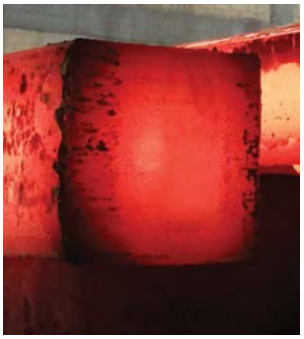
BILLETS, BLOOMS & SLABS

SMARKLase - BILLET MARKING TECHNOLOGY

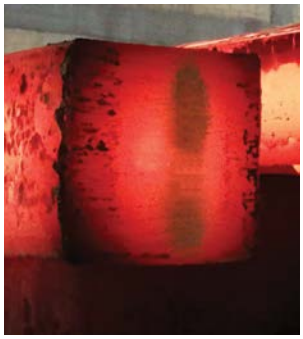
REA SYSTEMS
AUTOMATED TRACEABILITY SOLUTIONS

SMARKTEC
Marking Technology

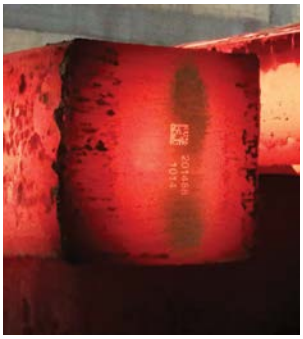
THE SMARKLase PROCESS



01 High pressure water descaling



02 Temperature laser reactive coating



03 Laser imaging the text & datamatrix code

04 Verify the correct marking of every single billet

DIRECT MARKING

DIRECT MARKING

Direct marking on the surface of the billet
High-temperature marking up to 1200°C
No tags attached that fall off the billet
No pollution at the rolling mill with metal tags

QUALITY & CONTRAST

High resolution laser marking technology
Easily readable mark by humans and machines

ROUGH SURFACES

Contactless marking
Human readable marks on bad oxy-cut billets
High-reading ratio even on really rough surfaces

HIGH RESISTANCE MARKING

High resistance to mechanical scratch
Nonremovable marks tested at 80 bar water jet pressure
Sustainable marks regardless of outdoor exposure

CUSTOMIZED INTEGRATIONS

MODELS

Gantry type structures with 2 carriages to cover 6 strands, marking the face of the billets
Single Marking units on the side of the colling bed to mark the face of the billets on the individual notches
6-axes robots installed inside a container at the billet bed to mark the face and the top of the billets
Multiple marking units installed at the strand stoppers for high throughput individual billet marking on the face and/or the top of the billets
Semi automatic jib crane Laser marker (for limited production manual marking)

MAIN FEATURES

- Heavy duty construction designed for the mill environment
- Integrated descaling unit including a 200 bar pressure pump and valve control
- Dedicated chiller unit to water cool the equipment
- Automatic cleaning station for the spray guns
- User-friendly touch screen HMI

SMARKLase Gantry Type Billet Marking

SMARKLase Axial System

SMARKLase Multiple Container Axial Systems

SMARKLase Robot in Container

BILLET TRACEABILITY AT THE ROLLING MILL

MAIN ADVANTAGES

- Automatic billet traceability at the entrance of the furnace
- Data capturing vision systems for automatic tracking of billets, reading both:
  - 2D datamatrix codes
  - OCR human character reading
- The vision system includes:
  - Mechanical integration in the area
  - Set of vision cameras with lens and filter
  - Stainless steel protective housing
  - Dedicated lighting system to avoid reflections and enhance camera operation
  - Blowing nozzle to automatically remove dust from the lens
  - Control cabinet with PLC for the integration of vision system

VERIFICATION OF THE CODE RIGHT AFTER MARKING

A Vision system installed in the Marking unit will verify the content of the code right after marking every single billet

More than
2500 customers

Innovative solutions

A strong sales and engineering team
specializing in marking and coding solutions

Engineering department with more
than 30 years of experience

Industry
4.0 reference

7307 Young Drive
Walton Hills, OH 44146

440-232-0555
sales@reasystems.com

www.smarktec.com
www.reasystems.com