

SPM 3000

SMART PAINT MARKER

Smart Paint Marker **3000** series is a strong and reliable solution developed for paint marking of **Coils, Slabs** and **Plates**.

SPM 3000 uses single or multiple nozzles to spray a special paint which adheres firmly to the surface of the product.

The head marks clear, highly visible and easily readable characters and **Data Matrix**.

Data Matrix allows the easy and automatic reading of the product code, making the **tracking systems** extremely reliable.



The marking system is mainly composed of:

- Robotic arm with a marking tool mounted on its wrist
- Electrical cabinets
- Fluids cabinet
- HMI

The system was specifically designed to operate in the harsh environments like hot steel rolling mills. It can be installed virtually anywhere and products can have any orientation. Usually no modifications of the lay-out are required.

SPM 3000 is fully automatic and equipped with advanced diagnostics, making the troubleshooting easy, requiring only occasional refilling and scheduled cleaning, care and maintenance.

The marking cycle is fully automatic and marking data are received by the factory automation system or HMI. The marking zone is interlocked and the marking head moves towards the product to be marked, until the probe detects its exact position and sizes.

The robot manipulates the head close to the product, while the synchronized nozzles spray the special paint to create the desired markings.

After the marking, the robot arm moves back to the home position and the marking zone interlock is released.

SmartMetalMarkers™
FAMILY

INDUSTRY
4.0
COMPLIANT



imts
Marking & Tracking

Marking and reading systems for metallurgical products



Data Matrix 10 digits



Data Matrix 10 digits

The marker has a long autonomy thanks to the low paint consumption, requiring paint refilling after more than 100.000 characters.

The available marking head types are:

- Single spray unit (continuous stroke)
- 7 (or more) spray units (dot matrix)

To determine the position and size of the product to be marked, the system can be equipped with one of the following devices:

- Mechanical probe
- Optical probe
- Laser sensor

The laser sensor allows to implement the **Crown Profile Function** to improve the quality control of the coil, measuring the telescopic wraps.

Options:

- Automatic nozzle flushing
- Data Matrix (single nozzle recommended)
- Reader
- **Coil Crown Profile** (laser probe only)
- **Double co-operating robots** (cycle time optimizations and redundancy)

Main features:

- Character height, width and space continuously and independently scalable
- Strap jump (to avoid markings on straps)

Typical Specifications:

- Product temperature: up to 1000 °C
- Markings: Alphanumeric characters, Data Matrix, Logo
- Character height: 60 – 110 mm (other on request)
- Paint: White (other colors on request), solvent or water based
- Paint consumption: about 6.000 ch/liter (size depending)

Contact us to know more about special versions.

SPM 3000 EN rev0



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