

MICROPERCUSSION/LASER MARKING COMPARISON

Industrial marking is evolving rapidly and there are many issues at stake:

- The availability rate of the marking system determines the productivity of the production line.
- Industrial marking is demanding: complex logos, Datamatrix, durability.
- The total cost of marking must be minimal over the lifetime of the equipment.

MARKING BY MICRO-PERCUSSION



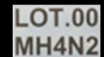
PROS

- Compact equipment.
- Low initial investment.
- Permanent label.

CONS

- Matrix marking (dots).
- Non-contrast marking.
- Long marking time.
- Noisy.
- Material specific marking needle.
- Fragile needle for hard materials.
- Regular maintenance.
- Relief marking that can deform thin materials.
- Minimum dimensional marking (5 mm).

LASER MARKING



PROS

- No consumables (laser).
- Contrasting vector marking.
- Quiet.
- No deformation of the material.
- Low operation and maintenance cost (electricity).
- Intermittent or on-the-fly operation, up to 5 m/sec. Accuracy of 10 µm.
- Instant marking.
- Robust equipment, no mechanical wear, no breakage.

CONS

- Regulated integration (laser risk to be treated).
- High initial investment cost.
- Monochrome marking.



Questions to ask yourself when integrating a marking solution

- What will be the unit cost of my marking?
- What is the production volume?
- Are production interruptions acceptable?
- What surface is available for my marking?

Key economic points laser vs micro-percussion

- Availability rate of over 99%.
- Low maintenance cost (no consumables).
- Superior marking quality and definition.
- Low energy cost.

