

Portucel Soporcel Modernizes Mill with Honeywell's PMD Controller Technology



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Carlos Gonçalves, Head of Paper Machines and Finishing Area Maintenance, Soporcel

Benefits

Grupo Portucel Soporcel, a leading pulp and paper producer in Portugal, needed to upgrade one of its paper machine control systems at its Figueira da Foz mill. In order to improve reliability and avoid obsolescence, Portucel Soporcel replaced its ABB line drives with Honeywell's process, machinery and drives (PMD) controller technology, resulting in several benefits including increased operational stability and reliability. Another important benefit is a clean automation solution which combines the drive and process controls resulting in increased transparency of the integrated system and a significant improvement in diagnostics capability.

Background

Grupo Portucel Soporcel is a leading producer of uncoated wood-free papers and bleached eucalyptus kraft pulp with a production capacity of 1 million tonnes of paper and 1.3 million tonnes of pulp. The acquisition of Soporcel by Portucel in 2001 marked an important step in the restructuring of the paper industry in Portugal to create a national group with a strong presence in the pulp and paper sector.

With a strong commitment to the environment Portucel Soporcel is Portugal's largest generator of biomass-based renewable energy. Its production processes promote sustainability and energy efficiency using forest biomass as their main energy source. Portugal's forests, including the 130 hectares managed by Portucel Soporcel, are a major absorber of carbon, helping to reduce the amount of greenhouse gases in the atmosphere.

Portucel Soporcel has 2,000 employees and three mills, which are located in Setúbal, Figueira da Foz and Cacia. The Figueira da Foz mill is the largest integrated office and offset paper manufacturing facility in Europe.

Challenges

Soporcel's paper machine #1, located in the Figueira da Foz mill, was installed in the early 1990s with a drive system based on 30 DC motors and 20 AC motors. Over time the system had some reliability problems and there was difficulty in getting spare parts. Following the company's strategy to keep technology updated, modernization of the system was considered a priority.



Soporcel increased reliability at its Figueira da Foz mill with Honeywell's PMD controller technology.

The alternatives for this modernization were to acquire a separate control system or to integrate the paper machine control with the existing Honeywell Experion® Process Knowledge System using PMD controller technology. The chosen solution was the latter one using Profibus as fieldbus.

Solution

Honeywell's PMD controller is used to control fieldbus-based processes and process equipment. By implementing advanced control loops and updated technology, Portucel Soporcel was able to increase operational stability and reliability.

"We are very happy with this rebuild," said Carlos Gonçalves, Head of Paper Machines and Finishing Area Maintenance, Soporcel. "The automation modernization is always worthwhile, even when combining somewhat old technologies with state-of-art control solutions. Now it is much easier to make small changes and optimizations to the application."

With a very tight schedule, hard work and dedication were required from both Portucel Soporcel and Honeywell. The two companies worked together as one team from the beginning of the project. Portucel Soporcel is pleased with Honeywell's support and teamwork.

"Honeywell has worked with Soporcel for many years and we recognize reliable technology and very professional support. The excellent support from Honeywell Finland and Honeywell Portugal ensured a happy ending. We finalized within the planned schedule and the system works as expected," said Gonçalves.

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More Information

For more information on Honeywell's pulp and paper solutions, visit www.honeywell.com/ps or contact your Honeywell account manager.

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