

Austrian Paper Mill Reduces Transmissions Times by 50% and Realizes 3 Month ROI with X-Rite Inline Solutions



In today's competitive industry, paper mills must manage many challenges that come from a wide array of materials, including recycled paper and non-homogeneous raw materials. Additionally, they face increasingly complex customer requirements and global sustainability initiatives.

This prominent Austrian conglomerate, which specializes in paper production through its subsidiaries, is constantly striving for innovation and efficiency. With a strong focus on recycling and a history rooted in paper production, their paper mill was looking for ways to modernize operations to efficiently produce high-quality liner board, optimize operational costs, and remain competitive and sustainable.



Industry:
Global Paper Mill



Location:
Austria

"With such an increase in production the customer is satisfied, and the investment in the inline color management system is fully justified. The exact color control (online) allows us to precisely meet the predefined L^ , a^* , b^* values, and realize ΔE^* values of 0.1 to 0.2. Little maintenance effort is required."*

Technical Director
Paper Mill - Germany

Challenge

1. The company's paper mill was equipped with two older machines. Starting up the line and changing shades took time and color deviations would appear out of nowhere.
2. To verify color was in spec, operators pulled a sample to measure in the lab after reel change. If color is out of spec, the entire roll was scrapped because there is no way to tell when the color shift began. Each wasted roll incurred reproduction costs and decreased machine productivity.
3. The mill needed an advanced system for inline color measurement but did not have the budget to replace their paper machines.

Solution

Understanding the customer's requirements was crucial: Integrate a new system seamlessly into the existing setup to ensure accuracy, reduce costs, and enhance product quality. X-Rite, the world leader in inline color measurement and closed loop color control, presented a comprehensive tailored color measurement and control solution.

- A non-contact benchtop spectrophotometer,
- A custom frame to position the device over the paper roll, and
- Quality control software to monitor and adjust color throughout the run.

X-Rite's inline, closed loop solution serves as an early warning system. If color starts to shift, it alerts the operator of a shade change and automatically adjusts dye pumps to bring color back into tolerance. It also offers automatic start up and shade changes to further minimize operator intervention.

X-Rite offered this complete solution along with a straightforward installation process that only required a 2-hour machine shutdown.

Conclusion

X-Rite's innovative approach to color measurement not only addressed the paper mill's immediate challenges but also positioned the company for long-term success in the competitive paper production industry. The collaboration serves as a testament to the power of strategic partnerships and cutting-edge technology in driving efficiency, quality, and profitability.



Results

X-Rite's inline, closed loop solution provided substantial benefits with outstanding results:

1. Met the technical specs so the mill could continue to use their older machines.
2. Eliminated typical operator mistakes, costly line errors, and rework with automatic shade changes.
3. Rapid ROI within just three months for an immediate financial impact.
4. Saved approx. \$200,000 annually in dye waste.
5. Reduced transmission times by 50% for overall operational efficiency
6. Enhanced product quality to meet the company's high standards and exceed customer expectations.