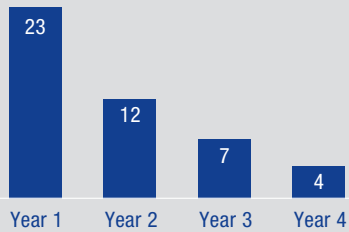


Total Roll Management – The Ultimate Roll Service Concept

The performance and reliability of rolls have a huge impact on paper quality and mill profitability. The Voith Total Roll Management (TRM) concept is the ultimate tool for all papermakers to achieve the best roll performance and reliability.

% of total unscheduled downtime related to rolls



Case study 1 result:
Greater than 50% reduction in downtime due to roll problems

Paper machine efficiency [%]



Case study 2 result:
– Reduction in annual roll spending
– 3% increase in machine efficiency

Voith Total Roll Management is a comprehensive program that takes care of all the needs of the rolls. It is based on deep cooperation and long-term goals. With this partnership, you get measurable results and bring significant contribution to your bottom line profit, today and into the future.

Voith personnel have tremendous know-how around the complete roll systems, and they are dedicated to everything related to rolls.

Voith Paper Rolls was the first to introduce the Total Roll Management concept. You can rest assured we are the most experienced partner in the industry, and our case study results speak for themselves.

What makes Voith Paper Rolls the Best Partner for You?

Within the TRM partnership, Voith Paper Rolls will be your single point of contact, working closely together with mill's specialists to achieve elimination of roll problems. Voith will stay – next to the internal specialist of the Rolls company – closely connected with other Voith Paper experts, which

are engaged in the whole papermaking process: fiber systems, graphic paper machines, board & packaging machines, fabrics, finishing and automation. The combined know-how of all these groups results in a truly comprehensive expertise throughout the entire papermaking process.

TRM Portfolio

Roll Systems

Voith Paper Rolls manufactures all types of rolls using the highest quality material combined with accurate and precise manufacturing procedures. Each roll is custom engineered with the latest design concepts, which means they are optimized for each application.

Roll Covers

Voith has a complete portfolio of roll covers and coatings. Starting from the wire section to the winder, Voith has roll covers specially designed for each position. Voith covers are top-rated in the industry, and the quality is well proven through many years of reliable service. Voith will recommend and fine tune the best cover for each roll position.

Roll Service

Voith services all types of rolls, regardless of original manufacturer. Periodically, rolls have to be completely reconditioned to the original specification. If needed, Voith can also perform engineering upgrades. Every solution is tailor made for the specific need, striving for maximum results for the cost.

Field Service

Voith Paper Rolls can also provide Field Service from the wet end section to the winder. For example, dryer cylinders can be balanced in your paper machine in their own bearings; this leads to highest balancing results and helps you reduce shut down time. Our Rollchange Teams are well known for shortest reaction times and very quick rollchanges. That helps you to keep downtimes to a minimum.

Voith also coordinates transportation of the rolls. Our roll tracking system, called SØNAR, is a unique software program that makes roll tracking very simple. It supports the entire TRM concept.

Implementation Steps

After the machine survey or reviews of rolls histories, e.g. past problems, difficulties, roll change intervals or roll grinding frequencies, are completed, various technical support tools are available to further optimize the paper machine operation.

The next step, after analyzing the data, is to present the findings and recommendations to the mill. The final step involves collaboration between the mill and Voith Paper Rolls in formulating the implementation plan.

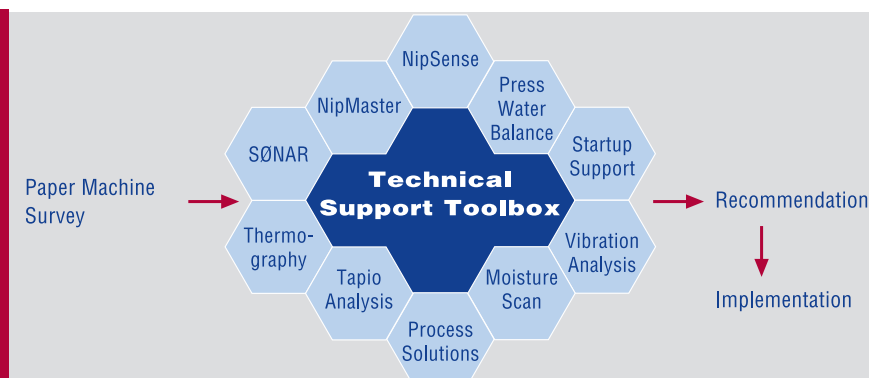
Summary

Total Roll Management enables mill personnel to focus more time on the core business of papermaking, while getting the industry's best expertise on maintaining and optimizing rolls. With the TRM concept, the total responsibility for rolls is turned over to Voith Paper Rolls.

Voith has roll service centers around the world. We are there for you 24 hours a day, 365 days a year.

We will take care of everything related to your rolls to ensure, that roll issues will disappear and you can rely on your rolls everyday.

Implementation Steps



Contact



Jin Kim
Rolls
jin.kim@voith.com



Jochen Honold
Rolls
jochen.honold@voith.com