

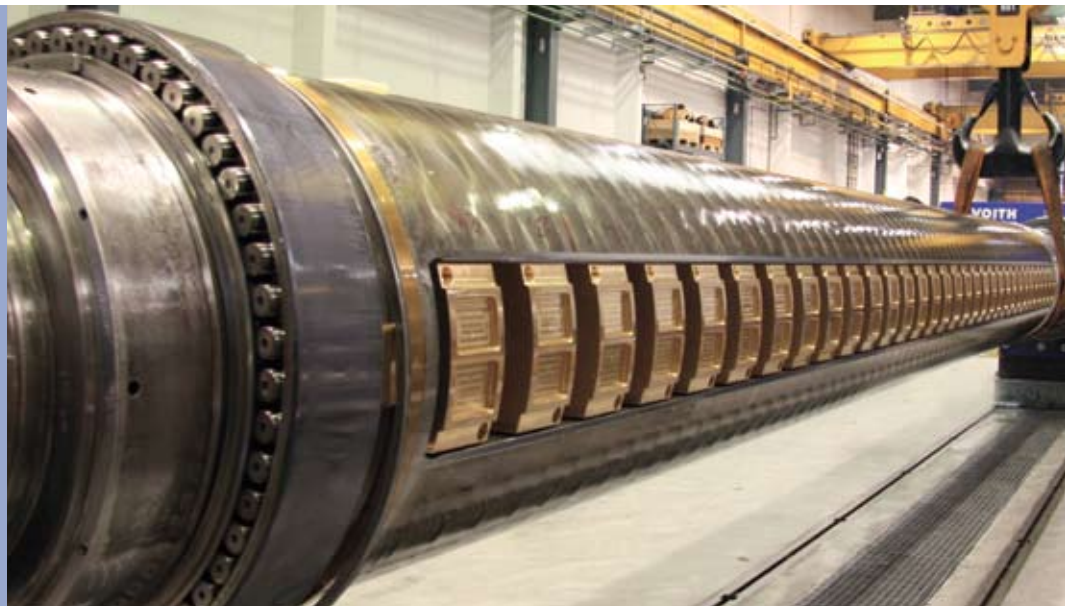
Nipco roll – in successful use for over 30 years

The “heart” of press and calendering technology

Fluctuations in the CD profile of the paper or board web are a thorn in the side of papermakers. In order to guarantee a consistent, high quality paper grade to be continually processed and sold, these fluctuations must be kept to a minimum. Due to the increasing requirements of processors, the correction of CD thickness variations is becoming increasingly important.

A constant, flawless production result is the basic requirement for competitiveness in the international market. For targeted profiling and leveling out of the surface, Voith offers a variety of tools in a wide range of performances. This includes profile rolls, especially the Nipco roll. The basic idea for today’s Nipco technology was developed in 1971. Just three years later, the first Nipco roll was operating in the press section of a paper machine. This started the success story of the Nipco roll, which is often described by papermakers as

the “heart” of press and calendering technology. Thousands of Nipco rolls are now in use. And the area of use for Nipco technology goes far beyond the papermaking sector. The focus is on tailored solution concepts for operators. Modernizations of the existing Nipco technology provide a wide variety of product advantages in efficiently rebuilding existing Nipco installations with the latest technology and improved characteristics. NipcoScoop, NipcoSeal, and NipcoCool are just three of numerous upgrade options.



Hydrein roll in the rebuild to the Nipcorect roll.



The same Nipcorect roll in the rebuild to counter support elements.

Nipcorect roll

One example of constant continuing development and the resulting modernization is the Hydrein roll in a soft calender from 1989. In order to keep pace with required improvements in technology, it was converted to the first Nipcorect roll in 1995. Since then, Nipcorect rolls offer the operator an enormous correction potential in the CD profiling of the paper web, because the supporting elements in this type of roll can be individually controlled. Thus, a more precise fine profiling is possible.

In 2007, the rolls that had been converted to Nipcorect were modernized again and adapted to the current developments. The reasons for this are certain paper grades with a large percentage of recycled paper, which were run in the lower range of linear

forces. So that a high profiling potential could be guaranteed, there was a conversion to counter support sources that introduce a uniform force opposite to the working nip. To achieve the desired low line load, the supporting elements are provided with substantially higher pressures in the nip direction than the conventional Nipcorect rolls. The corresponding interaction between both supporting elements rows results in the always available correction potential between the individual zones even at low line loads.

True to the motto “engineered reliability”, the deflection compensating rolls from Voith allow a smoother and thus higher-quality production of paper or board through the correction of CD profile fluctuations and thus a crucial and reliable contribution to the productivity and efficiency of the machine operator.

Contact



Daniel Weber
 Finishing
daniel.weber@voith.com