01 Screenshot with graphical navigation.

02 Screenshot of a roll tab.

ANYTIME, ANYWHERE ACCESS TO ALL THE ROLL INFORMATION YOU NEED

ROLL MANAGEMENT MADE EASY

SØNAR provides all available data for all of a paper machine's rolls, right around the clock. From now on, maintenance personnel and papermakers just need a few clicks of the mouse to see the status of their rolls, when the next roll change is scheduled and the scope of servicing required.

Rolls are an indispensable part of a paper machine. They are key components without which the paper machine would not function and whose failure can be very expensive. The greater the number of rolls on a machine, the more difficult it is to keep track of them. This is why documenting the history of the rolls is very important, as it helps those responsible to make the right decisions, which can affect machine efficiency, at the appropriate time. Very often therefore, maintenance or production teams keep separate, manually compiled lists providing information about when a roll was installed, when it has to be changed, the scope of servicing necessary after the change or under what specific circumstances a roll has to be replaced prematurely. However, maintaining these separate lists is not only time consuming, they are often not available to everyone involved and so it is easy to lose track – and this is precisely where SØNAR comes in.

SØNAR is a roll management software program, a database providing roll data around the clock in a readily accessible framework. The papermakers themselves enter the data into the system. It then only takes a few clicks of the mouse to determine, for example, whether a sizing press roll will soon need to be re-covered, or if and when a wire guide roll requires a service. SØNAR can be used by all customers, regardless of the number of rolls installed on their machines. They simply log on with user name and selected password to access the machine via an encrypted Internet connection. Its graphical user interface makes SØNAR very easy to operate, as the user navigates through the machine by means of symbols. The navigation process is very simple, moving through the entire machine to the specific section and from there to the individual roll position or installed roll (Fig. 1).

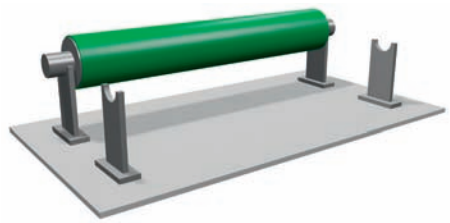
Status at a glance. It is possible to see at a glance whether a roll is installed, in service or currently available for use (Fig. 3). General information such as year of construction, potential operating locations and spare rolls available for this location, is provided for every roll. In addition, the system provides details of roll length and diameter as well as residual cover thickness in the case of covered rolls. Scheduled running times, roll change and servicing dates can be input for each roll, thus allowing a downtime schedule to be compiled, for example. This option helps those responsible to optimally schedule downtimes and coordinate them with the targeted roll running times. At a glance, it is ▷

03 Roll status at a glance

Installed

In service

Ready for use



▷ possible to schedule a roll change, reserve the crew needed for it and inform the respective service center if necessary. Specific details for each roll can be saved in comment fields, with around 300 data fields available for each roll (Fig. 2).

All logs and reports included. The roll histories are also enormously important to Voith's service specialists. The ready availability and coherent structure of the roll data help them provide a good service. For example, weak points in a roll can be identified and rectified. For preventive maintenance in particular, the roll history is very important. Voith also offers the option of having all data resulting from the roll service saved in that particular roll history. Grinding and balancing reports, spare parts lists and drawings are also included with the roll data as well as detailed service logs. This allows customers to easily keep a complete track of all servicing operations performed on a roll. In addition, it is easier and quicker to exchange various documents. Thanks to SØNAR, all relevant documents for each roll are available at all times in one location and from a standardized and readily comprehensible system. The program therefore offers a complete range of options for easy management of the complete roll inventory – for all machines and all roll types.

Available as an app for smartphones and tablet PCs. SØNAR is not just available as an online version, but also comes as an app for smartphones (Fig. 4) and tablet PCs. As with the conventional Internet version, the customer logs on with a user name and password. In the app, the menu interface has been adapted for typical intuitive app navigation. This allows a quick glance at the most important data. Moreover, the SØNAR app is also available offline. This is necessary due to the poor reception frequently found at paper machines. The app can be used by customers to view and modify data. As soon as reception improves again, the app automatically synchronizes with the database.

Furthermore, the option of fitting the rolls with RFID chips is already available. Via an RFID antenna plugged into the smartphone or tablet PC, the SØNAR app can then use digital information to clearly identify the available rolls. This means that it takes just one click to immediately retrieve the respective data for the selected roll. This system offers the customer the additional advantage of associating the standard RFID with its own applications such as a maintenance management program. //

04 SØNAR app for smartphones.

Benefits at a glance

+ Comprehensive roll management tool
+ Intuitive GUI
+ Available in multiple languages (English, German, French, Spanish, Polish)
+ No more scattered lists stored in different places; everyone has the same information status
+ Overview of the history of all rolls on a machine
+ All reports and measurements for the respective roll
+ Fast access to planned roll running times
+ Simple planning of roll changes and servicing
+ Overview of residual cover thicknesses, important for maintenance budget planning
+ Available at all times: online and also offline as an app
+ Expansion capability, e.g., SØNAR app and RFID identification

Info: Radio Frequency Identification

RFID (Radio Frequency Identification) is a wireless process for identifying products or objects. The exchange of data over certain distances is based on a non-contacting, electronic wireless signal communication. The system consists of a data carrier (known as an RFID tag), an antenna and a read/write device. Major advantage: The RFID tag does not have to be directly in the line of sight of the reading device, and readability is not affected even by severe contamination.

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