

# Robot Tema Multi - Tema Mono for Coils Top-Side

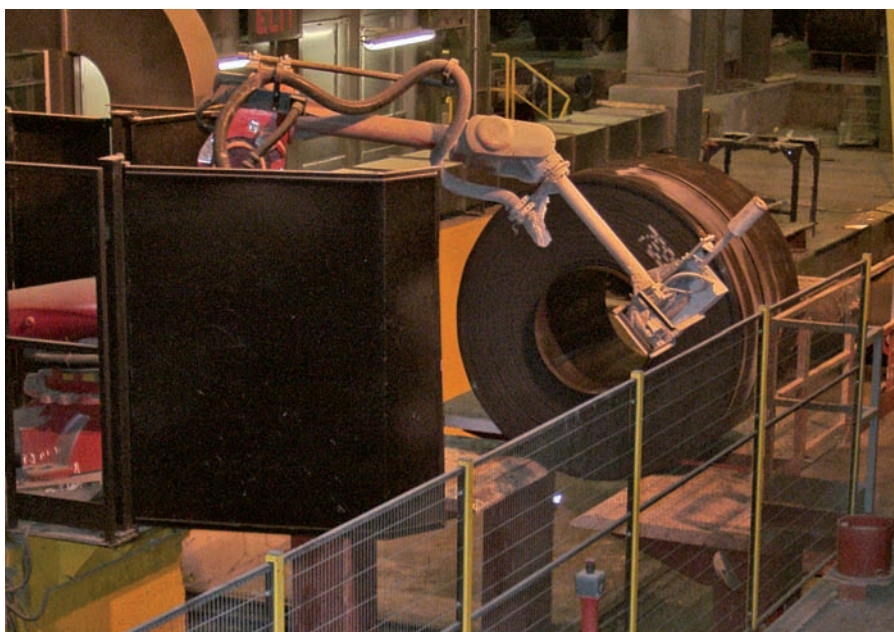
Green Project offers robot solutions for marking coils using as spraying device:

- a TEMA Multi unit, marking characters defined by a dot matrix for applications requiring a fast marking cycle, or
- a TEMA Mono unit, whose opening synchronised with the robot movement produces characters defined by a continuous line (like written by a human hand), very well readable also from distance.

Robot machines are more flexible than standard machines as they can be easily updated / modified in order to satisfy new marking requirements.

## Main Marking Features

- Cold and Hot application up to 1100 °C
- Coil orientation: axis vertical or horizontal (parallel or perpendicular to coil transport)
- Marking position: on the cylindrical surface (along the coil axis or circumferential) on the flat surface (along a straight or curved line)
- Symbols: letters, numbers, special characters (logos), Data Matrix code
- Height of symbols from 28 mm to 200 mm, in one or more lines
- For TEMA Multi, fonts based on dot matrix: 7, 9 or 12 dots in height
- For TEMA Mono, standard and OCR fonts, based on a continuous line, are available



**System configuration**

- Six-axes Robot
- One TEMA Multi / TEMA Mono marking head
- Paint preparation cabinet (including circuit for paint recirculation)
- Pneumatic cabinet
- Automatic cleaning system
- Power and control cabinet
- Work cell with safety fence
- Control desk with HMI
- For hot applications, the system is equipped with a kit for thermal protection

**Functional features**

Automatic adapting to different coil dimension

Many parameters can be adjusted / selected by the operator via Control Unit, f.i.:

- Dot dimension (4 - 12 mm, automatically adjusted to coil temperature) (only TEMA Multi)
- Characters dimension (width, compression, height)

Host connection (Ethernet, Profibus or other common industrial fieldbus)

**Optional function**

- Automatic Skipping of straps
- Tools for editing fonts and modifying parameters (only TEMA Multi)
- Marking a Data Matrix code readable by a standard reader (combined marking / reading function to achieve automatic tracking of coils)

**Paint / Ink features**

**Type:**

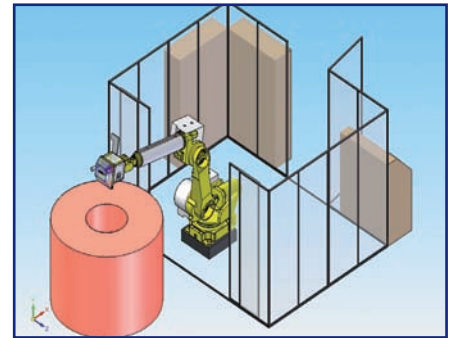
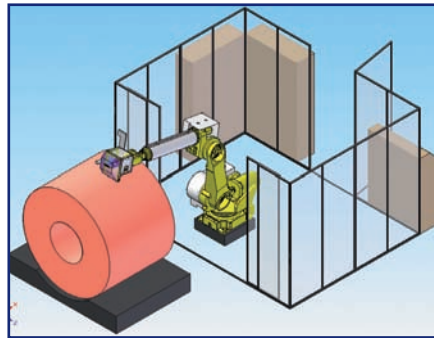
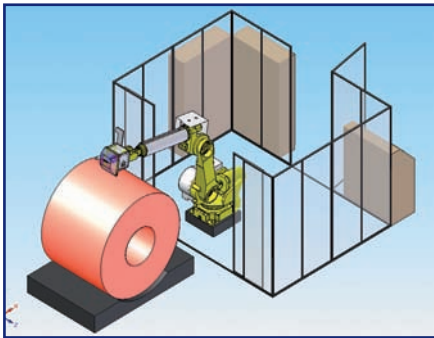
cold: paint (solvent or alcohol base), ink (MEK or alcohol base)

hot: paint (solvent or water base)

cold for re-heating: special paint resisting to re-heating up to 750°C (for aluminium)

**Colour:** white (other colours available for cold applications)

**Consumption:** approx.10 g for 1000 dots (about 60 chars 70mm high)



Certif. n° 1235/98



Certif. n° EMS-1724/S

