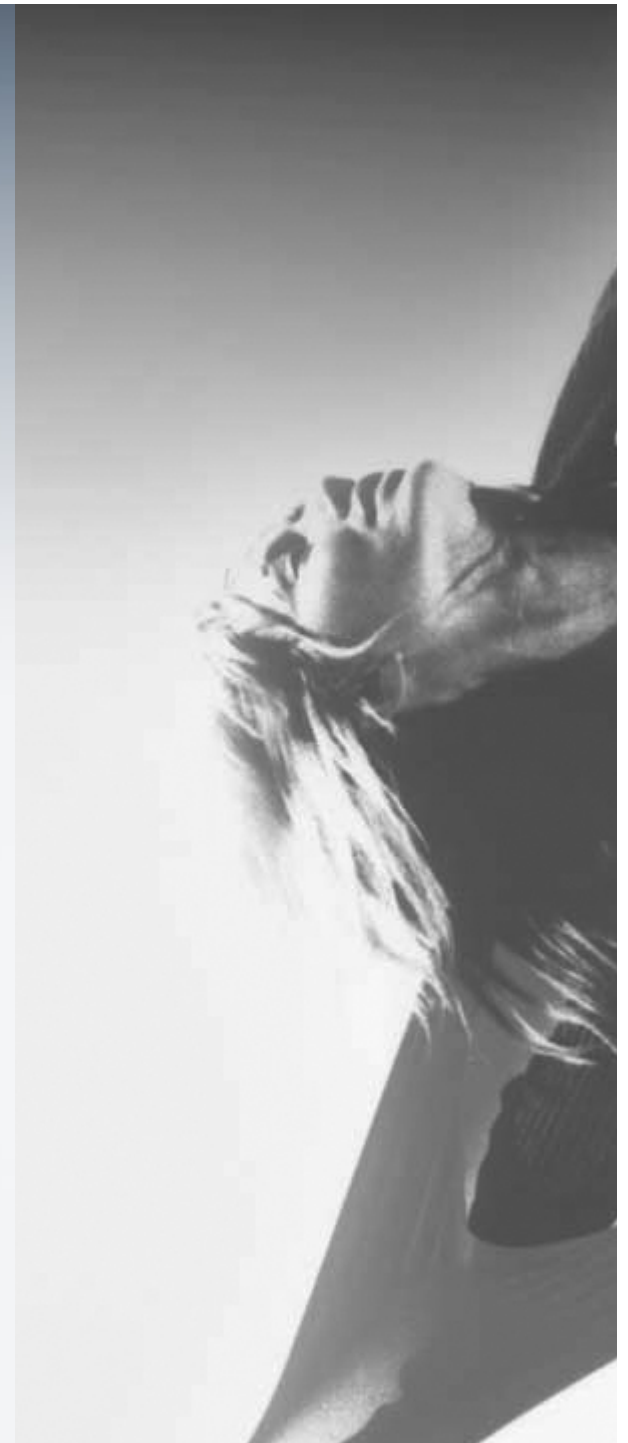


# Laser Markable Inks



# Laser Markable inks

## Main markets

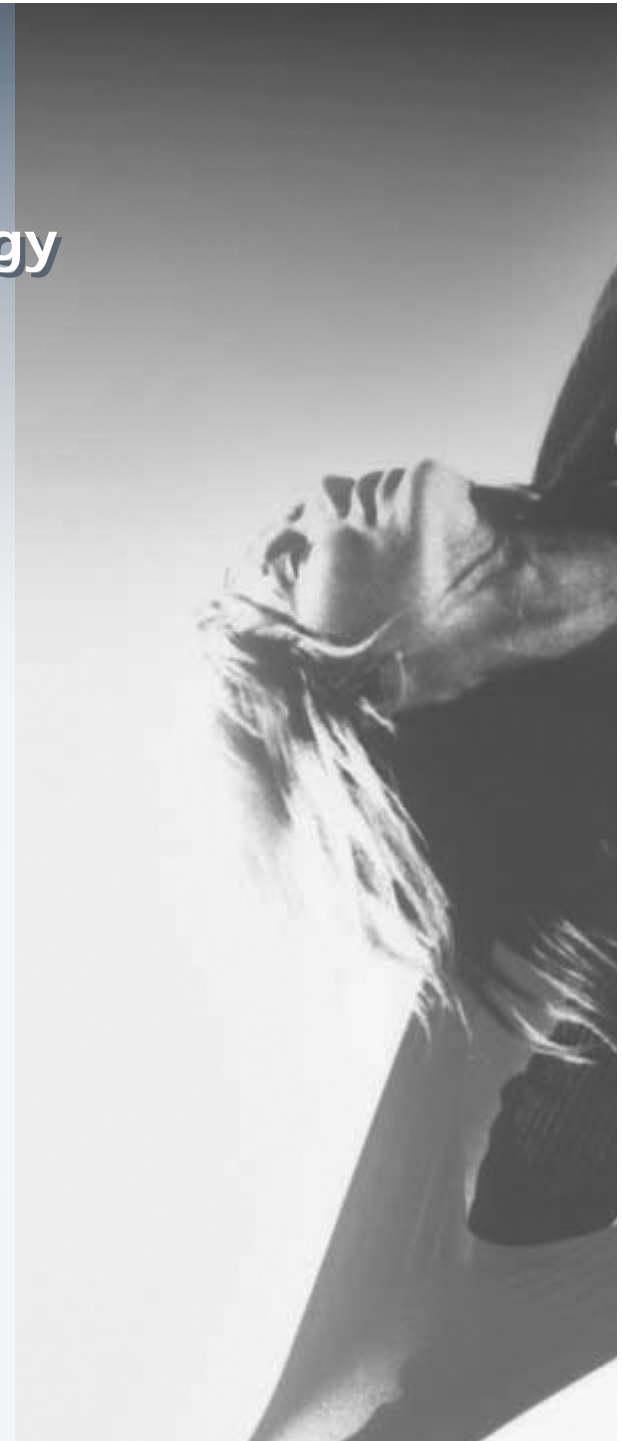
- Product Identification (over \$4billion)
  - Disruption technology for CIJ and TT
  - Packaging and labels
- Lasermarkable ink is printed on label or pack
- This is later overprinted by Laser, creating barcodes, codes or VIP information that is needed.
- Technology is faster, more robust, versatile compared to ink jet, direct thermal and thermal transfer.



# Lasermarkable inks

## Advantages with laser coding technology

- Indelible code
- High reliability:
  - Laser has probably the highest reliability of all coding devices with close to 100%, thus maximising production line uptime
  - Code created in surface or under protective layers.
- 'Clean' production line environment:
  - No additional on-line materials required. No risk of product contamination.



# Lasermarkable inks

## Advantages with laser coding technology

- Low maintenance:
  - no inks or solvents to refill (or spill) on the production line, no ribbons to replace, no nozzles to unblock. No consumables to stock = low running cost
- Low cost of ownership
- Instant codes: No drying time
- High quality characters –better code legibility than inkjet
- Non Contact



# Laser-markable Ink

A smart ink for labels

- Laser-markable ink can be formulated to be printed using UV Flexo, UV screen, WB flexo as well UV Letterpress
- is especially developed for being marked by low-energy laser
- will change color from white to black. The color-change is an imaging process as opposed to an ablation process.
- The ink works with Low energy laser, with 10600 nm wave-length.



# Laser markable inks

- Factors affecting the final result are:
- Laser power (too low the colour turns light-grey, too high the ink will be burned off or burn through label)
- Speed of Laser
- Lens
- Coat weight of ink
- The ink can be laminated with a transparent film, however some materials are opaque to the laser-light.
- Consequently testing of films is recommended prior to use.



# Laser markable inks



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