

### FENIX – The Virtual Paper Making Environment



**RISE (Research Institutes of Sweden) has created a three-dimensional model of the paper machine in the pilot park ‘FENIX’ in Stockholm. The first visit to this virtual environment was organized in January 2021, when participants around Sweden were able to visit and explore the environment from their own office locations.**

**-The feedback was very positive and motivating, says Peter Hansen, Senior Researcher at RISE.**

When people will not come to the paper machine, the paper machine can become digital and be experienced with nearly the same realism. If FENIX has the same fantastic features as its namesake in the Greek mythology, we leave unsaid, but the sense of walking around inside a digital paper machine could easily be described as magical. The model of FENIX is one of the so called ‘Living Labs’ developed within project SALLPI (Smart Automation Living Lab Process Industry Implementation). FENIX is pointed at the pulp and paper industry and the purpose of the work is to explore the usability in the industry for Virtual Reality (VR) and Augmented Reality (AR). The digital model gives the opportunity to test hypothesis, experiment and walk about in a virtual environment to explore possibilities and knowledge of traditional paper manufacturing.

In January, the first visit to this virtual environment was organized.

-This was done either by using their own normal PC or by using a Oculus Quest virtual reality-head set, Peter Hansen, who was in charge of the activity, continues.

In addition to experience the virtual environment, the participants got the opportunity to identify application areas of the AR and VR technology that could be interesting from their own perspective. Jonas Uller, one of the workshop participants working as IT Manager at BillerudKorsnäs, a company that has experience of and sees the potential with new digital aids such as VR and AR.

-In the SALLPI project, we have experimented with the technology and see future applications, like visualizing data in production environment and training of staff, he says.

The work is part of the SALLPI project, where the overall goal is to accelerate the digital transformation of the Swedish process industry through a collaboration between research and industry. The initiative is supported by Vinnova's strategic innovation program "Process Industrial IT and Automation", (PiiA). PiiA is one of the 17 strategic innovation programs funded by Vinnova, the Swedish Energy Agency and Formas.

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