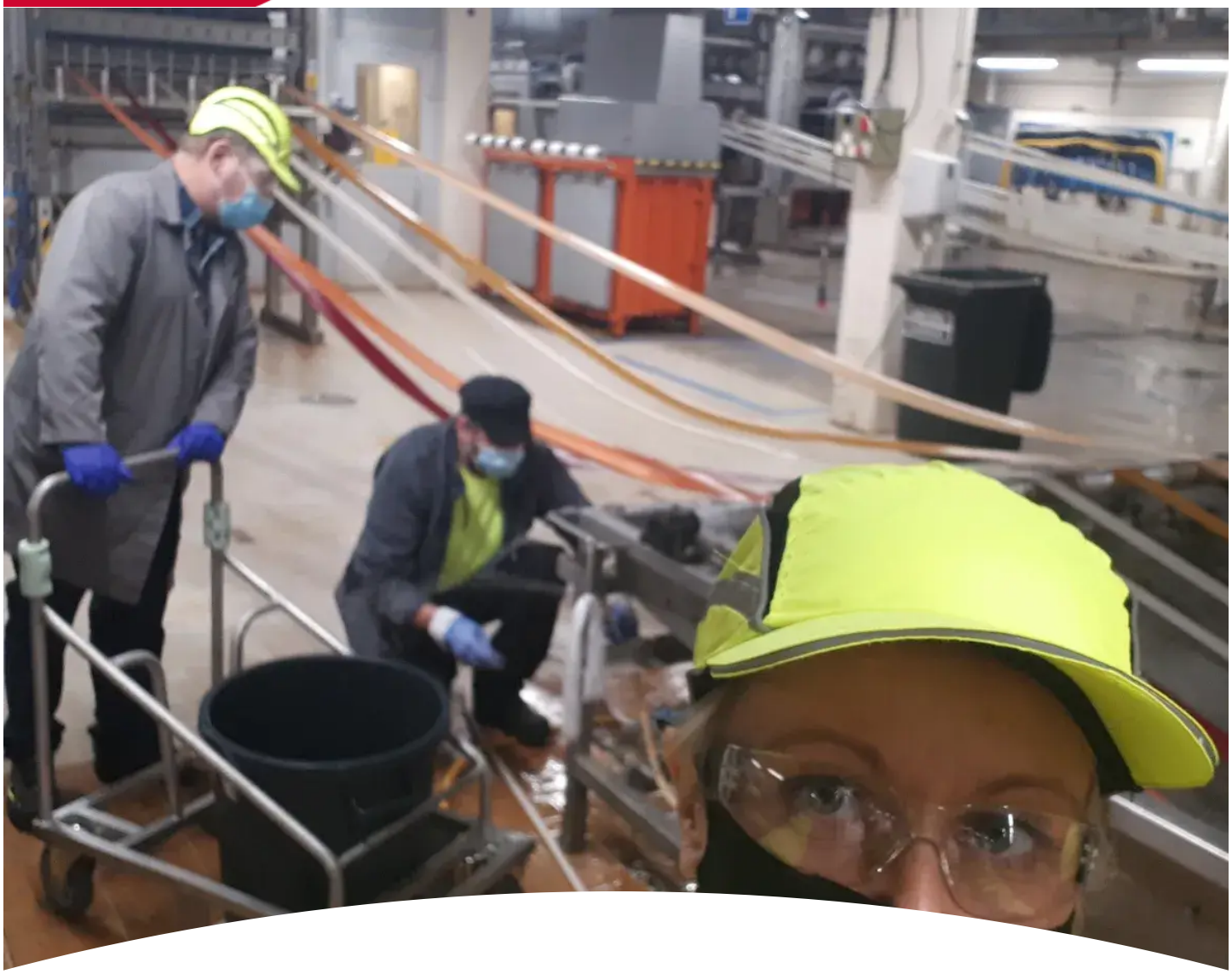

#WeAreViskoTeepak

Jonna Uggeldal: Environmental Health and Safety Manager

Jonna started her Visko journey in 2003 as a R&D Project Manager. She was responsible for several projects, with the purpose of replacing the viscose with a more environmentally friendly alternative. She particularly remembers one project that had the aim to replace the viscose with cellulose carbamate, "In that project, pepperoni was successfully manufactured in the United States. At that time, the project was a secret because our competitor "Teepak," had a patent on it."

Development for testing

"We were convinced that we would succeed in replacing the viscose with a more environmentally friendly alternative. We had developed a laboratory method for testing new materials that even today can easily test alternative solutions. In 2005, two lines with their own cellulose carbamate solution lines were ready for 24/7 test runs at Visko", Jonna recalls. However, the timing was not right for alternatives for viscose, and since the test results came in with too much delay from the customers' final tests, the carbamate producer withdrew from the project in 2007. Instead, the merge of Visko and Teepak began, and the Hanko unit started using M3, TIS, FMS Labo, My Movex and the other applications as well. Jonna's part in this integration work was applying all these programs to test runs in the Hanko production.

Paper and acid challenges

Between 2008 and 2009, when ViskoTeepak brought a lot of Crompton Paper to Hanko, an old problem in production suddenly escalated. A very thick and hard coating began to settle inside the machines and caused great operating difficulties. The coating was found to be calcium oxalate. The calcium originated from paper, while oxalate originated from crude acid bought from a nearby explosives factory. "When we stopped using the crude acid, the coating problems also disappeared," Jonna remembered. Nowadays the Hanko plant uses 93% clean raw acid.

At that time, Jonna's position changed, but the tasks remained similar. The position went from R&D project manager to Process engineer. Between the years of 2010 and 2015, ViskoTeepak qualified two new cellulose suppliers and standardized the amount of viscose in the products. Acid and salt contents in the production were also standardized according to product categories and job runs. Moreover, various levels of the vat dye coloring were categorized, investigated, optimized, and automated with online measurements and flows. The start-ups of vat dye batch runs could be shortened, sometimes from several days to a few hours before the casing operation was run again.

Nothing would be possible without a team like this.

Many projects over the years

Jonna has led her team through many different projects over the years. On the following page is a list of projects with a slightly larger scope that many ViskoTeepakers will remember, as the projects involved several people from different departments.

1. HCLDP - High Cellulose Low DP - viscose project.
2. Acids and cycles - a long study on optimal spin bath contents, and flows.
3. Heated viscose project - a project where we wanted to improve the impregnation of the paper.
4. Extended viscose absorption time - the die was raised to extend the impregnation time before the spin bath.
5. Online Redox, pH and peroxide measurement for machine 36-42.
Die adjustment - the project to constantly create even casing.
6. The vacuum cleaner on line 40 - a fun project to vacuum away “dust” from the paper.
7. Online viscosity measurement - the viscometer is called L-VIS (ELVIS) and is the only device that even the maintenance has been able to state is maintenance-free! Fantastic. Since the installation in 2017, the meter has only been sent for repair once, so we could say that “Elvis has left the building”, but luckily it is now back again.
8. Standardization of the XY boxes - correcting of illogical level differences in the strength requirements of the base casing, nowadays all base casing, which are manufactured equally and with the same material, have the same quality requirements. Only a few customer-specific exceptions exist.

Environment and Safety Manager

At the beginning of 2020, the position of Environmental Health and Safety Manager became vacant at

the Hanko plant. “I had never really seen myself in that role before, but after many lengthy discussions with several colleagues, I saw the opportunity to be able to further develop myself and take on the responsibility as EHS manager. “I searched for the position after the recommendations I received and realized that if ViskoTeepak wants me as EHS manager, then of course that is what I should do. Now, this couldn’t be a better fit for me.

The occupational safety tasks are statutory and offer great opportunities to run projects at several different departments and levels. If the safety is in good condition, the quality and work efficiency often also follow,” Jonna says.

Projects of all kinds

Now, two new paper lifts are being procured for production. They will be installed within a few months. On the environmental side, which is linked to casing production, we have already had time to carry out many large projects belonging to the environmental department over the past two years. We have renovated the wastewater tank, acquired two large new raw water tanks equipped with UV light treatment and we have identified and are working on removing the organic material that clogs the Nitrogen stripper. A safety concept is also underway in connection with the stripper’s clogging. We have changed the inside packing from structured packing to random packing, which means that the change of inside packing can now be done safely. The change of structured packing was one of the most dangerous works that had to be done as often as every three months before this change was made,” Jonna remembers.

“Right now, we also work together with production on a project to optimize the rinsing bath temperatures on the fibrous casing machines. At the same time, we have been able to state that an unnecessarily large amount of water has been used for washing. On the first machine we “took for treatment”, we have reduced the rinsing water consumption from 80 liters per minute to 50 liters per minute in the last six months. The rinsing water temperatures and flows must be optimized and standardized on all machines. The sorting of product waste and problem waste from the acid baths and energy waste from washing baths will be made more efficient in 2022. The problem waste costs 10 times more than energy waste, so everybody understands that it is important to sort correctly. The idea for the efficient sorting comes from a process worker.” Jonna says.

Future Fibrous casing

“In recent years, some new external contacts have also contacted us regarding alternatives to viscose. It would be fun if we had the opportunity to test different alternatives again. The use of chemicals is tightly controlled and is becoming increasingly stringent. It would also serve the environment and occupational safety very well if one day we could manufacture fibrous casing without the use of carbon sulfur. So far, however, only lesser amounts of solutions have been obtained, which we have been able to test on a laboratory scale. The next step would be to get enough alternative viscose solution to be able to run on a line on the fibrous casing machine.” Jonna says.