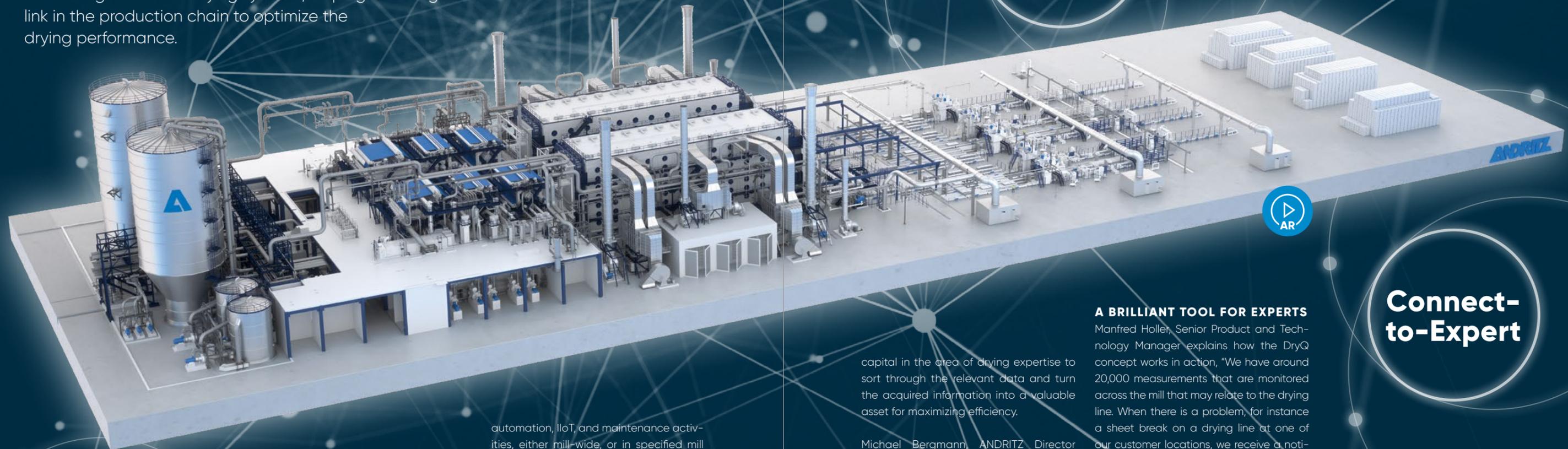


# METRIS DryQ: STRENGTHENING DRYING LINE PERFORMANCE

Running a pulp mill successfully requires that all processes, technology, and equipment work in harmony across the entire system with the whole chain being only as strong as its weakest link. Metris DryQ™ is the new intelligent solution from ANDRITZ, designed for monitoring data from drying systems, helping to strengthen a vital link in the production chain to optimize the drying performance.



## Analysis Software

A new mill-wide concept from ANDRITZ is being well received by pulp producers around the world. Called SYNERGY™, the concept involves a long-term service agreement, typically lasting three years, which at its core provides ANDRITZ expertise from process and equipment in cooperation with its customers to achieve agreed targets.

As part of this agreement, ANDRITZ provides a broad approach to helping its customers improve their production and profitability by offering advice and expertise on operation, process, equipment,

automation, IIoT, and maintenance activities, either mill-wide, or in specified mill areas. The concept of Metris DryQ optimization processes is right at the heart of the SYNERGY concept.

### DryQ – MUCH MORE THAN SIMPLE DIGITIZATION

One of the mill areas that ANDRITZ has been concentrating on its endeavours to maximize efficiencies across pulp mill production is the drying line. DryQ is an intelligent solution applied across the fiberline to gather information on the whole process so as to maximize drying line efficiency. However, this is not simply a digital add-on to gather data; DryQ is much more than that. ANDRITZ uses its human

## Smart Devices

capital in the area of drying expertise to sort through the relevant data and turn the acquired information into a valuable asset for maximizing efficiency.

Michael Bergmann, ANDRITZ Director of Digitization, Pulp Drying says, "DryQ consists of several elements which, when combined with deep knowledge of the process, can make a real difference to the efficiency of the drying line. We have a number of software programs that contain filters to sift through the data and determine what information is needed and what is not. But the key element is the expertise to interpret the information gathered from the data in the right way and derive the solution for the customer to allow decisions to be made in the process. This really is a way to apply our expertise and knowledge and share it in an efficient way."

### A BRILLIANT TOOL FOR EXPERTS

Manfred Holler, Senior Product and Technology Manager explains how the DryQ concept works in action, "We have around 20,000 measurements that are monitored across the mill that may relate to the drying line. When there is a problem, for instance a sheet break on a drying line at one of our customer locations, we receive a notification. The notification contains graphs with the main operation data before the break took place. Using the acquired data, experts look at the parameters and operational information, and can analyze the reasons for the break. We have these experts dotted all around the world, with detailed knowledge of processes, automation, electrics, or machine hardware and depending on the nature of the problem, they can quickly get involved."

What DryQ brings to the drying line is visibility of operations so that ANDRITZ experts can quickly analyze what the problem is, how to fix it, and then more



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FOR FURTHER INFORMATION SEE PAGE 3



## Connect-to-Expert

importantly, how to avoid the problem happening again. Bergmann gives another example, "One of our customers recently started up after its annual maintenance and quickly noticed multiple problems with the drying line; the settings had moved from the original positions before the shutdown.



The first Metris DryQ solution is installed at the Montes del Plata mill in Uruguay.

**"There is a real human element involved in this new digital way of working, and the ANDRITZ team both on site and remotely have worked right alongside us to improve stability and efficiency."**

**JUKKA HELTTUNEN**  
Technical Manager  
Montes del Plata



Using data from DryQ, we could identify process parameters that were altered and restore the original settings. This took just one hour; without this information it could have easily taken days to restore the settings."

Metris DryQ can be a stand-alone solution, or an add-on to SYNERGY. Its target is to maximize operational reliability to include high uptime, high availability, stable production, and increased flexibility to changing production conditions. It additionally uses performance monitoring and correlation analysis to predict problems in advance, showing pulp mill production experts where they are winning or losing in various production scenarios.

"DryQ is the perfect combination of the latest in data gathering combined with deep human knowledge and experience. Basically, it's a brilliant tool for pulp producers aiming at excellence in their operations," adds Bergmann.

**MONTES DEL PLATA**

One of ANDRITZ's key customers, the ultra-modern Montes del Plata mill located in Uruguay, recently signed a three-year SYNERGY agreement. The mill, jointly owned by Finnish company Stora Enso and Chilean pulp giant Arauco, will see all three main areas of its production and maintenance looked after by ANDRITZ: process and equipment, automation, and maintenance. The installation of DryQ is part of the SYNERGY agreement.

Jukka Helttunen, Technical Manager at Montes del Plata, says of the SYNERGY agreement, "We want to achieve world class results at this mill and the SYNERGY concept from ANDRITZ is the ideal way for us to achieve that goal. One of the areas we identified as in need of improvement under the umbrella of the SYNERGY contract was the drying area, so hence we decided that DryQ would be a solution to fit our needs.

"We chose ANDRITZ because of its expert knowledge of process and equipment and ability to optimize all areas of the mill. Also, the Montes del Plata mill is a complete ANDRITZ turnkey operation, which has clear advantages."

In September 2019, DryQ was installed and applied to the mill's two drying lines. The agreement included remote support and assistance, and access to ANDRITZ experts, with the aim of boosting the dryers' performance and stabilizing the process. Gabriel Machado, in charge of the fiberline at the mill says, "Since the very beginning, we have been very impressed with ANDRITZ's professional and transparent approach to the DryQ project. The experts involved both at the mill and remotely support us in every aspect of the drying line operations.

"DryQ came into its own when identifying a problem we had with damaged wires (fabrics) on one of the drying lines.

ANDRITZ experts analyzed the data and performed several steps, and then provided us with the optimum settings for the wedge zone. We decided to make some modifications and implemented them during the shutdown on both drying lines and now that problem is solved.

"The collaboration between the drying line team at the mill and ANDRITZ experts has been great. There is a real human element involved in this new digital way of working, and the ANDRITZ team both on site and remotely have worked right alongside us to improve stability and efficiency. They are particularly impressive when it comes to follow ups and any queries we have had."

DryQ also came to the mill's assistance when a problem was encountered with sheet control due to daily production being above the design speed. Using data from DryQ, ANDRITZ experts were able to recommend further improvements.

"We now have a drying line that is performing in a much more stable and efficient way. It gives us a lot of confidence to have ANDRITZ experts right with us as we deal with any challenges that may arise," concludes Machado.

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**GABRIEL MACHADO**  
Director Fiberline  
Montes del Plata

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