

Sappi to construct second-generation renewable sugar extraction demonstration plant at Ngodwana Mill

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- Sappi has commissioned the construction of a demonstration plant at Sappi's Ngodwana Mill in Mpumalanga Province, South Africa.
- The demonstration plant will extract hemicellulose sugars and lignin from Sappi's existing dissolving pulp line.
- The sugars platform will include beneficiation to higher value organic acids, glycols and sugar alcohols which find application in many everyday products.
- The plant continues Sappi's strategic move into the biomaterials and bio-energy business fields to extract more value from the production processes and in response to the global demand for renewable materials with a lower carbon footprint.
- The investment in biochemicals follows on the earlier investments in biocomposites, nanocellulose as well as Sappi's expansion of lignosulphonate capacity.

Sappi Limited, a leading global producer of dissolving wood pulp and graphics, speciality and packaging papers, is pleased to announce that it has entered into an agreement with leading global supplier, Valmet, for the construction of a second-generation sugar extraction demonstration plant to explore and optimise the extraction of bio-renewable chemicals. The plant will be close to industrial size and will be located at Sappi's Ngodwana Mill in South Africa. Start-up of the new plant is scheduled for the beginning of 2017.

Commenting on the decision, Andrea Rossi, Group Head Technology, explained that the demonstration plant will accelerate Sappi's move into new adjacent business fields based on renewable raw materials. Sappi's strategy includes seeking growth opportunities by extracting further value from existing production processes. The feedstock for the demonstration plant would be supplied from Sappi's Ngodwana dissolving wood pulp plant. The demonstration plant is the precursor for Sappi to consider construction of commercial plants at its dissolving wood pulp mills. The plant will also be used to improve the dissolving wood pulp manufacturing process.

He goes on to say, "The demonstration plant will make it possible to study the next-generation dissolving pulping process and test new ideas at mill scale. The main features which we hope to demonstrate include increasing production output, higher dissolving pulp quality, lower operating cost and a new optimised hydrolysate revenue stream. The products from the demonstration plant will assist in the development of various beneficiation options for the different dissolving wood pulp lines operated by Sappi."

Louis Kruyshaar, leader of the new Sappi Biotech division commented: "New revenue opportunities include possibilities to extract bio-based materials from the cooking plant pre-hydrolysate stream (such as hemicellulose sugars and lignin) for beneficiation to higher value biochemicals. These applications respond to the global demand for renewable materials with a lower carbon footprint. The products under development will expand Sappi's renewable biomaterials offering which include nanocellulose, biocomposites and lignosulphonate. This technology will also further enhance Sappi's global competitiveness and cost leadership and strengthen its production base in South Africa."

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