

Press Release  
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## **Direct Analysis with AI free up a lot of time for proactive maintenance at Ahlstrom-Munksjö in Billingsfors.**

Ahlstrom-Munksjö is a global producer of innovative and sustainable fiber-based solutions. At 45 production facilities in 14 countries, they develop and produce new solutions that make customers' operations more efficient and sustainable. The Group's offering includes decorative paper for the laminate industry, filter materials, electrotechnical insulation paper, packaging, label materials and special paper for both industry and consumer end customers.

One of the plants is the paper mill in Billingsfors, Sweden, which is part of the Industrial Solutions business area. The mill has had a very positive development and produces, among other things, foils for the furniture industry. The automotive industry is also an important customer group. Investments for several millions have been implemented in both 2020 and 2021 to increase capacity and expand into new markets.

A machine for formaldehyde-free coating and a new soda boiler are two examples. The future initiatives also include an expanded collaboration with MLT where an AI algorithm plays a central role.

### **2,500 measuring points provide a lot of data to analyze**

For more than four years, the employees at Ahlstrom-Munksjö in Billingsfors preventive maintenance department have had MLT's handheld route-based measurement instrument VIBSCANNER 2 as a work tool. The instrument provides a simple, fast and highly reliable measurements and where the data collection takes place at the touch of a button. Even if the vibration measurement is fast, it takes time when there are about 2,500 measuring points!

Patrik **Axelsson** head of the Preventive Maintenance and Storage Department.

- *It takes us about a month of work to walk around the factory and collect data from all measurement points. With so many measuring points, it is difficult to work proactively because it requires a subsequent analysis work to see where there may be problems. We wanted to put more effort into working proactively to get better control, simplify and speed up the work and reduce the risks of production disruptions. When MLT presented the solution with a smart AI algorithm integrated into the NiVia concept, we became interested. I saw great opportunities to drastic reduce the time it takes to analyze and instead free up time to plan proactive efforts to those places where there is a risk of problems.*

### **Reduces the time for analysis work by about 50%**

In his department, Patrik has six full-time employees and one half-time position. Most people work with the important preventive maintenance work. Although VIBSCANNER 2 has simplified it a lot, NiVia has with the integrated AI algorithm created completely new and important added value.

- *I would think that the time for the analysis work has been reduced by about 50% and this means that we have been given completely new possibilities to work preventive. A lot of time has been freed up that can instead be directed towards the perhaps 20-30% of the measurement points where the Direct Analysis with AI shows that there may be a risk of disruption in the near future or in the short term. Being able to see at an early stage that*

*there may be problems with, for example, a damaged bearing means that we can plan the maintenance work in good time. We have a completely different control today and really feel that we can contribute to the company's goal of efficient and safe production with minimal disruption," says Patrik.*

The great advantage of NiVia's AI algorithm with Direct Analysis is that the analyses of large amounts of data are automated. Instead, time are freed up for in-depth analyses and action proposals. MLT's sales engineer Anton **Groth** believes that AI, Artificial Intelligence, is the future of vibrationmeasurement and that future is already here now and at Ahlstrom-Munksjö in Billingsfors.

- *The fact that the AI algorithm filters out measuring points that do not require any action provides extremely important benefits. You get a graphic picture of how a machine park is doing. On the screen it appears with green for measuring points where everything is as it should, and with yellow where an extended control is required. If it turns red, it is an alarm level that requires rapid action. In this way, maintenance staff get a user-friendly overall picture without having to sit and analyse large amounts of data," explains Anton.*

#### **A higher availability without surprises**

The AI algorithm is available in the FRT tool – First Response Tool – from the developer Asensiot. The tool is easy to integrate with existing NiVia systems. FRT has an accuracy of more than 99% when it comes to identifying early damage and defects. This accuracy has meant a lot to Patrik Axelsson and his colleagues.

- *The fact that we can get the first important indications directly on the computer screen about the status of paper machines sharpens our own efficiency. It becomes so clear where our measures will be put in place and for the employees this means that the work becomes more meaningful. Now we really feel that we can work proactively and that this in turn creates important benefits for the operation of the machines. There will be a higher availability without surprises. We can in a completely different way than before work away sources of error and anticipate the risks of machine failure and downtime. Should we ever be unsure how something should be interpreted, we get good support from MLT who quickly responds and help.*

Although NiVia with AI has created important added value for preventive maintenance at Ahlström-Munksjö, there is continued potential to further simplify vibrationmeasurement and free up even more time for proactive efforts. That would be by also investing in online measurement. The interest is there, but the future will tell if there will be another future investment together with MLT!

#### **For more information, please contact:**

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