

STS 6000 SMART TAGGING SYSTEM

Smart Tagging System 6000 series is the most modern and up to date system to mark **Bundles** or **Wire Rods**. The system marks the tag or label on-line and applies it on the hot product through PIN welding process (Patented System). Created to help the operators to work in a better and safer rolling mill area, STS 6000 ensures error free markings and a complete documentation of the cycle with pictures of the product and log of operations.

Thanks to the 3D artificial vision system, it is capable to determine the best position on which the identification tag/label can be attached.

The tag or label has an excellent contrast and readability. Markings can contain characters, logos, **Barcode**, **Data Matrix** etc.



Tag attached by PIN welding

Barcode, and especially Data Matrix, allow the easy and automatic reading of the product code, making the tracking systems very reliable.

Either laser printer and thermal transfer printer have high resolution to mark characters of any size, thus the amount and size of markings are limited only by the tag/label size (typically 100x75mm).

SmartMetalMarkers™
FAMILY



The system is mainly composed of:

- Robot arm
- Printer
- PIN feeding system
- Electrical cabinets
- HMI

STS 6000 is specifically designed for harsh environments like steel mills. The tagging tool is engineered to operate for long times requiring very small maintenance and few and cheap wear parts.

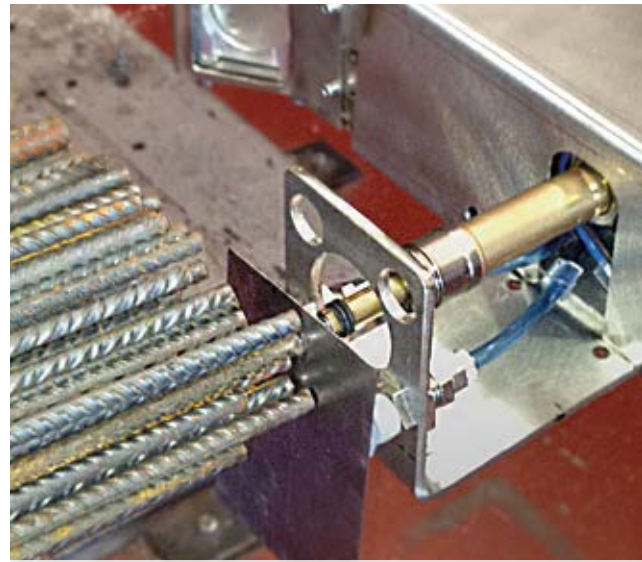
It is fully automatic and equipped with advanced diagnostics, making the maintenance and troubleshooting easy.



Marking and reading systems for metallurgical products



Tag applicator



Tagging Tool



Pin Feeder

The system receives the marking data from the factory automation system (or by HMI) and prints the tag/label. The robot picks the tag/label up and reaches the waiting position. After the start, the robot performs the 3D scan of the product to find the best welding point and welds the PIN on it to attach the tag. After welding, the camera checks the tag/label readability and allows the product evacuation. The printer has a long autonomy due to the large tag/label feeder capacity (typically 2000 or more). PIN stock guarantees equal or longer autonomy. Refilling operations are easy and require very short time.

STS 6000 is very flexible and configurable according to the customer needs. Typical points of installation are:

- After Strapping Machine
- Close to Weighing station
- On head/side of transfer rollway/chains

The system is equipped with the appropriate printer to mark the desired type of tag/label as:

- Laser printer (Coated Metal Tag)
- Thermal Transfer Printer (Special Plastic/Paper Label)

(see Tag/Label brochure for more details)

Contact us to know more about special versions.

Option:

- A second thermal transfer printer, to avoid missing marking cycles due to label roll end (laser printer does not need the second unit because it already has a double tag stock as standard).

Tagging cycle can be repeated in case the camera fails to read the code, improving the global performances close to 99.X%. With respect to other marking technologies, tagging technology has the big advantage to overlap a new marking on products previously marked with a wrong code.

Main Features:

- Tag Auto Centering
- Tag Auto orientation in the store
- Code Readability Check
- Automatic Cycle Repetition
- Cycle documentation (pictures, log)

Typical specifications:

- Product temperature: up to 600 °C (or more)
- Tag/label size: on customer request
- Markings: Characters, Logos, Barcode, Data Matrix
- Cycle time: about 25 s