



# Th-ink modular!

Digital Label Printing Systems



## mlabel meets the highest expectations

A unique label printing system: mlabel prints and finishes labels in one step! Since it is fully modular, the customer can design his ideal machine configuration. The free combination of various printing processes and the entire spectrum of finishing modules make it possible!



Convincing print results • Extremely economical • State-of-the-art design

# mlabel – modular and entirely flexible

## 1 Material unwind

- Precise web guide system with integrated splice table
- Web tension control
- Web cleaning unit

## 2 Thermal transfer print engine

- To apply high gloss metalized colors, e.g. silver and gold, or white underlay
- For security features such as holograms
- To apply scratch-off layers

## 3 Cold foil unit

- To apply high gloss, metalized colors, e.g. silver and gold

## 4 RFID module

- Dispenser unit for RFID inlay insertion
- Unwind for printable cover layer
- Optionally with read/write unit

## 5 Inkjet print engine

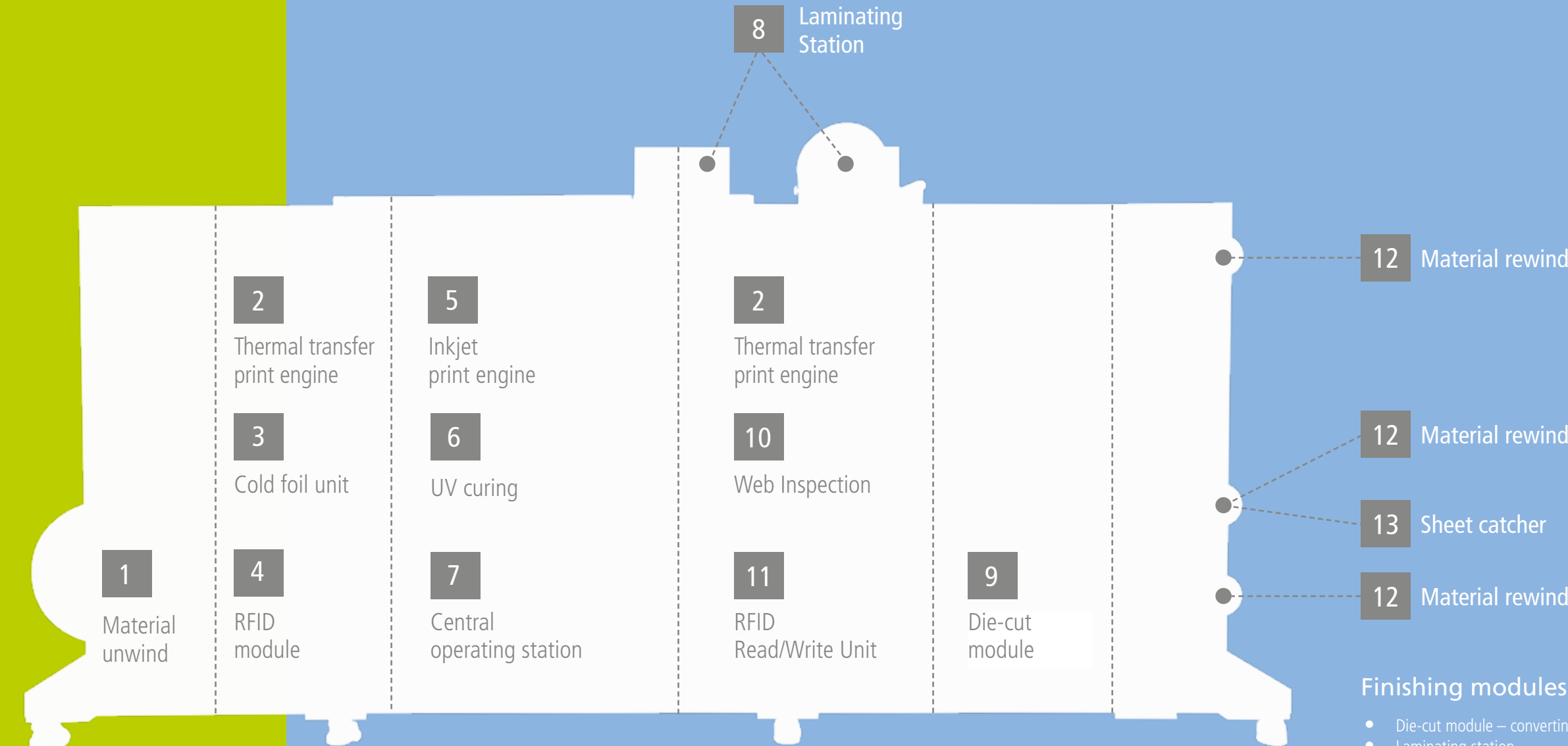
- Up to 6 colors with UV Pinning
- Without pinning up to 12 colors
- Print speed up to 50 m/min with UV inks, up to 72 m/min with water-based inks
- Integrated maintenance station with automated print head cleaning and ink recovery

## 6 UV curing

- Immediate pinning of the inks with UV LED pinning systems
- Automatic speed sensitive UV curing unit
- Optionally with UV LED or UV lamps for final cure
- Performance reserves for critical inks and high print speeds

### Print modules

- Inkjet
- Thermal transfer
- Cold foiling
- Flexography



### Finishing modules

- Die-cut module – converting unit
- Laminating station
- RFID insertion
- RFID verification
- Web inspection
- Customized modules

## 7 Central operating station

- Access to all functions for printing and finishing
- Simple operation with a graphic user interface, optimized for a touch screen

## 8 Laminating Station

- Adjustable material tension for unwind and rewind
- Servo drive with clockwise and counterclockwise direction
- Splice table

## 9 Die-cut module

- Rotational die-cutting (from top or bottom)
- Through-cuts with integrated waste extraction
- Slitting, variable sheeting, and perforating
- Integrated second die-cut station with separate servo drive for re-registration die-cut of pre-printed label material (optional)

## 10 Web Inspection

- Print image inspection
- Barcode verification

## 11 RFID Read/Write Unit

- Functional test of inserted RFID tags
- Available with marking of defective RFID tags

## 12 Material rewind

- Servo drive, clockwise and counterclockwise

## 13 Sheet catcher

- For the roll-to-sheet production in connection with a sheeting cylinder

# mlabel – a unique concept

## The ultimate job flexibility

- Full-fledged production machines with freedom in combining printing and finishing technologies
- Completely modular design with matched modules
- Customer-specific modules are possible

## Ease of operation

- User-friendly operation in plain language dialog
- Adjustable touch screen
- Compact, space-saving machine design
- Front access to the machine allows for easy material change

## Powerful software

- mprint's machine and print software was designed for ease of use and optimal print quality
- Integrated module to print variable data
- Ink management software with the possibility to create ICC and device link profiles
- Specialized expansion module to reduce ink consumption

## Performance data

- Printing speed: 50 m/min. (UV inks), 72 m/min (water-based inks)
- Resolution: 600 x 600 dpi (physical resolution) or 1,200 x 600 dpi
- Print width: 216 mm – widths of 324, 432, and 540 mm upon request
- Width of die-cut module: 10" (254 mm)
- Max. material width: 260 mm



Every current label printing technology can be integrated in mlabel's modular design.

# mlabel creates the future

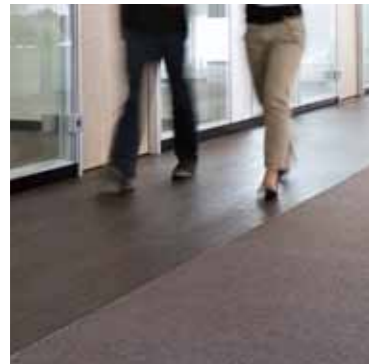


## Extremely economical

- All printing and finishing processes in one step
- Process stability with professionally integrated standard modules
- High print speeds result in high productivity
- Glossy gold or silver, as well as the integration of security features without additional process steps

## Prepared for the future

With a mlabel digital label printing system in its production lineup any company is prepared for the future. And the future means more products with shorter life cycles, in smaller runs, and for more and more customers. Because the mlabel printing systems are digital and modular, they are the perfect solution for the ever-changing requirements! mlabel has the maximum level of flexibility for a quick reaction to new market demands: modules can be purchased down the road and integrated quickly and easily. Th-ink modular!



# mprint – visionary and highly motivated

## At Full Throttle

With mlabel, the digital label printing system, mprint has shown how a small Southern German company is still able to compete with international corporations. The commitment to the smallest details is reflected in a machine's true utility value. Here at mprint, our best efforts go also into the many small refinements and detailed solutions, which make the work easier for our clients.

## Unbeatable Quality

mprint is a family-owned company in Germany's Black Forest with an exceptional in-house production depth and reliable, long-term partners. The largest supplier of precision parts is Morlock Präzisionstechnik, owned and operated by Rudi Morlock. Due to his extensive experience in the field of printing, he supplies mprint only with the absolute best quality: "The two companies are separated only by a door in the production hall. Any questions regarding components are immediately resolved. This is the best and safest way to react to all customer requests."



**"Together we have succeeded: nothing less than the ideal digital label printing system."**

Michael Morlock, mprint  
Rudi Morlock, Morlock Präzisionstechnik



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