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Sweden’s Holmen Paper Hallsta, part of Holmen Paper AB, has secured its operations by upgrading its quality-control system, Network Platform QCS from ABB, to the very latest proving frame technique, instead of buying new equipment.

The upgrading with new functions will result in less downtime and waste. With upgrading, the existing proving frame will last at least to 2019, while achieving both environmental and cost savings at the mill, which annually produces 700,000 tonnes of paper a year.

“Historically the focus used to be on the amount of produced paper. Today, quality is our customers’ main focus. Most important to us is therefore to have equipment supporting high quality and ensuring consistency,” said Hannele Arvonen, site manager at Holmen Paper Hallsta.

Hallsta first installed ABB’s QCS platform to its PM12 machine in 1988 and the existing proving frame has been upgraded twice, in 2001 to Smart Platform and now, in 2009, to Network Platform.

Holmen Paper Hallsta holds a strong position as a special paper mill within the wood bearing printing paper industry. The mill manufactures so-called improved newsprint paper for enclosures, magazines and advertising brochures as well as SC, stock and ledger paper.

Hallsta was the largest paper mill in Europe at its start-up in 1915 and remained one of the world’s largest mills during the 20th century.

In recent years, Holmen Paper Hallsta has made a transition from mass production of standard paper qualities to a variety of special paper grades. Now, the mill has decided to upgrade its existing quality control system to include the very latest technology, Network Platform QCS, instead of buying totally new equipment. With this upgrading, the existing proving frame can be used for at least another ten years, and by avoiding manufacturing of entirely new equipment, both environmental and cost savings are made.

ABB claims that QCS has 99.5 percent availability. A stoppage in a paper machine can cost up to 200,000 kronor per hour.

“For Hallsta, the upgrading of the QCS...”

*For Hallsta, the upgrading of the QCS...*
means availability to the latest measuring technology and functions at a lower cost than if we would have replaced the entire CQS system. Investments with low life-cycle costs are vital for us to keep our competitive edge on increasingly tough markets,” said Tore Sjöberg, project manager at Holmen Paper Hallsta.

**Hallsta and ABB develop a solution together**

ABB and Hallsta have together developed several new functions in the QCS. Hallsta has contributed with innovative solutions for the wet-end colour control on the PM12 paper machine. ABB has integrated the function in the existing QCS and, with Hallsta’s help, further developed a calibration function for improved correlation with lab measurements.

“It has been a rewarding collaboration that has brought Holmen Paper Hallsta tangible control benefits and given us the opportunity to develop products that really meet the needs of our customers,” said Håkan Österholm, product manager at ABB Sweden.

**Pioneering optical measuring technology**

The upgrading of the proving frame means you can benefit from today’s rapid technology development within the field of measuring and control systems, says ABB. New sensor technology can be used from ABB, such as a revolutionary new technique for optical thickness measuring, which can measure and control thickness with high precision even for very demanding paper qualities.

Traditionally, dual-sided contacting caliper sensors or laser based sensors are used for measuring the paper, which means that thin and fine paper qualities are exposed to damage risk, and hence production stoppage. Unintentional downtime in paper mills could cost as much as 200,000 kronor per hour which is why a reliable operation is of vital importance.

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