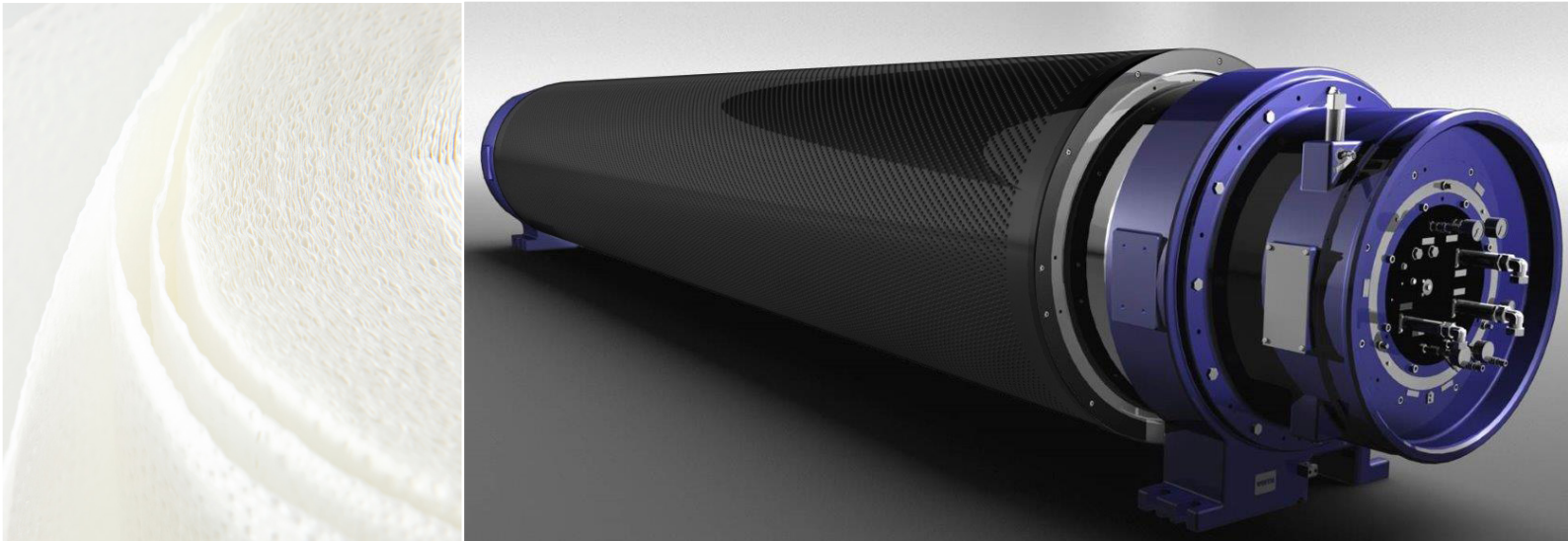


Case study

Tissue mill awards long-term mechanical roll service contract and roll cover business to Voith based on performance



Summary

A Southern U.S. tissue mill, which produces virgin and recycled fiber products for both the consumer and commercial markets, recently expanded its relationship with Voith as the company proved its service excellence and quality product offerings.

Details

As part of their continuous improvement initiative, the mill utilized Voith for additional products and services. At the time, Voith was already a significant supplier to the mill. The excellent service Voith provided led to a Total Roll Management (TRM) contract. The mill captured benefits with having a dedicated roll cover and mechanical roll service supplier. Some of their suction pressure rolls were experiencing main bearing spinning on the tending side journal, forcing destructive removal of these expensive

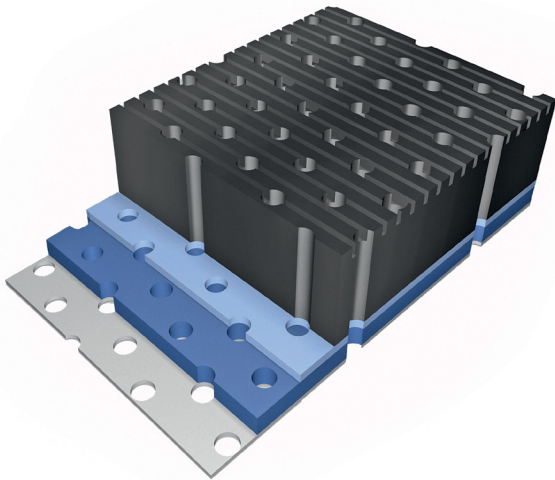
bearings and journal repair on each service. A new roll design eliminated the issue, saving the mill about **\$50,000 annually**.

Results

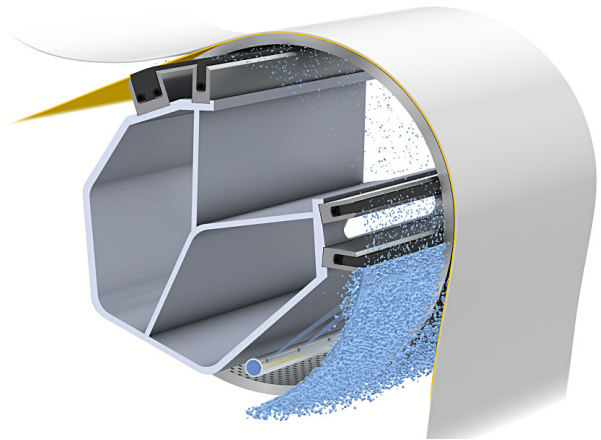
The mill saw these benefits through their expanded partnership with Voith:

- **No more bearing issues** - Voith's analysis determined the journals were inadequate. Major roll rebuilds were implemented to resolve this issue.
- **TRM service** - With this contract, the mill's roll service and repair needs are handled by Voith.
- **Water and energy use** - A HydroSeal installation reduced the mill's water and energy consumption.
- **High-quality roll covers** - MegaSoft roll covers are meeting the customer's needs.

MegaSoft tissue roll covers meet customer expectations.



HydroSeal offers a self-lubricating seal strip for wear reduction.



Voith's expertise brought these changes to the mill:

- 1. Mechanical updates:** As a result of an assessment of existing conditions and equipment, Voith performed a redesign of the mill's suction pressure rolls. The redesign led to much-reduced maintenance costs and improved overall reliability for the system. The updates were made to exceed the performance of the troublesome OEM design.
- 2. New pressure roll covers:** To replace the previous vendor's roll covers, Voith recommended high performance MegaSoft suction pressure roll covers, which are specifically designed for tissue applications and feature an innovative multi-layer construction for optimum bonding strength, wear resistance and improved after-hardening performance. Voith also optimized the nip fit, grinding the cover to the optimum shape for the conditions on the tissue machine. The new covers consistently meet the customer's high expectations.
- 3. Energy opportunities and savings:** Another step that Voith took was the incorporation of the HydroSeal self-lubricating seal strips to reduce wear and extend seal life in the suction pressure rolls. HydroSeal distributes water over the entire width of each sealing strip individually, continuously covering the interior surface of the suction pressure roll with a homogeneous film of lubricating water. This substantially reduces the amount of lubricating water required, reduces the amount of energy used to drive the roll and prevents remoistening of the paper web.

Why partner with Voith?

Voith's technical expertise, experienced personnel, hands-on service capabilities and ongoing presence in partner facilities can make the difference on mechanical roll service and cover projects, delivering a quality of service that cannot be matched by competitors.

Voith's HydroSeal is an innovative system to lubricate the seal strips inside suction pressure rolls. It can deliver long-term savings thanks to reductions in water and energy usage.

MegaSoft suction press roll covers, which are infused with a unique polymer bonding matrix to deliver a bonding strength four times more powerful than older systems, allow for high capacity paper production. These covers conform to Yankee dryers while offering the highest levels of wear resistance, heat resistance and bonding strength.

"Voith is focused on partnering with our customers. With the Voith team, you can optimize machine performance using a combination of outstanding mechanical roll services and roll covers that perform extremely well."

*— Ian Meinke
Product Manager, Voith Paper FRS North America*

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