

Change of Production to Dissolving Pulp

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For several years, the staff at the site in Hallein considered changing the production to viscose pulp and since October 2010 the project "Dissolving Pulp" was conducted under the new owner Schweighofer Fiber GmbH.

Viscose pulp has a higher percentage purity and whiteness in contrast to paper pulp, the important references are the viscosity and the R18.

The project "Dissolving Pulp" included the changeover from Magnesium oxide to caustic soda, an additional washing press as well as another bleaching stage in the pulp production plant. The waste water treatment plant had to be expanded with an anaerobic reactor for biogas production and an anaerobic reactor with floating biology to handle the higher pollution load, resulting from the viscose production.

The pulp drying plant was retrofitted with a highly efficient 6-stage cleaner plant, for removal of smallest impurities and silicates. Upstream of the conventional drying cylinders, the press section of the paper machine underwent a complete rebuild. Beside the lump breaker and shoe press a new head box with circler profiler was installed, for a smoother and consistent profile at the wire table. Furthermore the vacuum system was entirely changed by replacing six liquid ring vacuum pumps with high efficient turbo blowers, the drive system was changed to alternating current with frequency converter controls, and many other optimisation measures were carried out.

The challenges involved in the conversion of a paper machine on drainage and drying of the viscose pulp will be presented in the lecture. In particular the press section with the new shoe press and the new headbox will be subject of the lecture.

First experiences with the new machines and equipment will confirm the chosen concept.