COLLOIDS

LASER MARKING

L-TEC®

High Performance Laser Additive

Any process, any polymer

Colloids L-TEC® laser marking products can be used in virtually any process and any polymer. The use of lasers are continuing to grow and Colloids range of products will allow you to get the best from your laser.

The high contrast marks that can be achieved are rapid and in virtually any colour and shade.

The L-TEC® additive works by absorbing the laser energy and causing some very localised heating, for a very short time, which creates a dark mark obtained from the burning or charring on the surface or a light mark obtained when laser causes the polymer foam.

Both light and dark marks are permanent, resistant to light, abrasion and chemicals.

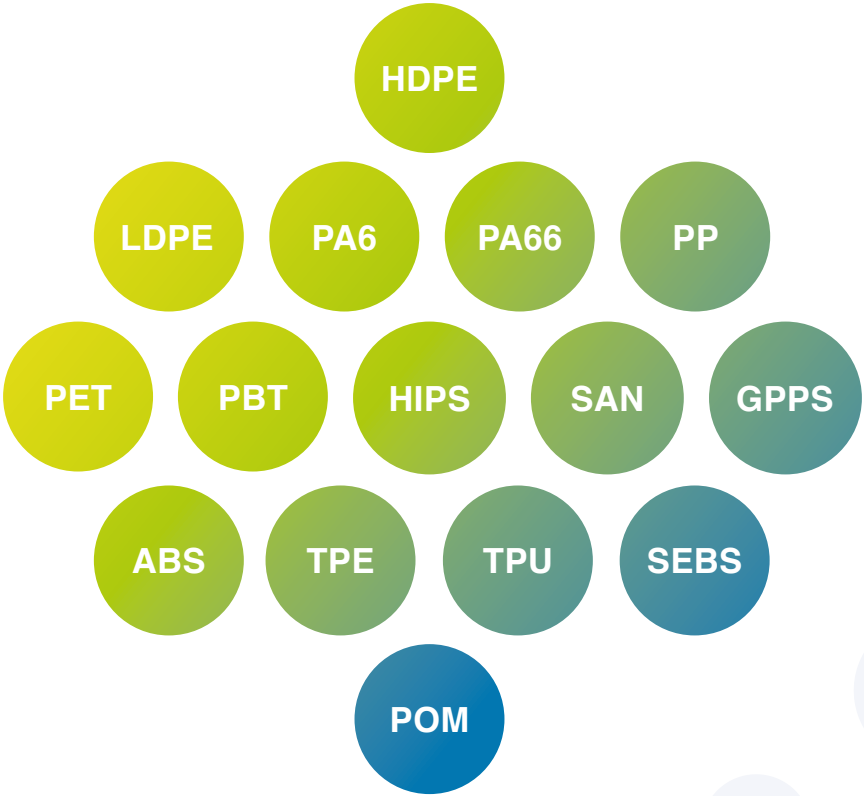
Transparent and translucent

L-TEC® can also be incorporated into transparent polymers either as a natural or coloured tint creating a dark mark.

Why laser marking?

- Marks are chemical, light, scuff resistant
- Anti-counterfeit
- Non-contact process so no wearing of parts and tools
- No consumables such as inks and solvents
- Can easily mark on stepped or curved surfaces, depending on laser capability
- The laser marking can be incorporated into the process and mark in-line
- Laser marking is suitable for both low and mass production of parts
- Not affected by static

Polymers


HDPE
LDPE
PA6
PA66
PP
PET
PBT
HIPS
SAN
GPPS
ABS
TPE
TPU
SEBS
POM

Markets & applications

In general laser marking can be used to identify part numbers or product information to be permanently marked compared to a label or print which may peel off or wear off over time. This technology has found uses in security applications, such as tags and seals.

Automotive
Lot numbers and manufacture dates for parts will help defend warranty claims from non-OEM parts fitted.

Decoration of interior parts using laser marking.

Recent changes in IATF accreditation requires consideration of anti-counterfeiting technologies.

QR codes or barcodes can be printed to allow for inventory checks, product information etc.

Medical
Recent changes in medical standards require single use items to be identified with lot/ID numbers.

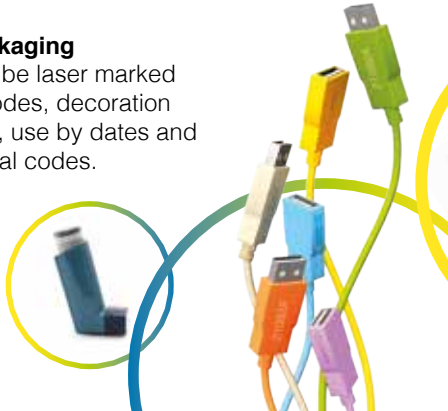
Electronics
Part identification on keyboards, control switches and some components.

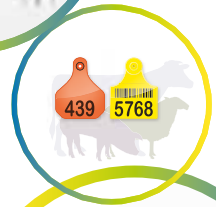
Cosmetics & personal care
Part decoration and logos, personalisation, use by dates and promotional codes.

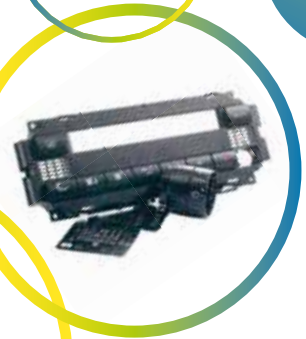
Caps & closures
Caps can be laser marked with barcodes, decoration and logos, use by dates and anti-counterfeiting.

Agriculture
Cattle ID tags which are permanently marked.

Food packaging
Caps can be laser marked with barcodes, decoration and logos, use by dates and promotional codes.







Product offerings

L-TEC® is compatible with solid state YAG, pumped diode, hybrid fibre, green and UV lasers. L-TEC® can be supplied as a polymer specific or universal masterbatch with addition rates from as low as 1% or fully compounded into a specific polymer. Products will be formulated with both the L-TEC® laser marking additive and the colour optimised.

R&D expertise

At Colloids we understand that developing a laser marking product is more complex than just colour, which itself is complex enough. That's why we have an R&D team set-up to work on every laser enquiry. This team supports Colloids globally with every laser enquiry.

The R&D team will fully optimise every formulation, to ensure that you get a product that is the right colour, marks at the fastest speed, with the highest contrast and importantly at the right cost. Using our in-house laser every formulation is fully tested and the right balance is achieved with the additive and colourants.

Quality

As with every product supplied from Colloids quality is at the forefront when we design our manufacturing processes. The L-TEC® additive has been result of a 2 year R&D project and therefore we fully understand how to control the product to ensure that every pellet of masterbatch is consistent which will ensure that you get consistent marking.

Every batch produced is tested in-house using our laser. A laser marked sample plaque is supplied with every batch which will give you confidence that you are buying a product with exactly the right amount of additive needed to achieve the perfect mark.

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