

Implementing Rebuilds Quickly and Efficiently

Having a local presence is key to the quick and successful implementation of rebuilds. For example, it took only five days for the headbox in the Aracruz pulp mill to be rebuilt. Paper manufacturer IP Luiz Antonio now finds that the new roll covers and press felts in its press section have increased the dry content by over 2.7%. With five locations in Brazil and six others in South America, Voith has established the local presence that is decisive for these successful projects.

Service work on the headbox with short downtimes. The pulp mill Fibria Celulose S.A. is located in Aracruz, the Brazilian state Espírito Santo – 70 km from Vitória. It comprises three fiber lines with an annual capacity of 2.3 million metric tons of bleached pulp. As Voith supplied the dryers for PDMs 1-4, Voith, in turn has been given responsibility for the dewatering line main shutdown.

In 2011 Voith was called to rebuild the considerably corroded PDM 3 headbox. Especially the bottom part had to be changed. Therefore, a new bottom part, completed according to the original drawings, had to be designed and installed in the headbox during the main shutdown service within five days. It is always a big challenge and great responsibility to stop a dewatering machine and to rebuild one of the most important sections like the headbox. It is essential to return to normal production without changing its parameters. The harmonic service was supported in perfect cooperation with the production and maintenance staff from Fibria. This rebuild also included the longitudinal beam for the fourdrinier, which was also supplied for PDM 4 and installed at the same shutdown. Moreover, during the same year Voith was called upon again to provide exactly the same rebuild for PDM 3.

Increased dryness with product combinations. In Brazil, International Paper's Luiz Antônio mill produces uncoated woodfree copy paper on PM LAN2. In 2011, this mill began the implementation of a project for optimizing the press efficiency of its PM LAN2. Voith offered a complete press analysis with specialist measurement tools and knowledge to collect and analyze the necessary data. With the analysis results, a water reduction was performed followed by engineering recommendations for fabric designs, roll cover material and surface geometry. By this means, a combination of Voith products such as SolarFlow suction roll cover, PrintFlex V4L fabric and G2000 press roll cover together with PrintFlex S3 in the third press helped.

The high water storage capacity of the Voith polyurethane covers along with the press fabrics resulted in a more than 2.7% increase in dryness from 41.12% to 43.85%. Another benefit was that the machine reached record reel speeds of 1,180 m/min, exceeding its previous speed by 10.4%. Consolidating those results, through process adjustments and machine crew development, will generate a potential production increase of 19.3 t/d. Production Manager Eurípedes L. Valadão Junior of IP's Luiz Antônio mill states: "This development was a clear demonstration that, with the combined efforts of the supplier and customer, motivated people can enhance efficiency and quality in the production process."

Caption:

Sao Paulo, Brazil.