ENGINEERING TRACEABILITY

REA SYSTEMS
AUTOMATED TRACEABILITY SOLUTIONS

SMARKTEC
Marking Technology

BILLETS, BLOOMS & SLABS

COILS

DIRECT MARKING
Direct marking on the surface of the billet
High-temperature: marking up to 1200ºC
High mechanical resistance to scratch
Sustainable marks regardless of outdoor exposure

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

ROUGH SURFACES
Mark on rough surfaces with bad oxy-cut
Contactless marking – distance > 150 mm
No tags attached that fall off the billets
No pollution of tags at the rolling mill

HIGHEST READING RATIO
Reading OCR & datamatrix for reundancy
Inventory easiness with hand held scanners

DIRECT HIGH RESOLUTION MARKING
High-quality labels directly on the surface of the coil
High-temperature: marking up to 1200ºC
Logos, OCR texts & 2D barcodes

100% OF COIL PRODUCTION VERIFIED
Machine vision system verification of every single coil
OCR and datamatrix automatic reading

FAST WRITING
Fast writing cycles for multiple line marking

STEEL PRODUCTS – Marking & Traceability

PLATES

PAINT MARKING
Multiple lines robotic quality marking
Static and on-the-fly marking
Up to 1200°C plate temperature
Text, logos & datamatrix

EDGE MARKING
Laser marking technology
High resolution printing
Up to 1200°C plate temperature
Text, logos, 1D & 2D barcodes

DOT PEEN MARKING
High quality punched characters
Fast writing cycles
Single pin to reduce maintenance
Text, logos and 2D barcodes

HOT ROLLED BARS

HIGH RESOLUTION DIRECT BAR MARKING
Fast-marking cycles (18 bars /10 seconds)
Datamatrix codes & alphanumeric texts
Up to 1200°C bar temperature

AUTOMATIC DETECTION
Automatic detection of the number of bars to mark
Automatic detection of the diameters
Automatic detection of the bars position on the conveyor

AUTOMATIC VERIFICATION
Automatic verification of the datamatrix codes
after every print
100% of the production is verified

TUBE & PIPE

VISION SYSTEMS

MULTIPLE PIPE ROBOTIC MARKING
High quality OCR characters & datamatrix codes
Short cycle times for marking & verifying
Up to 300°C

1D LINEAR BARCODE MARKING
Easy capture with barcode scanners directly on the oil rig
Optional clear coat application for a better resistance

SMARKLASE PIPE ID MARKING
Laser marking technology
High resolution printing
Text, logos, 1D & 2D barcodes

INKJET ID ROBOTIC MARKING
Up to 3 layers wet-on-wet for outdoor protection:
• Black base coating
• White pigmented inkjet ink
• Protective clear coating
Automatic cleaning cycles

SPIRAL PIPES INKJET MARKING
High quality marks parallel to the seam
Text, logos & datamatrix
Optional clear coat application for a better resistance

COATED PIPE MARKING
High-quality texts, logos and datamatrix
Multiple inks available in a variety of colors & formulations

BILLET TRACKING CAMERAS
Verify 100% of your production
Eliminate heat mixes
Full traceability of billets

TUBE & PIPE TRACKING CAMERAS
Verify 100% of your production
Track your pipes through the mill
Capture your pipe's 2D codes up to 3 m/sec

VISION SYSTEMS FOR THE MILL
Robust integrations
Customized lighting and filters
OCR & 2D barcodes data capture and verify
Linear cameras to scan larger areas
High resolution cameras

SMARKTEC

A REFERENCE BRAND IN THE STEEL SECTOR

SMARKTEC's expertise is focused on the marking, coding and traceability of steel products. We are present in most of the global steel groups, being a reference in the Oil & Gas sector in the USA.

Our capacity for innovation allow us to be the pioneer of direct marking of continuous casting products, such as billets or blooms, marking QR Codes and OCR Texts for the easiness of the automatic data capture.

We offer an international distribution network that will help you build a solution for your track & trace needs.

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