The MD-9000 is Zetes’ labelling machine for unique identification (datamatrix and serialisation). It is developed to meet the strict needs of the pharmaceutical / healthcare industry being fully compliant with international legal requirements. With its flexible design, the machine suits both new and existing production lines. The MD-9000 is steered by an industrial real-time controller capable of exchanging data between all the components of your packaging line.

The MD series has been designed to meet the need for fast integration on packaging lines. Proven features deliver efficiency and ease of use in industrial environments. A modular approach with a wide range of configuration possibilities, result in minimal intervention time and consequently maximal productivity.

**Datamatrix & serialisation**

The MD-9000 is built for unique identification (datamatrix, 1D, QR code and serialisation). It is fully compliant to international legal requirements against pharmaceutical counterfeiting. With its flexible design, the machine suits both new and existing production lines. Using industry standard components and designed in-house, the MD-9000 is developed to meet the needs of the healthcare industry and provide a clear solution to the challenges of serialisation.

**Key benefits**

**Productivity**
- Reduced downtime with easy product change mode
- Designed for tamper-evident labelling
- Digital tracking (accuracy 1 / 10 mm)

**Traceability**
- Compliant to ECC-200, E-Pedigree, and all legal marking requirements
- 100% global readable & compliance warranty
- Increased data accuracy with ZetesAtlas integration

**Efficiency**
- User-friendly interface
- Ability to [print & apply] mark, inspect and store
- at rates up to 400 items / minute
- Speed-up production order launch and increase OEE* with ZetesAtlas integration

**Reliability**
- Industrial design and conception
- Maximum availability and uptime
- Industrial standard components

* OEE: Overall Equipment Effectiveness
Designed by and for the pharmaceutical industry

Datamatrix marking and serialisation improves traceability and authentication of medicines and medical goods throughout the supply chain. With the MD-9000 you mark, label, seal and verify your medical products in line with the strictest standards of the pharmaceutical industry.

The MD-9000 has been designed and built based on the input of customers from the pharmaceutical industry. As a result, its features are adapted to the specific needs and highest quality standards of the industry:

- Balcony style construction eliminating risk of residue products
- Secure data-entry via secured network architecture
- Accuracy, precision and control in high-speed environments (up to 400 items / minute)
- Full stainless steel frame, height adjustable

Marking, labelling, sealing, inspecting: a modular approach

The MD-9000 offers various features that can be combined depending on the customer’s needs:

- Datamatrix marking & control (print & verify), top or side positioning
- Vignette labelling, e.g. for social security purposes
- Safety seal labelling, for tamper evident packaging
- Multiple print technologies

With its flexible design, the machine fits into new as well as existing production lines.

Quality and reliability

- Using industry standard components
- Optimal performance in high-speed environments
- Individual CE compliant fencing for alternating moving parts

Ease of operation

Zetes’ MD-9000 is unique in its focus on ergonomics. Designed by experts based on operator input, means good buy-in from new operators.

- Centralised pivoting touch screen for easy manipulation
- User / operator friendly interface
- Quick and easy tool free size changeovers
- Easy access for cleaning and maintenance
- No integral security fencing; individual CE compliant fencing for alternating moving parts
- Compact design, small footprint

Complementary conveyors for optimal product manipulation

The MD-9000 can be equipped with complementary hardware modules to ensure efficient marking, labelling and control in the most demanding environments:

- Top and bottom conveyors
- Side belt product return units
- Infeed centering conveyors
- Hand wheel operated side belts, adjusted from center, left or right
- Positive ejection
A set-up tailored to you needs

1. **MD-9000 P:** Print & Verification
2. **MD-9000 PV:** Print & Verification + Vignette Labelling
3. **MD-9000 PT:** Print & Verification + Tamper Evident Sealing
4. **MD-9000 PVT:** Print & Verification + Vignette Labelling + Tamper Evident Sealing

**Process overview**

- **MARK**
  - Datamatrix marking and serialisation. All major inkjet or laser manufacturer units applicable in the MD-9000 series of machines.

- **LABEL**
  - Complementary high speed vignette labelling, for social security purposes, possible with integration of additional conveying equipment for positive control of the cartons during the infeed.

- **SEAL**
  - Optionally, two self adhesive tamper evident labels can be applied on the carton closure flaps (top or bottom or alternatively two adjacent sides). Verification UV sensitive labels with positive ejection, if not compliant.

- **INSPECT**
  - Wide range of camera vision systems (from all suppliers) used for verification of quality of barcode and label position.

- **EJECT**
  - Positive ejection module

- **STORE**
  - Secure data management and storage via ZetesAtlas, Zetes’ Packaging Execution Solution.
MD-9000 specifications

Cabinet
- Balcony style
- Full stainless steel frame with adjustable height positioning
- Integrated aluminium base plate
- Handwheel operated to cope with different pack dimensions

Features
- ZetesAtlas full process execution
- Digital management of all operations (product tracking)
- Easy adjustment of all components
- Industrial HMI
- All conveyors individually equipped with stepper motors

Conveyors
- Side belt infeed conveyors for product alignment
- Top and bottom conveyor for tamper evident labelling or side print & verification
- Side belt outfeed conveyors for product reject station
- Positive ejector

Dimensions
- L x W x H: 970 (to 2300) x 600 x 1800 mm
- Weight: +/- 350 kg

HMI
- 15 inch industrial panel PC
- Global interface
- Status, technical parameters

Item size
- Length: min 30 mm - max 150 mm
- Height: min 20 mm - max 115 mm
- Width: min 40 mm - max 185 mm

Item marking with multi-technology
- Inkjet (continuous, DOD, high resolution)
- Laser
- Thermal-transfer (label)

Item check
- High-definition camera

Labelling head
- Up to 60 metres / minute
- Vignette labelling head
- Safety seal tamper evident labelling heads

Reject station
- Electrically or pneumatically driven
- Covered
- With safety switch and reject collection box
- Positive ejection mode

About Zetes
Leveraging more than 30 years of experience in labelling solutions combined with in-depth supply chain process understanding, Zetes’ research department has designed the MD series to help multinational and mid-sized companies maximise efficiency on their packaging lines. From the analysis of the needs through to project implementation and responsive services and support.

Supplies
Don’t forget your labels and ribbons. To ensure optimal performance of your machine, contact us for the best-fitted supplies.