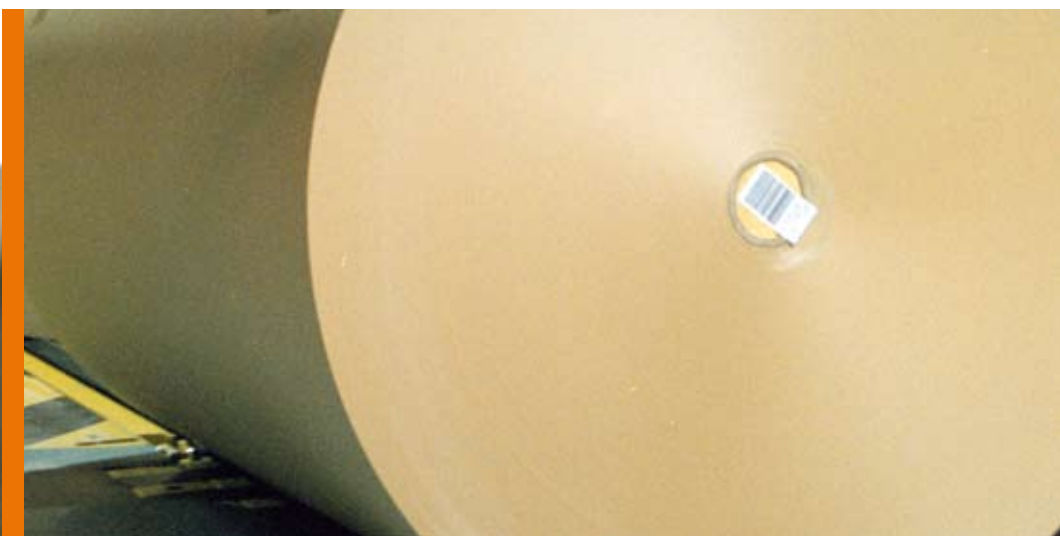
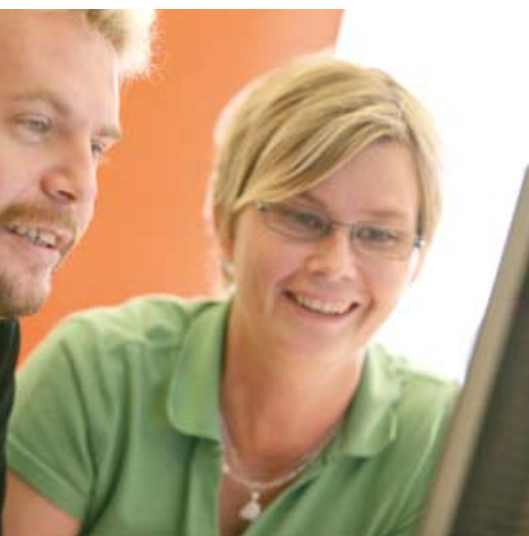




PaperLine®

For a reliable return in the
pulp and paper industry



Innovation by experience





An uncommonly intelligent investment

You probably agree. An investment in industrial IT should give a fast, reliable return. That's why an investment in PaperLine® is a wise choice, both in terms of the production process and profitability.

Production Intelligence™

The know-how gathered within your company is invaluable. ÅF will help you to use this bank of knowledge in the best possible ways. We build the knowledge about your production systems, products and, if necessary, about your customers into an information system. The system will then continuously create new knowledge that will boost your competitive strength, while you increase the value of your products as you deliver knowledge that benefits your customers.

That's what we call Production Intelligence.

A system used internationally

PaperLine is Production Intelligence. The system is internationally used by pulp and paper mills and the reaction to it has been very positive.

PaperLine is often the link between the business system and production. It collects information and provides valuable knowledge when you plan production. You can simulate the effects of rebuilds and new investment. You can optimize

trimming, classify reels, monitor and improve overall equipment efficiency, follow up quality data and lots more.

In short, PaperLine will help you keep a constant focus on getting the best out of your production process.

Customized standard solutions

The PaperLine concept includes a basic technical platform and a range of subsystems that are described on the following pages. Even though it's an open system developed from standard modules, we'd like to call it a customized solution.

We believe that the people who use the system should be involved in designing it. That's why we always start our projects with the screen layouts. This is where some of the greatest added value comes in, in the form of process development. Going into detail about how the system works and how the different work stations shall be organized always creates the best working methods. The solutions are more user-friendly and can come on stream quicker because the users have already accepted them. In fact, the users have a personal stake in the result.



PaperLine® Simulation

The simulation tool provides an outstanding overview of the entire production situation. It helps you see the effects of current production plans on the mill's resources, such as paper machines, bleach plant and digester as well as the status of customer orders in production.

The right knowledge of the parameters that affect the production situation enable significantly increased use of capacity. Disturbances are prevented, the consequences of unplanned shutdowns are minimized and simulation of planned shutdowns is simplified.

That means increased utilization of resources and the ability to simulate different scenarios for new investments or other process changes.

PaperLine® RECO

RECO is an easy to use administrative tool which will help you solve problems in the work of replacing absent workers in a critical production line. It provides a total overview of forthcoming needs and gives you a fast and effective way to find stand-in workers with the correct competence.

RECO gives you the possibility to cut your personnel costs and will also reduce and give your workers a more equal distribution of the overtime.



PaperLine® Block scheduling

The Block scheduling tool supports your production planning in the mill. It gives you complete freedom and total control.

It's well known that good general planning creates the conditions for making larger trim groups and thus exploiting the full width potential of the paper machine. Automatic functions in the module include confirmation of delivery times and sorting after quality and grammage in the operation schedule.

It takes less than five minutes to approve an order and send it via trim planning to production. It is also easy to undo released production plans. The functionality is also useful if you want to satisfy your late-ordering customers and make more money on them.

PaperLine® Storage system

A good storage system helps to minimize roll handling. Fewer lifts mean less risk of roll damage. Storage-positions are optimized and proposed according to the total size of the order and the planned loading location.

Because it is used in different environments, PaperLine can be run on a PC, truck terminal or hand-held device.

The system provides complete traceability for all items in the warehouse and you can track each item as it is loaded onto internal and external transporters.







PaperLine® StarTrim

Those who have tested StarTrim say that it is the most userfriendly trim system on the market and it always gets top marks in independent comparisons.

The system handles winding, rewinding and sheeting. It can also be used in converting plants to optimize the utilization of finished rolls in a warehouse.

You know what your trim losses cost you today. Efficient trim optimization is one of the fastest ways to boost productivity.

In most cases StarTrim increases the PM width utilization by 1% and upwards, which means that the payback time for the system is very short. For most mills, it's only a matter of months.

PaperLine® QualityControl

This module helps you to make the right decisions at the right time. You gain key information about quality and know exactly where on the paper web the information is coming from. This is done by using paper production information in combination with process and signal values.

PaperLine can also propose re-classification if the paper produced deviates from the specification. The overall aim is to get as much top grade paper to your customers as possible.



PaperLine® Production execution

PaperLine makes sure you produce what customers order with the highest level of profitability.

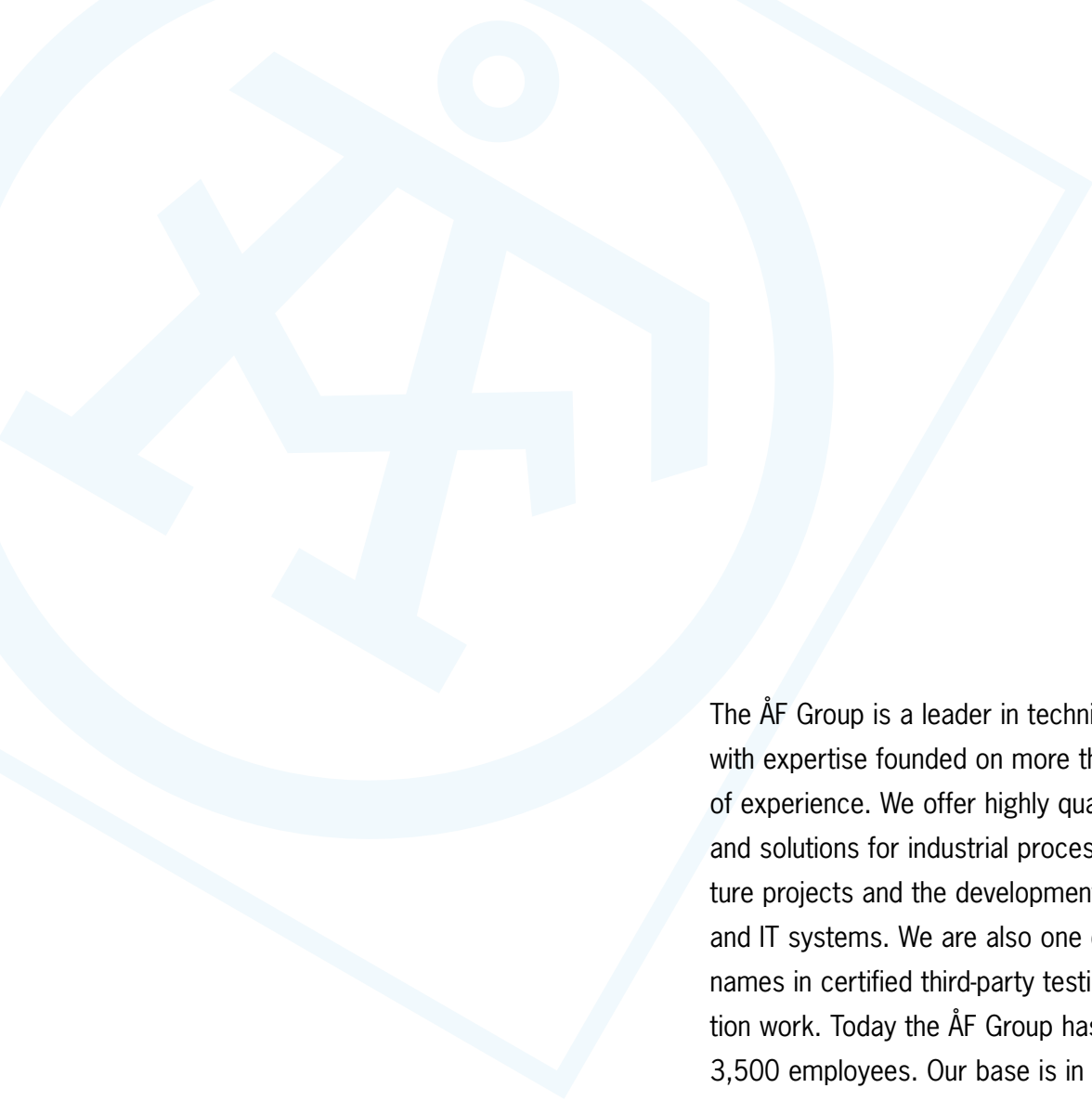
The system takes care of paper rolls from the winder through packaging in the mill and in the converting plant. It handles parent reels, standard rolls, sheets and packs and ensures traceability even when there are several tambour splices in the same roll, joined parent reels and several rolls in the same pack.

Re-planning of production due to complaints or reclassification is often not given priority, but this is an area where large savings can be made using the advanced replanning features of PaperLine. Additional runs are made profitable as the system takes the original volume of the order into consideration.

Process development

After running a PaperLine system for a while a large amount of valuable data is collected. Future analysis requirements will change due to new customer demands, new products and new market conditions. That's why we recommend that, in addition to a production database, we create a data-warehouse for you to store all historical data.

Using a standard, on-the-market software, as an analysis tool you will be able to connect simply with other databases and thus gain complete control over all analysis whatever the information being analyzed.



The ÅF Group is a leader in technical consulting, with expertise founded on more than a century of experience. We offer highly qualified services and solutions for industrial processes, infrastructure projects and the development of products and IT systems. We are also one of the leading names in certified third-party testing and inspection work. Today the ÅF Group has more than 3,500 employees. Our base is in Europe, but our business and our clients are found all over the world.

