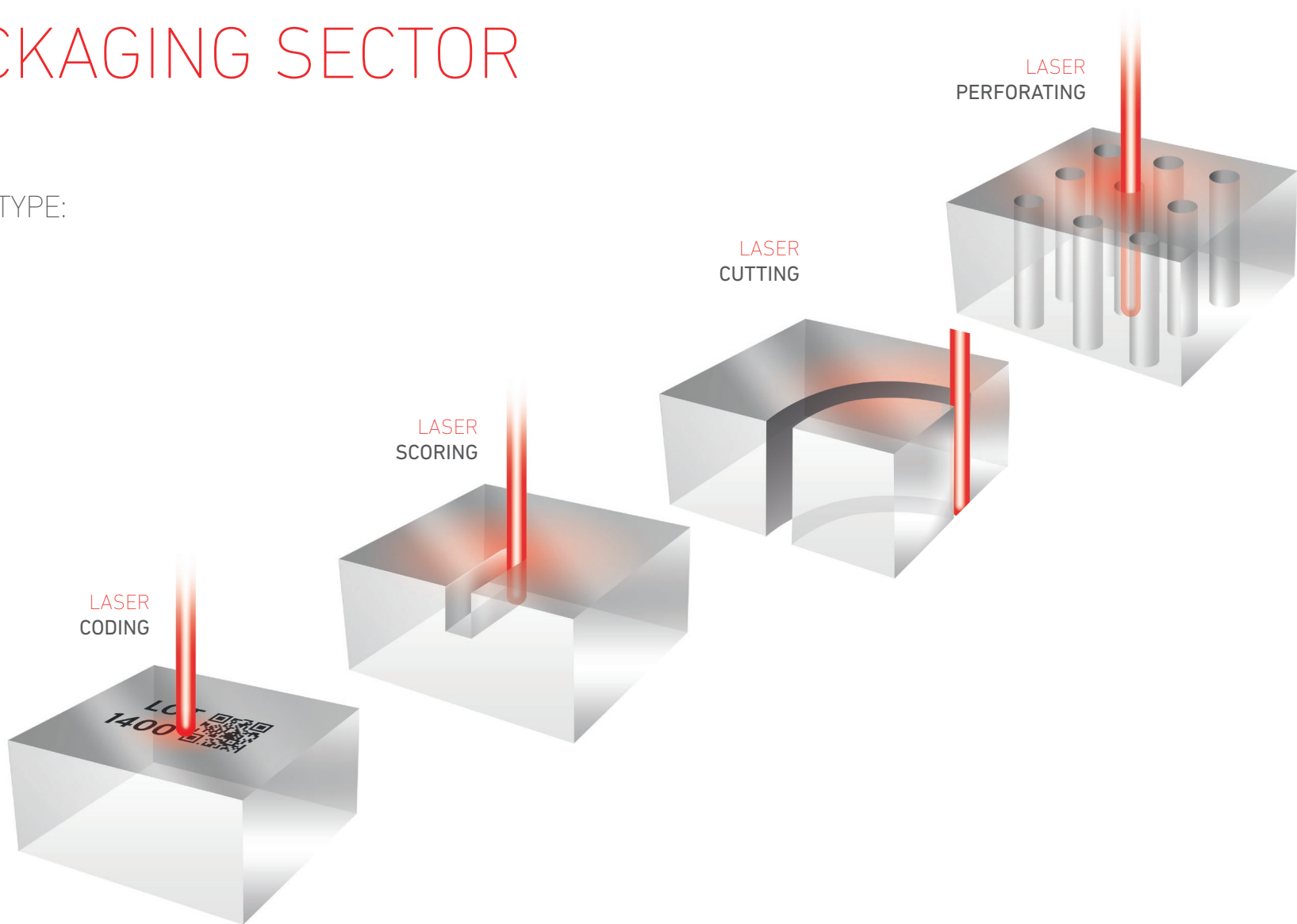
Enabling **TRACEABILITY** from production to end customer.  
Allowing consumer **ENGAGEMENT** through promotions,  
nutritional information, games, etc.



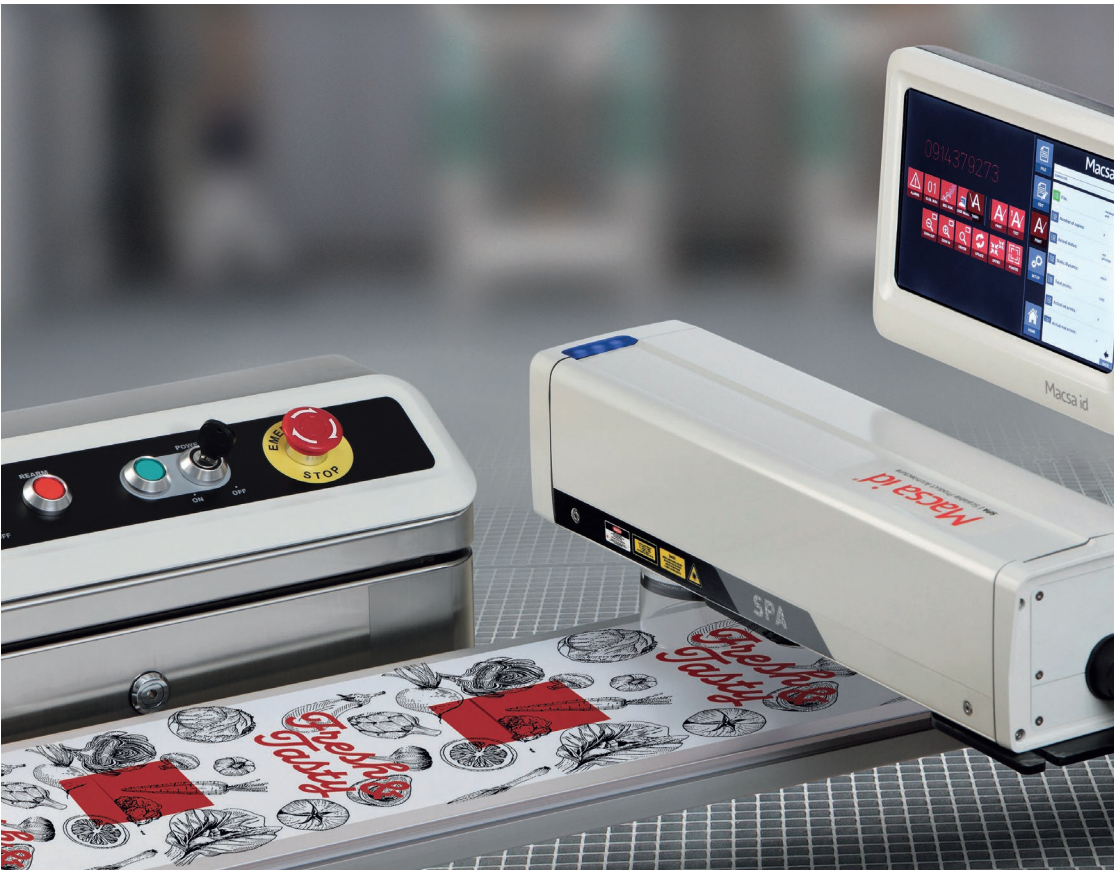
# APPLICABLE SOLUTIONS TO PACKAGING SECTOR

TO MACHINERY TYPE:

- Multilane / Stickpack
- Horizontal HFFS
- Vertical VFFS
- Flowpack
- Thermoforming
- Slevvers
- Pouch Converting



# APPLICATIONS AND MACHINERY



## LASER CODING

Macsa laser machines can code without loss of quality on a wide range of films and flexible packaging materials and substrates such as PP, OPP, PET, PE among others.

There are many advantages associated to the laser. It is a fast, environmentally friendly technology that requires no consumables, it is stable and permanent, and at the same time, it is very flexible to adapt even to harsh environmental conditions.



CODING



SCORING



CUTTING



PERFORATING

# LASER CODING & SCORING

Precise control of the properties of the laser beam allows the selective cutting of layers in the most complex plastic laminates. This allows easy opening while leaving other layers intact to protect the product from light and humidity. Unlike mechanical tools (dies, blades, punches, etc.) laser suffers no wear, as it does not come into physical contact with the substrate.

On Vertical Form Fill Seal Machinery

On Multilines / Stickpack Machinery



CODING



SCORING



CUTTING



PERFORATING

ON VERTICAL FORM  
FILL SEAL MACHINERY



ON MULTILINES /  
STICKPACK MACHINERY



# LASER

## CODING, SCORING AND CUTTING

With a laser we obtain a clean and accurate cut, as well as great flexibility due to its large capacity for adaptation in complex processes. The synchronization of several lasers can make a great variety of applications, from simple lines to contours for reusable packaging. The laser cutting is versatile and functional, since it can make all kinds of shapes in order to obtain a great variety of customized packaging adapted to your needs.

On Flow Pack Machinery

On Horizontal Form Fill Seal Machinery

On Pouch Converting Machinery



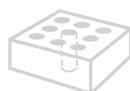
CODING



SCORING



CUTTING



PERFORATING



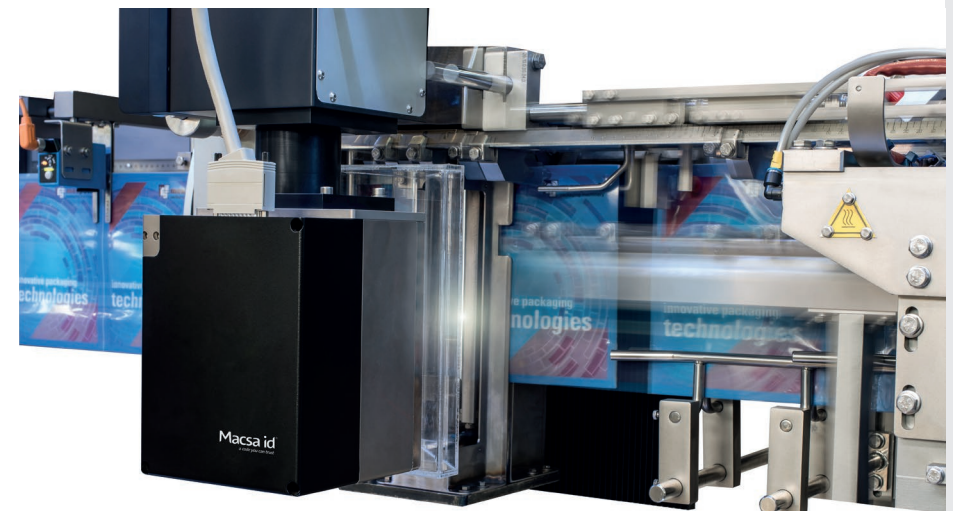
ON FLOW PACK  
MACHINERY



## ON HORIZONTAL FORM FILL SEAL MACHINERY



Unique expertise in machinery integration



## ON POUCH CONVERTING MACHINERY

Based on our wide range of laser technologies, we have developed a specific portfolio of solutions applicable as integrated in the machinery or as stand alone systems.



# LASER MICROPERFORATION

With a laser we obtain a clean and accurate cut, as well as great flexibility due to its large capacity for adaptation in complex processes. The synchronization of several lasers can make a great variety of applications, from simple lines to contours for reusable packaging. The laser cutting is versatile and functional, since it can make all kinds of shapes in order to obtain a great variety of customized packaging adapted to your needs.



CODING



SCORING



CUTTING

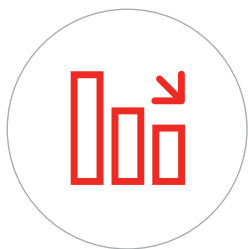


PERFORATING

ON A SLEEVE  
MACHINERY



# LOWER YOUR COSTS



## SAVE COST ON THE LONG RUN

Macsa laser systems provide the lowest total cost of ownership for flexible packaging applications.



## NO MAINTENANCE

Cutting without contact: no sharpening, no die-cut exchange and no cutting spares.



## NO CONSUMABLES

Code inline with no inks, no solvents and minimum maintenance.



## SAVE FILM, SAVE COSTS

Laser cut saves 5 mm of film for each produced pouch. Be sustainable.



## 3 LASERS IN ONE

Laser cutting, coding & scoring with a single laser system. Buy a cut laser; get a coder and scorer for free.



## PAY ONE SHAPE AND GET 1000 FOR FREE IMMEDIATELY

Design all shapes you need in minutes, and don't pay more for it.

# MAKE YOUR PRODUCTS EASY TO SELL

## ✓ Differentiate from others

Promote shapes to the supermarkets and differentiate yourself from your competition.

## ✓ Make your end user's life easier

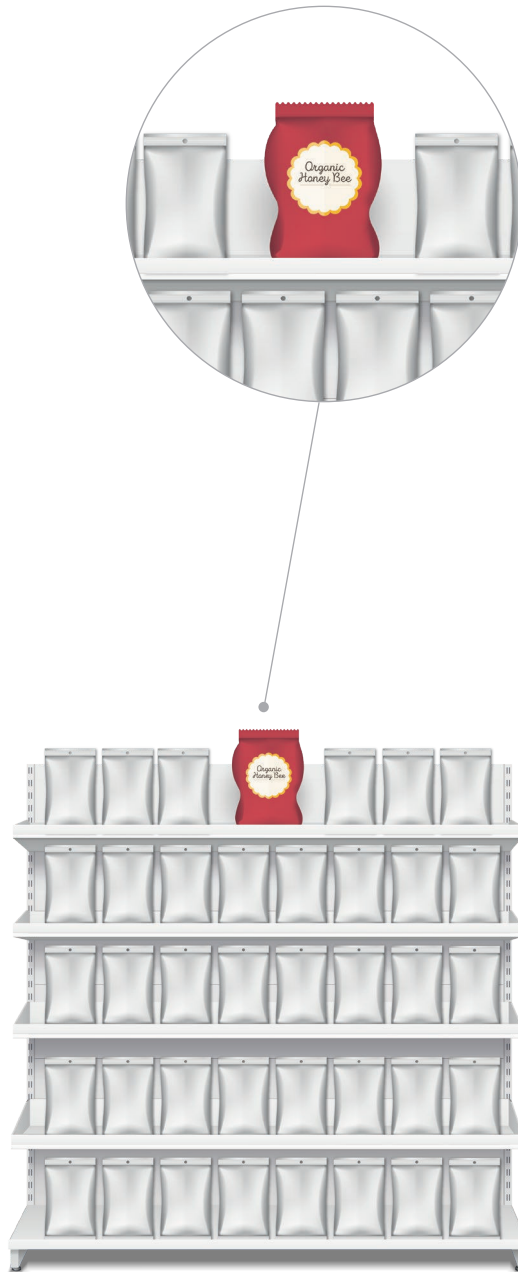
Get customer's to love your products, offer them Macsa's easy opening solutions.

## ✓ Increase shelf life

Inline micro perforation elongates your product's life, thus now you can sell at new far away territories.

## ✓ Make your products more attractive

Perfect cut: no threads, no hooks and perfect shapes with Macsa Inline Cutting Systems.



# IMPROVE YOUR PROCESS AND YOUR PRODUCTS

## ✓ No stops to change shape

Change your package shape in 7 seconds; "manufacture" a new shape in 7 minutes. And all from a touch screen.

## ✓ Total integration

Don't wait for new reels to arrive, do it now thanks to laser cutting, coding & scoring inline with your packaging machinery.

## ✓ Make your products nicer

Get the best coding quality for your products with Macsa Laser systems.

## ✓ Make your products safer

Permanent laser marking is the best counterfeiting solution for your products.

## ✓ Work more efficiently

Thanks to Integra software data will be collected for decision making, to improve your manufacturing processes and operations, giving the capability from data flow to analytics.

LASER TECNOLOGIES	C02	Fiber	DPSS			BidiLase
			DPSS	GREEN	UV	
FEATURE	Coding, Scoring & Cutting	Coding				
WAVELENGTH	10.600, 10.200 & 9.300 nm	1.064 nm		532 nm	355 nm	975 nm
TECHNOLOGIES	C02	Ytterbium pulsed & CW	Compact Q-Switched Nd:YVO4			BidiLase
POWER	10, 30, 40, 60, 80, 100, 300, 560W	20, 30 ,50, 100, 200W	6, 10, 20W	1.5, 4, 5, 10W	5, 15W	60-240W on 25-35 dots
ENVIRONMENT	Standard, Dusty & WashDown					
HMI	Touch Screen, PC, Laptop, OEM integration					
COOLING METHOD	Air & Water cooled					
SCANNING	2D & 3D					
ACCESSORIES	Encoder - Photocell - Chiller - Fume extractor - Floor stand - Mounting bracket - Alarm kit ...					
SERVICES	Consultation - Installation - Commissioning - Training - Technical Support - Extended Warranty - Maintenance ...					

Widest range of laser technologies by MACSA



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