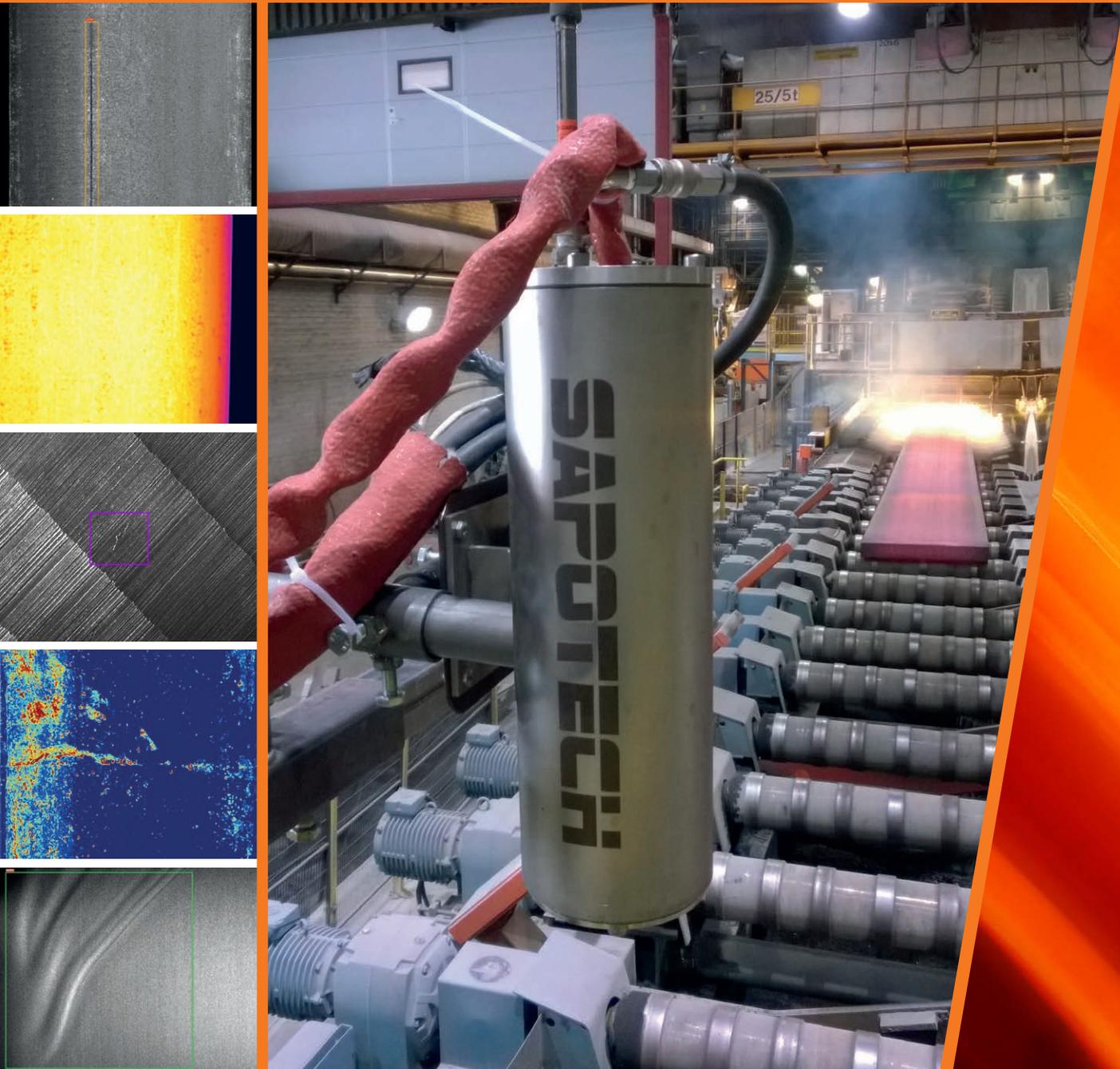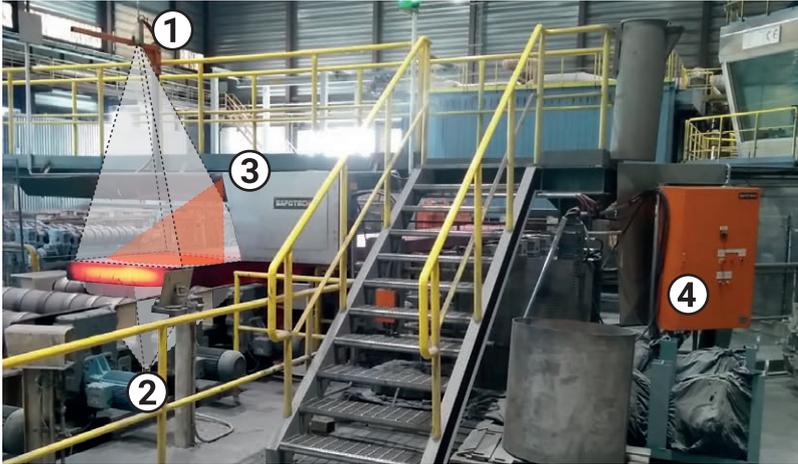# Reveal CAST

A complete Surface Quality Monitoring solution for all processes from high to low temperatures

SAPOTECH

See more.

Know more.

Benefit more.

WHAT IS Reveal CAST?

Reveal CAST is a solution for monitoring and assessing the quality of intermediate and final products of metallurgical processes, even at extreme temperatures. Visual information and numerical data is provided in real-time to optimize the production processes and final product quality.

① ② top and bottom imaging units

③ high speed illumination unit

④ control cabinet

QUALITY TRACKING FROM CONTINUOUS CASTING TO THE FINAL PRODUCT

Reveal Platform

① Detecting defects at the earliest possible stage to increase production efficiency

② Inspecting and detecting defects of hot cast products (e.g: slabs, billets, blooms, round products) to avoid processing defective material

③ Evaluating the need for further processing after grinding/scarfing

④ Assessing the surface condition of the product after the reheating furnace, minimizing unnecessary rolling

⑤ Early detection of casting or rolling-based defects to optimize yield and plan corrective measures

⑥ Documenting and inspecting the surface quality and shape of the rolled products to optimize yield

⑦ Early detection of defects during cold rolling, minimizing yield losses

⑧ Inspecting, tracing and documenting the surface quality of the final cold product to e.g. reduce customer claims
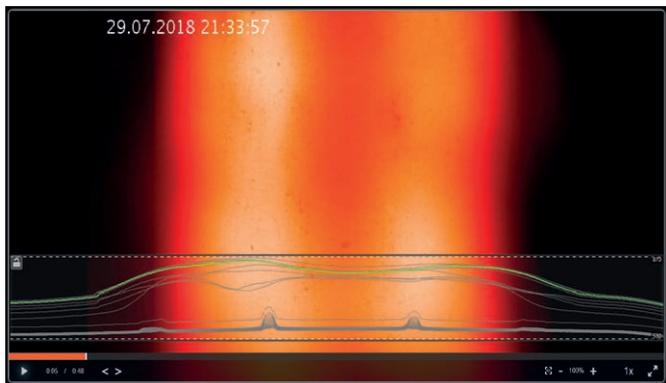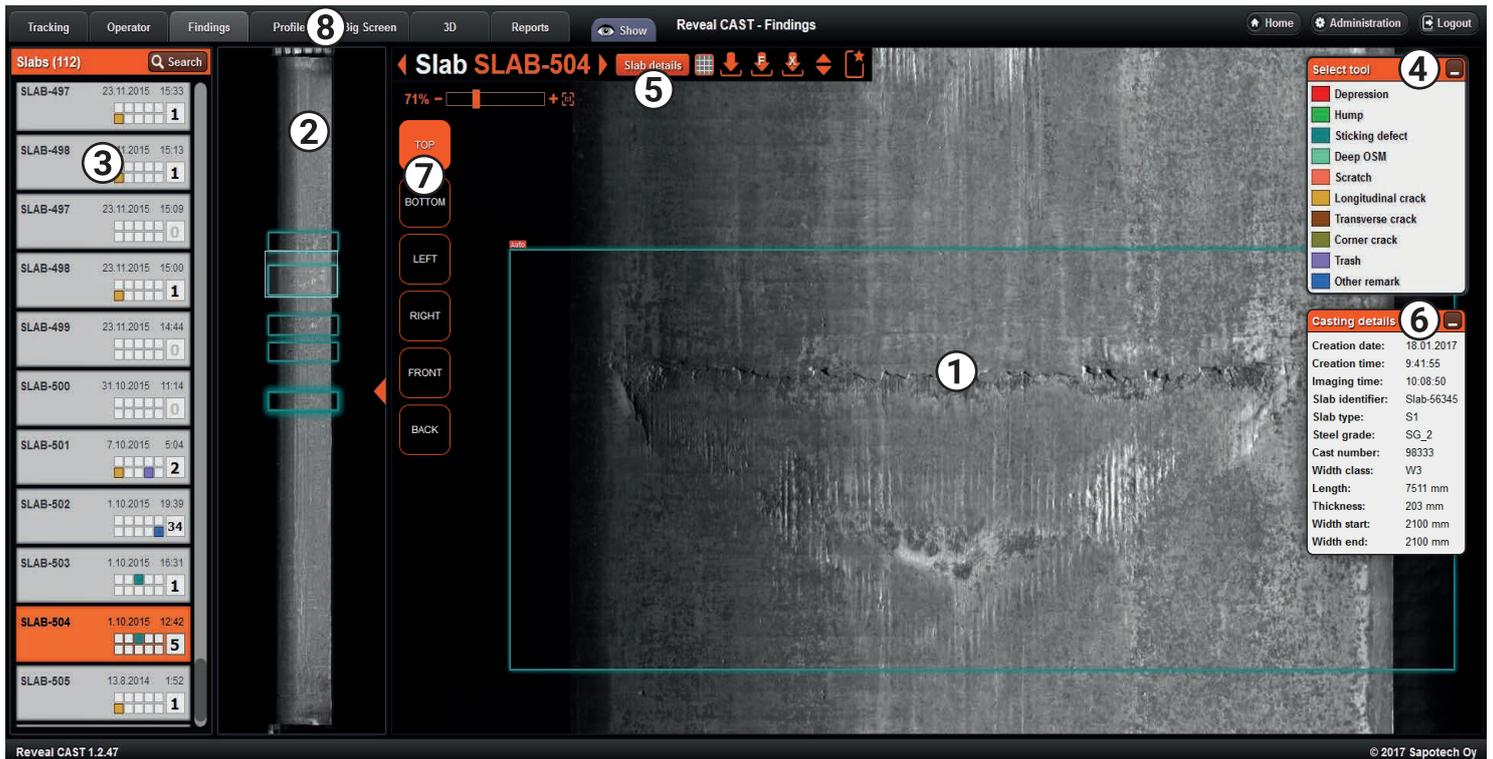
Reveal Platform ➡ Manufacturing Execution System (MES)

The platform can be integrated to the customer MES. The platform ensures that all the processes are connected and all data is shared between all the stages of the production process. Digitalization and data integration provides tools to improve production efficiency and quality, while keeping everything systematically documented. All the information provided by the platform is available anywhere, anytime.

Reveal CAST FEATURES

- Automatic detection and possibility for manual defect marking
- Accurate high speed laser imaging
- Image and measurement data storage
- Inspection of all surfaces
- Easy-to-use web browser interface
- Integrated reports
- Integration to customer systems (MES)
- Full dimension profile and measurements
- Infrared imaging
- Topographic measurement
- Dimension profile measurement

① High detail image and defects
② Thumbnail image for navigation
③ List of inspected items
④ Annotation tools
⑤ Image control tools
⑥ Imaged item details
⑦ Selected profile
⑧ Professional views and tools

Reveal CAST Specific measurement data

Reveal CAST APPLICATIONS

- Hot slabs, blooms and billets
- Ground and scarfed surfaces
- Foil imaging
- Hot bands and plates
- Bars, rods, pipes and shapes
- Cold rolled strips and sheets

Product type	Inspection and Measurement Results					
	Lenght	Width	Thickness	Topographic measurement	Speed	Temperature profile
Slab (hot or cold)	✓	✓	✓	✓	✓	✓
Billet (hot or cold)	✓	✓	✓	✓	✓	✓
Bloom (hot or cold)	✓	✓	✓	✓	✓	✓
Hot Band	✓	✓	✓	✓	✓	✓
Cold Strip	—	✓	✓	✓	✓	✓
Foil	—	✓	✓	✓	✓	—
Tube	✓	✓	—	✓	✓	✓
Pipe	✓	✓	—	✓	✓	✓
Bars	✓	✓	—	✓	✓	✓
Plates	✓	✓	✓	✓	✓	✓
Rolled Coil	—	✓	—	✓	—	✓
Wire	—	—	✓	✓	✓	—

Reveal CAST BENEFITS

- Real-time feedback about product surface quality from casting to finishing
- Optimizing cooling and casting parameter
- Optimizing grinding and scarfing processes
- Reducing scale and minimizing scrap
- Optimizing surface treatment
- Full inspection and documentation of intermediate and final products
- Reducing machine downtime and avoid accidents at the side

▼

- **Improving yield**
- **Increase production efficiency**
- **Optimize maintenance**
- **Reducing production costs**
- **Improving customer relationship**

Fast & Easy to install   *High quality imaging*   *User friendly*   *Easy decision making*

SAPOTECH

Sapotech offers high-tech solutions for online monitoring and tracing of the quality of metallurgical processes at all temperatures. All our solutions are compact, low maintenance, easy to install and give immediate feedback to operators.

Our products **Reveal CAST**, **Reveal TAP** and **Reveal 360** are based on the hardware and software components of our Reveal Platform. Our technology can adapt to the specific needs of our customers. Sapotech solutions are globally applied in the steel, aluminium, ferrochromium, nickel and copper industries.

ONE PLATFORM - MULTIPLE PRODUCTS - COUNTLESS SOLUTIONS

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