

Success stories

“ABB’s Surface Imaging System enables us to quickly establish where the defects originate from and this allows personnel at the mill to take immediate corrective measures.”



Client: Outokumpu, Tornio - Finland
Scope of Delivery: 5 x ABB Surface Imaging Systems

Tornio Works

OUTOKUMPU's Stainless Steel Works in Tornio, Finland is the world's most integrated single-site operation. The main products produced at Tornio are hot rolled and cold rolled austenitic and ferritic steel coils and sheets. The Tornio Works comprises a Hot Rolling Mill, 3 Cold Rolling Mills, a Tandem Mill and several Annealing and Pickling Lines as well as Finishing Lines. The annual production is over one million tonnes and in excess of 85 % of production is exported. Quality is foremost at OUTOKUMPU and the company supplies its high quality steel products to customers worldwide. OUTOKUMPU employs the most advanced manufacturing technology at its Tornio Works and OUTOKUMPU is proud of its reputation for quality Stainless Steel.

The background

In order to fulfill increasing customer demands and to further enhance quality and quality inspection at the Tornio Works steel production, OUTOKUMPU decided to upgrade its quality inspection operations. Advanced inspection methodology and technology also enable higher line speeds in production which will provide maximum capacity.

The solution

The ABB SIS is installed in the Hot Rolling mill for top and bottom side measurement, with impressive results. In spite of the harsh environment, ABB's SIS has proven to be both robust and reliable.

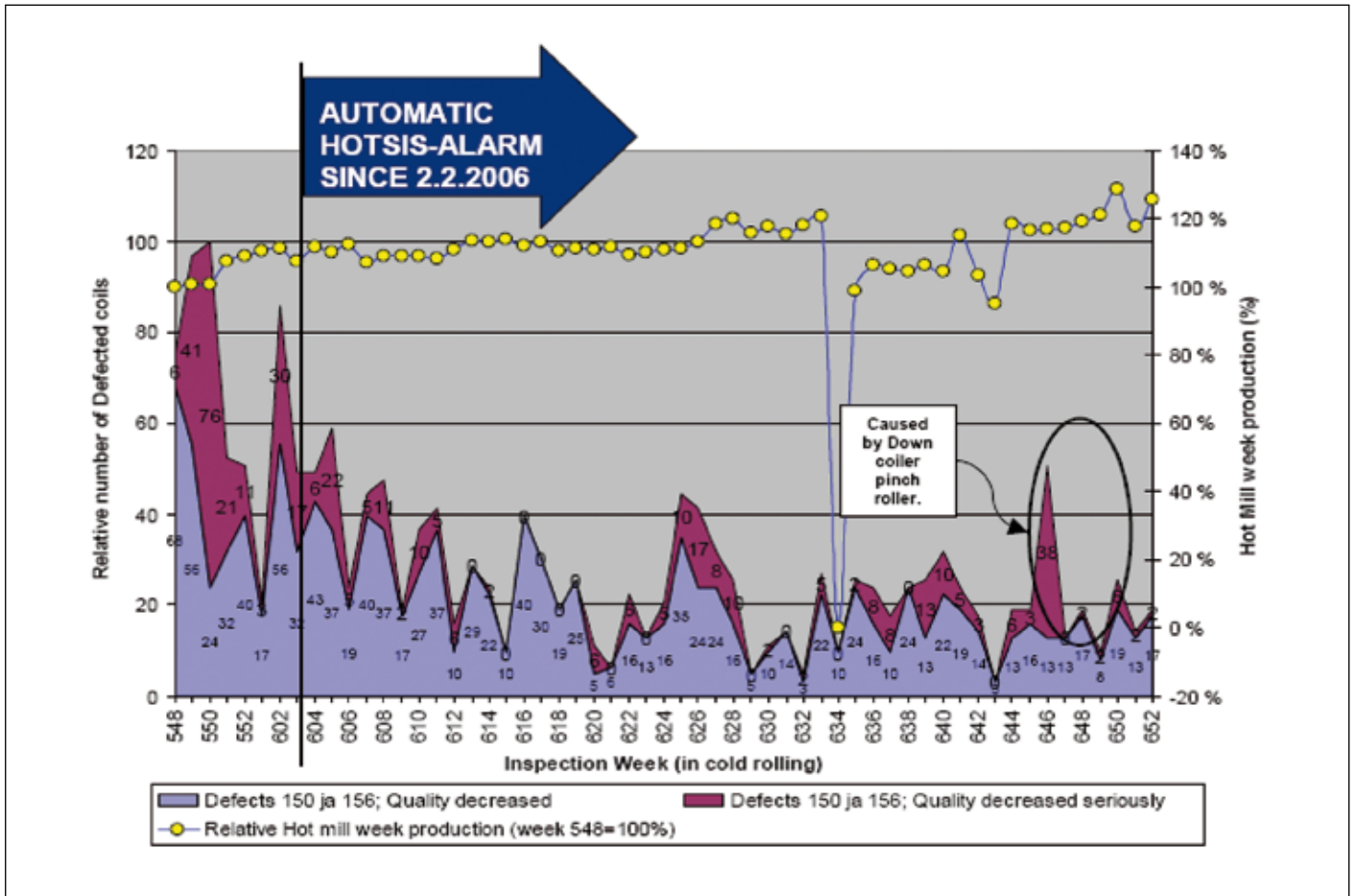
ABB's SIS provides accurate quality imaging and rolling mark analysis – including on Cold Rolling mills where speeds can be in excess of 250 m/min.

The results

OUTOKUMPU have seen immediate results. Heini Hämäläinen, Section Manager at Outokumpu Tornio Works explains:

“Our goal is to supply our customers high quality stainless steel, and ABB's Surface Imaging System helps us reach this goal. We particularly appreciate ABB's system's capability to detect defects and its usability. ABB's SIS system enables us to establish quickly where the defects originate from, and this allows the personnel at the mill to take immediate corrective measures.”

The results of the Surface Imaging System on the Hot Rolling Mill at Outokumpu are well illustrated in the graph below:



Presented by Petri Mure of Outokumpu at "Stainless 08" - June 2008.

Technical data : ABB's HDI800 Surface Imaging System

Outokumpu has installed ABB's HDI 800 in the following production lines in Tornio:

RAP 5 (Exit Line)	4 x 4 Cameras with 2048 Pixel CCD element
RAP 5 (Tandem Line)	2 x 4 Cameras with 2048 Pixel CCD element
AP 4 Line	4 + 5 Cameras with 2048 Pixel CCD element
Hot Rolling Line	2 x 2 Cameras with 2048 Pixel CCD element
AP 2 Line	5 + 5 Cameras with 2048 Pixel CCD element

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