



M-Real: Smooth dosing guarantees high-quality paper

The pulp and paper mill, M-real Hallein AG, is known for its superior paper quality. The mill has specialized in producing coated paper and TCF-bleached sulphite pulp from spruce.

The mill, located 15 km south of Salzburg, is an integrated member of the M-real Group and one of 26 production units across nine European countries. M-real is one of Europe's leading suppliers of value-added fine paper, primarily used for glossy magazines and often the preferred choice of marketing professionals.

The Situation

To guarantee state-of-the-art products, the production of fine paper calls for perfectly clean machines. To eliminate deposits of resin in the pipe work, it is necessary for the mill to dose precise amounts of "anti resin forming" into the cellulose production.

However, the original dosing solution with high pulsation was unable to live up to M-real's increasing demand for extremely clean machines. Consequently, M-real contacted Grundfos for an innovative dosing solution that could guarantee uninterrupted and precise dosing.

TOPIC:

M-real Hallein AG is an integrated pulp and paper mill. The company produces 150,000 tonnes of TCF-bleached sulfite pulp annually and up to 310,000 tonnes of first-class paper.

LOCATION:

Austria

COMPANY:

M-real Hallein AG

The Grundfos Solution

Based on the requirements of the customer, Grundfos recommended the innovative DME dosing pumps for the task. The patented Grundfos dosing solution employs the latest technology and principles to ensure smooth and precise dosing at all times. As a result, the Grundfos DME range is one of the most reliable and precise on the market.

Grundfos supplied a total of five DME 8-10 AR dosing pumps with a turndown ratio of 1:1000 to the pulp and paper mill. All pumps were delivered with side mounted control panels for easy mounting onto the skid. The pumps are controlled via analogue signal from a high-resolution flow meter, which makes the pumps dose the anti resin forming proportional to the production quantity.

Although the application required dosages between 1 – 3 l/h per pump and occasionally 5 l/h, Grundfos recommended dosing pumps with a capacity of 7.5 l/h for the purpose. By using a bigger pump the discharge phase will be extended compared to the suction phase, which ensures a smoother and more even dosing. At the same time, there is no compromise on the precision, because the DME pumps always operate with a 100% stroke length.

The Outcome

The DME dosing pumps have fully lived up to the customer's expectations. Since the installation the pulp and paper mill has experienced absolutely no problems with resin in the pipe work.

With a turndown ratio of 1:1000 and a slow discharge phase the reliable Grundfos solution guarantees that the production of high-quality paper runs smoothly.

And according to the manager of the electrical workshop, Mr. Rettenbacher, that is exactly what the pulp and paper mill requested – and achieved with the innovative Grundfos solution.