



UV Laser Marking

A winning solution for marking codes on flexible film

Depending on the film type, CO₂, fiber, and ultraviolet (UV) lasers can all mark on flexible packaging material. However, UV lasers stand out for their ability to mark in small areas on a diverse range of materials. With short wavelengths, UV lasers feature smaller spot sizes, producing better contrast, high-resolution codes, as well as minimal fumes on most substrates and low damage to barrier layers.

Advances in both laser technologies and film composition make lasers an excellent option for marking dates, lot codes, 2D barcodes, and allergen information on flexible film packaging.

UV lasers use a specific light source to create a color change of a bag or pouch's outermost film layer containing a UV-sensitive material like TiO₂, or of a white knock-out zone, leaving a permanent high-resolution code.

Since they do not require inks, solvents, or ribbons, lasers can help decrease waste in your operations, offering advantages to both your business and the environment.

Directly on the body of packs, bags, and pouches with consideration for the sensitivity of the product and the barrier material used



Directly on the sealing area of fin/lap seal packs, bags, pouches, zipper pouches, side-sealed pouches, and more

On a pre-printed white knock-out zone

UV lasers stand out for their consistent performance across a wide range of Videojet-tested film materials.

Compare laser marking quality on flexible films	CO ₂	Fiber	UV
On sealing area	●	●	●
On body: Low barrier products	●	●	●
On body: High barrier products	●	●	●

Testing is the key to making sure your substrate continues to protect the product



Careful consideration and testing must be performed to help ensure the desired mark on any substrate. Videojet sample labs are equipped and ready to perform tests on your materials. We're here to help!