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## Progress in optical process control

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The Goričane company originates from one of the oldest Slovenian paper mills, established in 1740. The company has been producing paper at its present location since 1788.

Today, the company produces mostly high-quality woodfree papers. Due to its location in the heart of Europe, where West meets East, the company is doing business in the world's most demanding markets; operating in Slovenia, in an environment full of natural beauty is an encouragement for constant innovations in our production and environment-friendly business activities.

The quality of the paper Goričane produces lets it export its products to 38 countries around the world, mainly in the EU, Turkey and the Balkans. However, the company name may appear in more distant destinations, too, such as Sri Lanka, South America, Israel, South Africa and Japan. The company has the following certificates: ISO 9001:2008, ISO 14001:2004, FSC® and PEFC™.

Because of the high quality demanding market, the papermill Goričane decided to purchase the best inspection system available. The main targets were finding the source of individual defects and putting focus on places, where it counts. With Dr.Schenk inspection system papermill Goričane has a tripple monitoring system to indicate on wich side of the paper the defect is, brightness of defects, due to high resolution precise analysis of every individual defect, streak detector, easymessure and many more.

Dr. Schenk systems offer significant savings as up to 50% fewer cameras are necessary than on a conventional inspection solution. This is made possible by the use of ultra-fast 8k dual-line cameras that can scan the paper surface at extremely high speed and deliver high resolution images.

The solution enables improved defect detection and classification through innovative illumination technology (Sirius Light, Virtual X-Ray) and MIDA (Multiple Defect Image Analysis), allowing to see defects from different perspectives for comprehensive analysis.

Local defect detection is complemented by overall properties monitoring with the same system – no extra hardware required. Gloss, Roughness and formation can be closely monitored and changes immediately fed back. Together, this ensures complete paper quality analysis.

The main advantages are the mentioned cost reduction as well as time savings: paper that does not meet the quality criteria is sorted out and does not receive additional and costly treatment. The LED unit does not have to be lowered to change paper or in the case of paper tear. And finally, only paper of the targeted quality is delivered to customers which increases their trust and loyalty.

Dr. Schenk systems are an important step towards industry 4.0 offering quality data that can be accessed at any time; connect ability with other systems, and correlation and trend analyses.

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