

HPD and fLASER by MACSA

LASERSHAPE™ AND STAND OUT FROM THE CROWD

INLINE LASER CUTTING,
CODING & SCORING



Macsa id
a code you can trust

A CODE YOU CAN TRUST

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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...

- | | |
|-------------|----------------|
| 1. HARDWARE | 3. SERVICES |
| 2. SOFTWARE | 4. CONSUMABLES |

Technological leadership



LASER TECHNOLOGY INNOVATION with patents registered in more than 30 countries

10% WORLD WIDE MARKET SHARE in coding and marking laser



ANNUAL INVESTMENT OF 10%* IN R&D (*) of turnover

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

1ST FIBER LASERS for on-line coding

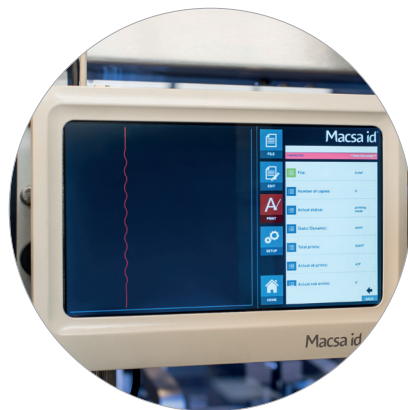


EFFICIENCY AND OPTIMIZATION Macsa's solutions and equipment are 4.0 industries ready



HPD THE COMPLETE INLINE LASERSHAPE SOLUTION™

Macsa ID offers the widest and most suitable inline laser product portfolio for all flexible packaging applications.



A significant step
forward in laser
technology

Cutting, scoring
and coding
flexible packaging
applications

INLINE. Lasers
installed on
packaging
machines

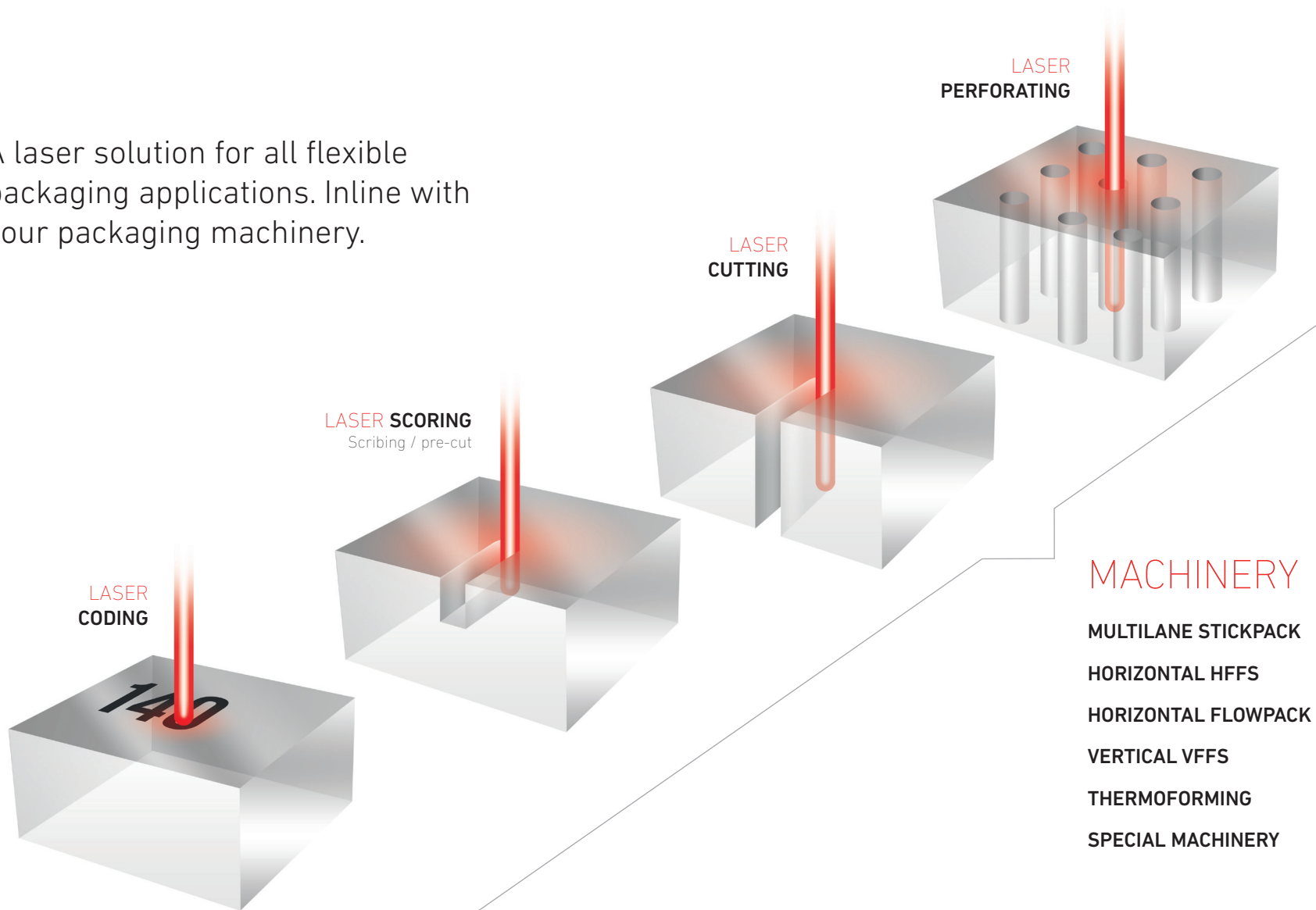
Unique product
portfolio and
integration know-how
in the market

Macsa unique
expertise



APPLICATIONS

A laser solution for all flexible packaging applications. Inline with your packaging machinery.



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.



LASER CODING



LASER SCORING



LASER CUTTING



LASER PERFORATING

LASER CODING & SCORING (easy open)

Precise control of the properties of the laser beam allows the selective cutting of layers in the most complex plastic lms. 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 a Multilane / Stickpack
On a HFSS machine
On a VFFS machine



LASER CODING



LASER SCORING



LASER CUTTING



LASER PERFORATING

On a Multilane /
Stickpack



On a HFFS machine



On a VFFS machine



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 a flowpack

On a HFFS machine



LASER CODING



LASER SCORING



LASER CUTTING

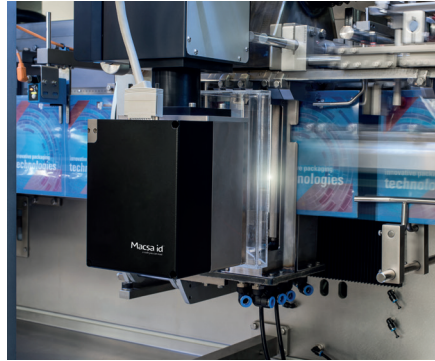


LASER PERFORATING

On a flow-pack



Cutting shapes on
HFFS multilane
machine



APPLICATIONS AND MACHINERY

LASER MICROPERFORATION

Polymers allow the transport of low molecular weight components, resulting in the permeation of oxygen, water, components of food aromas and any other gases and vapours. That is the basis of Modified Atmosphere Packaging (MAP). In porous packaging the longevity of perishable products is increased and the exchange flow between atmospheres is controlled.



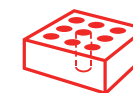
LASER CODING



LASER SCORING

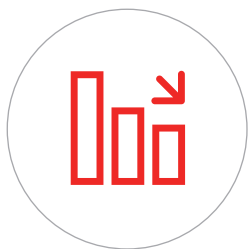


LASER CUTTING



LASER MICROPERFORATING

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

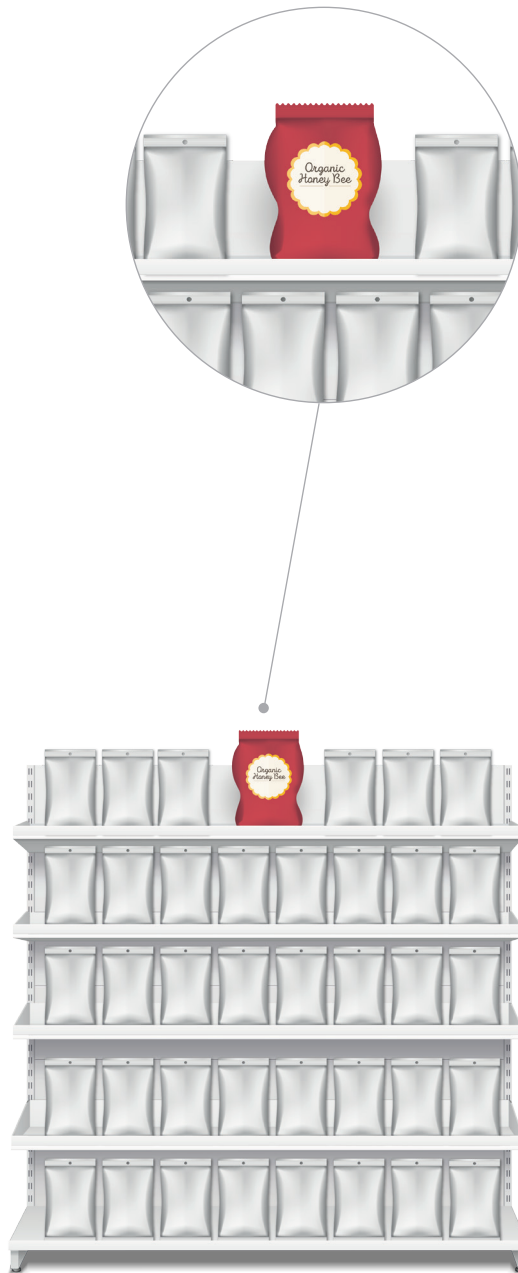
Get customer's to love your products, offer them Macsa's easy opening solutions.

✓ 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.

HPD Series

INLINE CUTTING, CODING AND SCORING

HPD Series are powerful, high performance CO2 lasers. They deliver exceptionally High Power Density which enables them to be effective in cutting and perforating flexible plastic films and foils and other materials, marking high resolution images onto several non-metallic substrates and coding difficult to code substrates.

Feature	HPD Series
Capabilities	Cutting, coding and scoring
Integration with	HFFS, VFFS, Multilane, Flowpack, ...
Technology	CO2 – 10.6 – 10.2, 9.3
Power	30-60-80-100-250-400
Substrates	PP, PET, PE, ALU ...
Marking areas	From 40x40 mm to 1200x1200 mm
HMI	Touch Screen, PC, Laptop
Cooling Method	Air / Water Cooled
Scanning	2D and 3D scanning
Accessories	Touch Screen - Encoder Kit - Chiller - Fume extractor - Floor stand - Mounting bracket - Alarm kit ...
Services	Consultation - Installation - Commissioning - Training - Technical Support - Extended Warranty

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.

Feature	fLASER
Capabilities	Coding on thinnest flexible packaging
Integration with	HFFS, VFFS, Multilane, Flowpack, ...
Technology	Fiber
Power	10-20-50
Substrates	Thinnest PP, PET, PE, ALU ...
Marking areas	From 40x40 mm to 600x 120 mm
HMI	Touch Screen, PC, Laptop
Cooling Method	Air Cooled
Scanning	2D and 3D scanning
Accessories	Touch Screen - Encoder Kit - Chiller - Fume extractor - Floor stand - Mounting bracket - Alarm kit ...
Services	Consultation - Installation - Commissioning - Training - Technical Support - Extended Warranty

HPD and fLASER by MACSA



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