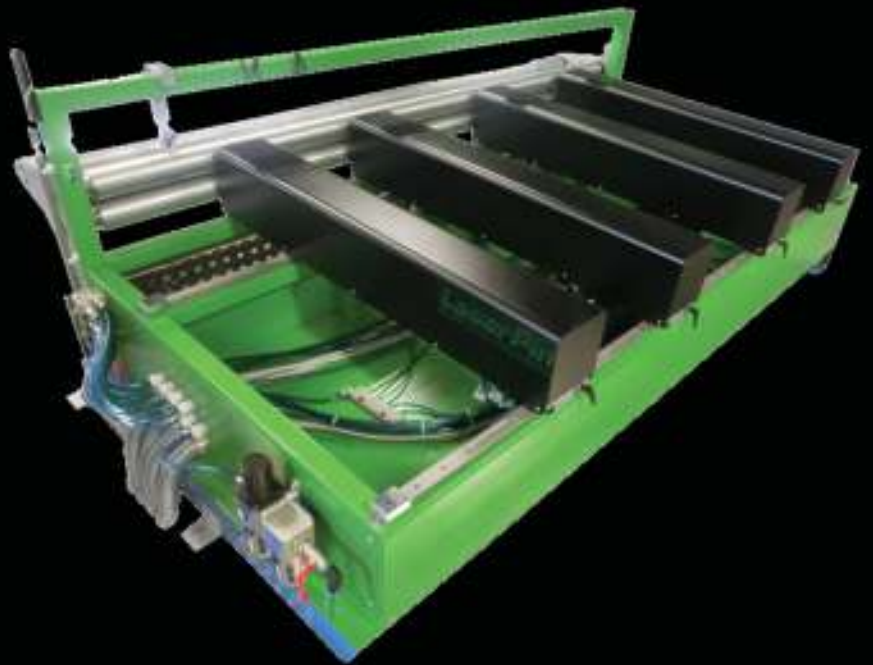


LaserPin

LASER LR4



Laserpin has invested in Laser technology, designing a unit that meets the requirements of the latest developments in the packaging industry, especially regarding Modified Atmosphere Packaging (MAP) and its applications.

The LR4 is ideal for micro perforation and scoring of plastic film for IV and V range packaging, allowing for an increased shelf life of fresh products

The LR4 is a machine equipped with a CO2 Laser, which emits a beam of light at a pre-set infrared wavelength.

An optic system concentrates the beam on a small surface of the material. The heat generated by the laser sublimates the material, thus creating small holes invisible to the naked eye.

The diameter of the holes is regulated by an innovative 4.0 software that sets the strength of the beam on the material, which runs at a constant speed. The laser unit is thus able to perforate materials with different strengths and thicknesses. It also works on materials made of different layers.

Changing the size of the holes alters the exchange of atmospheric gas between the packed product and the outside environment. Finding the right balance ensures an increased shelf life of the fresh product.

The software controls the pulses of the laser. At high frequencies, the laser runs continuously while at lower frequencies it creates holes at a set distance. The control system is supported by an encoder and a trigger system.

This means the software can vary the size of the holes and the distance between them, thus adapting to different materials and requirements.

By using the laser with calibrated power, it is possible to weaken the material in depth, reducing its thickness without perforating it, on web direction.

This process is called laser scoring and creates easy opening tears that help the end-users open a product.

Laserpin is investing in R&D to find increasingly better solutions for the latest developments in the industry.

LaserPin
Perforation Equipment

LaserPin srl
Viale Europa 18/20 - Cologno Monzese (Milan) Italy
Phone +39-022547475
www.laserpin.eu - info@laserpin.eu

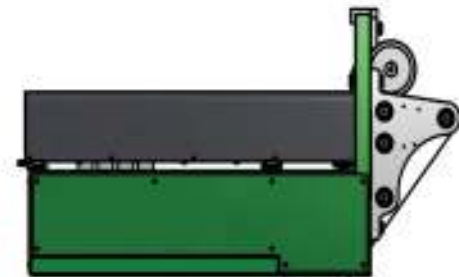
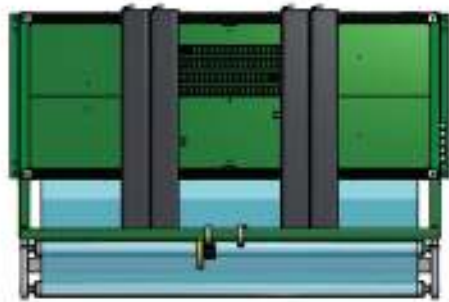
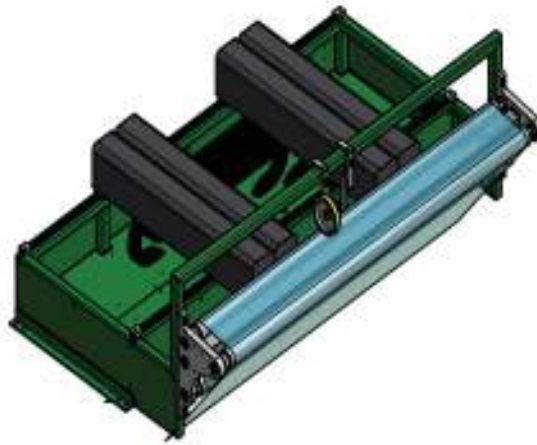
LR4

The LR4 is Laserpin's unit equipped with Laser technology.

It is ideal for micro perforation and scoring of IV and V range packaging.

It meets the latest requirements regarding MAP (Modified Atmosphere Packaging)

It creates holes as small as 0,07 mm.



Type of Material



LDPE



HDPE



PP



COATED



PU



PAPER



PVC



BIODEGRADABLE



COMPOSTABLE



PET

Maximum Working Width

2800 mm

Maximum Material Thickness

350 microns

Maximum Speed

400 meters/minute

Maximum Source Power

360 W

Diameter of the Holes

0,07-0,2 mm

Power Signal Resolution

10 Micro Seconds

Maximum Impulse Frequency

30 kHz

Cooling System

Liquid/Air

MAIN APPLICATIONS

MAP PACKAGING

EMAP PACKAGING

IV RANGE PACKAGING

V RANGE PACKAGING

EASY OPENING SYSTEMS