



Between meadows and forests, up to 305,000 t/a of newsprint paper are produced on the PM 11 at the UPM mill in Schwedt, Germany. (Image source: UPM Schwedt).

UPM Schwedt success story

A new lease on life: fit for the future in three days

The times are changing and we are changing with them – those responsible at UPM Schwedt, Germany, took this old saying literally and decided to bring their 12-year-old quality control system (QCS) up to the latest state-of-the-art system.

UPM Schwedt is not settling for half-way measures. The mill, which is in the immediate vicinity of the German-Polish national park, is setting standards in the areas of environment, safety and quality management. Nothing less than “best available technology” was set as the goal for the PM 11 paper machine, so modernization of the existing QCS was the obvious thing to do.

In doing so, it was important that the already installed automation products

could be integrated into the new system supplied by Voith Paper Automation. The existing isolated applications were integrated into the QCS software, so that UPM Schwedt is now profiting from a continuous, uniform platform.

In the process, an upgrade for the existing Profilmatic software, which was already used on the headbox at the OnQ ModuleJet dilution water control was also carried out. In the course of standardization, all other

cross profile controls were automated with the Profilmatic. In order to achieve the highest possible uniformity of paper quality, several machine direction controls were also installed that, among other things, also contain a program for automatic grade change.

Furthermore, UPM Schwedt opted for a soft-/hardware update of OnV TechnologyMonitoring. This system monitors all critical machine components and immediately sounds



Continuous quality control system from the headbox to the reel: OnQ ModuleJet, OnQ EnviroScan and OnQ Scanner.

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Steffen Deszpot, Manager Mill Service & Energy, UPM Schwedt

an alarm if there are vibrations of felts or rolls. Furthermore, it is in a position to detect short-wave fluctuations of quality parameters – such as basis weight or moisture – and assign them to the machine parts that are causing them.

In addition, the other QCS hardware was also reconditioned and replaced when necessary. Thus, the scanner in front of the reel was replaced by a Voith OnQ Scanner, which is equipped with sensors for basis weight, moisture and thickness. The previous ash point measurement was integrated into the scanner. The existing OnQ EnviroScan that measures the moisture and temperature of the paper web directly at the beginning of the

dryer section was checked and worn-out parts replaced. The project was topped off by delivery of an OnView information system with a high-power database. It is integrated into the new QCS. Via OnView, easy access to historical as well as current data is possible that can be clearly visualized with various tools and thus analyzed.

The extensive modernization was carried out within three days. The aim of increasing the uniformity of the paper produced was achieved. This illustrates the significant improvement of the 2sigma values of all important quality parameters. Furthermore, Voith Paper Automation guarantees a technical availability of 99.8%.

Those responsible at UPM Schwedt were also satisfied with that and Steffen Deszpot, responsible for the PM 11 technology, is convinced:

“Along with the new hardware landscape, now fit for the future, the now uniform platform was for us, above all, a great leap forward.”

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**“It’s clear:
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During a visit to the UPM mill in Schwedt, Germany, Steffen Deszpot, Manager Mill Service & Energy, took time out for a conversation. The topic was the modernization of the quality control system (QCS) on the PM 11. The 35-year-old has worked at the mill for seven years and has had a storybook career. Since last year he has taken over the responsibilities of Technical Director and has jointly overseen the QCS project.

twogether: Mr. Deszpot, what were the reasons behind the modernization of the PM 11?

Deszpot: The crucial factor was the incomplete hard- and software support for the previous QCS. We simply didn’t get any more spare parts, or only at high prices. In the current situation on the paper market, however, you just can’t afford that. A market leader, like we are, who wants to stay that way in the future can only do it with modern technology. For that reason, along with good, uniform paper quality, high technical availability was also an aim of the project. It was clear to us: if you want to be one step ahead, you have to invest.

twogether: Without a doubt, you solicited several proposals. What ultimately tipped the scales for Voith Paper Automation?

Deszpot: Voith’s proposal offered what was technically the best and most innovative solution. It satisfied our desire to integrate existing automation components into the new QCS. There were indeed less expensive proposals, but I can defend Voith’s somewhat higher price without misgivings, since I’ve gotten quality for it. Furthermore, we also wanted Voith’s automation for a Voith machine in order to have as few discussions about interfaces as possible. In addition, it was important to us

that Voith will upgrade the Schwedt service center and we thus profit from quick access times and an expanded spare parts storage.

twogether: UPM and Voith employees worked hand-in-hand on the project. How would you describe this joint teamwork?

Deszpot: The teamwork was very good! The project support was beyond dispute. Voith started up with a vigorous, experienced group here, and you have to praise the responsible project managers on both sides. They worked together closely and in a structured fashion and really delivered a super job.

“A market leader, like we are, who wants to stay that way in the future can only do it with modern technology.” Steffen Deszpot

Because of that, the final implementation of the project took only three days.

twogether: One of Voith's claims is to offer our customers custom-made solutions ...

Deszpot: ... and that was done, too. Since we have our own programmers and developers at the plant, over the years some of UPM Schwedt's own solutions emerged that we didn't want to lose. They were responsive to these special requests and even attended to details such as font sizes and so forth on the control panel displays.

twogether: The new system has been running now for almost a year.

What do you think are the most important advantages?

Deszpot: The PM 11 already had a rather high degree of automation beforehand, but the system had grown slowly and featured a motley hard- and software mix. Everything was operable, but there was no well-rounded concept. That has changed now! Existing isolated applications were integrated and all QCS products have now been brought together on a common platform. The daily work routine has thus become clearer, i.e., in very concrete terms, we have also been able to say goodbye to some monitors in the control room. Furthermore, the new Voith technology monitoring, offering many more moni-

toring possibilities than were available to us previously, was a clear leap forward. Nowadays, such a system is indispensable in order to keep an eye on the machine. Proactive maintenance thus becomes possible and malfunctions can be eliminated before they cause problems.

However, one of the most important advantages for us is also the reliable spare parts supply for the QCS that is now ensured. In this way, we save on procurement costs and the maintenance costs are also at a reasonable level.

twogether: How do things look with the paper quality? Have your expectations been met here?

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“Nowadays, such a system is indispensable in order to keep an eye on the machine.” Steffen Deszpot

Deszpot: Our aim was to get a uniform, suitable, i.e., for us controllable paper quality both in machine direction and also in cross direction. Our customers, the printing houses, should have exactly the same basis weight at the beginning of the roll as at the end and of course also a clean profile over the entire width. The modernization certainly helped us in this. The 2sigma values of oven-dry tons, moisture, thickness and ash are clearly better. Furthermore, thanks to the new grade change program, we can change more quickly from one basis weight to the next, so that the difference in cutting of rolls declines. In addition, the more uniform paper quality contributes to the fact that we

have a higher smoothness of running and thus also an easing of the machine's web break characteristics. That's difficult to express in figures, but in my assessment the number of breaks has decreased. Due to the constant quality, the paper runs through the machine in a superior way not only with the printers, but also with us.

twogether: Have you also had feedback from your customers in this regard?

Deszpot: Yes, complaints regarding quality are declining and our paper has a very good reputation with the printing houses.

twogether: Mr. Deszpot, when you look back on the project today, what do you remember in particular?

Deszpot: Many companies can implement the technology today. However, a project is carried out by the people who work on it. And in this case all have really done a very good job! It was clear from the very beginning: professionals were at work there. I can thus say with a good conscience that I would do it again in exactly the same way.

twogether: Many thanks for the candid conversation!



The PM 11 of UPM in Schwedt.