

Stora Enso Publication Paper, Sweden



Roland Lindström and Ulf Ahlstrand by the 8.4 meter wide paper rolls that are then cut down into the required widths and supplied to printers and newspaper publishers.

“A system for troubleshooting and preventative maintenance

At the Stora Enso paper mill in Hylte, an unplanned production stoppage costs around SEK 70,000 an hour. In order to avoid encoders causing such stoppages, Leine & Linde has developed a Heavy Duty sensor with an advanced diagnostic system, ADS™.

Self-diagnostic system

Deep in the woods, in the southern parts of Sweden, a paper mill was established at Hyltebruk back in 1907. Since 1972, paper has been produced here for newspapers, and there are currently four paper machines in production, operating in three shifts.

“The paper machines can produce paper at up to 1,550 meters per minute with a width of 8.4 meters,” explains Ulf Ahlstrand, technical engineer at Stora Enso. “We primarily use encoders to obtain feedback on the speed of the rollers in the paper machines. An unplanned production stoppage is, as mentioned, extremely costly and therefore we have set very high requirements with regard to the reliability of the encoders.”

In order to meet the requirements for a high level of reliability, Leine & Linde has developed an advanced diagnostic system, ADS™, for the incremental encoders in the robust



Since 1972, Hylte Bruk has been producing paper for newspapers.

800 range. The system is based on rapid logic in conjunction with a microprocessor continuously monitoring all the encoder's functions and is therefore able to detect faults at a very early stage. This happens early enough for the encoder to fulfill its function, so that the encoder can be changed during a planned maintenance stoppage instead of causing an unplanned stoppage.

Involved in product development

“When it comes to our requirements, we feel that we have received a very good response and service from Leine & Linde”, explains technical engineer Roland Lindström. “We have actually felt involved in their product development! Our partnership with Leine & Linde started back in the 1980s and over all these years we have maintained a continuous dialog with them to find the right products for the paper industry.”

In order for the encoders to function optimally, it is important that they are fitted in the right way. At Stora Enso, around 200 encoders are in use every day, and as the requirements for precision in speed feedback are high, the company has created procedures that ensure that the encoders achieve full performance and service life.


Encoders with excellent durability



“It is currently the ADS™ model of our Heavy-duty 862 incremental encoder that is most used in the paper machines at Stora Enso,” says Håkan Karlsson, salesman at Leine & Linde. The choice

of 862 is because the encoder is equipped with ceramic bearings that result in an unsurpassed service life and price and performance ratio.

“It is important for us to have a close partnership with our customers”, continues Håkan. “In this way, we gain excellent knowledge of their applications and challenges. Based on that, we can subsequently develop and improve our pulse encoders, which leads to more efficient production activities for our customers.”



STORAENSO

Company: Stora Enso Publication Paper
Location: Hyltebruk, Sweden
Production: Paper mill
Employees: Around 900
Production capacity: 800,000 tons/year