

ROBOTIC TAGGING APPLICATION

TAG, MARK, LABEL AND TRACE MATERIALS



- **FAST AND EASY TO USE**
with the programming language and PLC logic development environments.
- **ACCESSIBLE AND FLEXIBLE**
with supervisory and diagnostic systems such as IBA to monitor all robot parameters and states.
- **FULL INTEGRATION**
not requiring a dedicated system and being integrable into existing automation panels.

AIC Robotics department concepts versatile tailor-made solutions to ensure an advanced process in the finishing area of the processing line, improving the often-harsh conditions our customers operate in. Robotic applications designed by AIC automatically apply tags and supports to semi-finished or finished metal long and flat products.



BARS



BILLETS



BLOOMS



COILS



SLABS



TUBES



WIRE RODS

3D scanning time of the bundle is

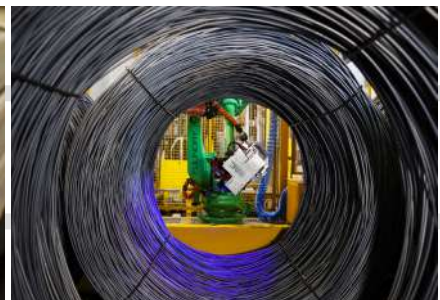
1.2 sec

The robotic island is able to work in plant with the production up to

180 tph

When the bundle is stopped on conveyor for tagging, the cycle time is

8 sec



- All applications are provided in a **tailored** and **customized** manner by selecting solutions with the greatest impact based on space feasibility studies.
- The feasibility study and preliminary design are carried out in **detail** for each individual component right from the start.



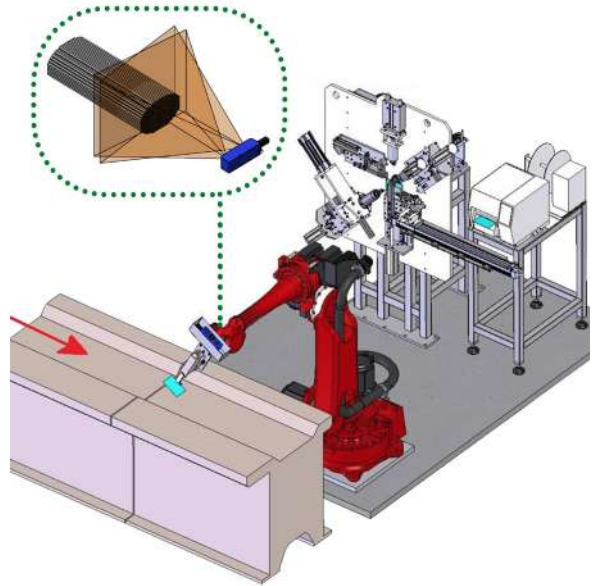
SOLUTIONS BASED ON THE MOST RECENT TECHNOLOGIES

Robots could be deployed on guides, and trolleys above multiple production lines on both sides or integrated with two separate robots, for example. Depending on the situation, this could include **floor-mounted** or **ceiling-mounted** robots.

At core, the components we use are the best on the market, with **renowned robotic hardware** (ABB, KUKA, COMAU, SIEMENS).

MAIN COMPONENTS

- Anthropomorphic 6-axis robot foundry
- 3D vision system for hazardous or hot areas
- Printers and Wire feeding system for tag supports
- Electrical panel with HMIs for diagnostics and safety alarms
- Control unit and Safety PLC



OPENNESS WITH INNOVATION



Artificial Intelligence provides robots with adequate computer vision and motion control inferred from vision sensors/3D cameras, to better understand the environment and act upon it in real-time faster and more accurately.

Both the PLC program software and the control unit of the robotic application can be based on and developed using **Siemens** or **Rockwell Automation** components.

reduce the risk of errors in mixing heat numbers at the production plant.

keep operators away from difficult positions and task, such as tagging material at high

assure full traceability of finished products and the tagging of each single product with the right identification data.



Heat resistant metal tags, QR code or RFID tag reader



More than 10,000 tags are included in the external

- The AIC Team handles **installation** and **commissioning**, always ensuring on-time production assistance and training. Before shipping, each customer has the opportunity to familiarize himself with the application and test its performance during the FAT (Factory-Acceptance Tests).

