

# KeyNotes

Monday 17 April

## SKF – Intelligent and Clean

SKF's focus is to help our customers to be more competitive. We combine hands-on industry experience with a vast product portfolio and knowledge around bearings, seals, lubrication, condition monitoring and maintenance services – all of which contribute to a better, more sustainable industrial development. SKF has something that very few industrial companies have: a deep understanding of almost all industrial applications. Everywhere there is rotation, there is a good chance that SKF products, capabilities and skilled colleagues are providing value in the form of improved operational performance and reduced emissions, based on two concepts: intelligent and clean. By developing new smart technologies that offer competitive advantages to customers, and at the same time, contribute to a sustainable society, we support our customers to achieve their main goals; increase machine availability, reliability and performance, reduce costs and enable a safe working place for our employees in a sustainable environment.

*Mattias Arstadius, Sales Director EMEA at SKF*

9.30-10.00 AM



## What skills will the maintenance technicians of the future need?

How will AR and VR help us? Will our colleagues soon be robots? What are the developments in the field of big data and predictive maintenance? Mark Haarman shares his thoughts about the future of maintenance. Haarman is founder and Managing Partner of Mainnovation, a leading consultancy firm specialized in Maintenance & Asset Management and author of the book VDM<sup>XL</sup> – which stands for Value Driven Maintenance & Asset Management. Mainnovation helps capital-intensive companies in industry, fleet and infrastructure to professionalize their Technical Department. Based on market research and practical experience Haarman will give insight in developments and trends within the five EuroMaintenance themes.

*Mark Haarman, Managing Partner Mainnovation and author of the book VDM<sup>XL</sup>*

10.00-10.30 AM



## The essential role of Asset Management for Operational Excellence

Victrex is a British-based supplier of high performance polymers. The company's headquarters and manufacturing facilities are based in the United Kingdom with technical and customer support facilities in multiple markets, serving over 40 countries. Victrex's solutions are used in a diverse range of industries including aerospace, automotive, electronics, oil and gas and the medical field. Jeff Versterre, COO of the company, has initiated a maintenance and engineering excellence program due to his belief that asset management and maintenance can significantly contribute to operational excellence. This program is part of a bigger strategy involving the connected excellence programs for process safety and Capex planning & execution.

*Jeff Versterre, Chief Operating Officer at Victrex*

3.00-3.30 PM



## Data-driven maintenance in world class

LKAB's transformation towards a sustainable future. Three important areas are leading the transformation: New world standard for mining, Carbon-free sponge iron with hydrogen technology and Extract critical minerals from mine waste.

The maintenance has a large financial impact where we create predictability, enabling better planning for fact-based decisions. Three important areas for achieving results are people (the business), processes and technology.

*Maria Ryytty, Senior Manager Strategic Maintenance LKAB*

3.30-4.00 PM



## Challenges instead of Problems

In Asset Management, companies are confronted with essential developments in their external environment leading to risk exposure. Several mitigating actions are developed, like decarbonization master planning, the use of green hydrogen as carbon-free feedstock and various implications of Smart maintenance. This demands adaptation and resilience. In this presentation, Jan will discuss the trends and the alternatives he notices in the market on transformation and on new business models. These new models have enormous implications for Asset Management: make or buy decisions, remote or unmanned maintenance and models to adequately make use of the unpredictable windows of opportunities for adaptive maintenance, driven by, for instance, the volatility of electricity generation. Jan shares his vision of how best to respond to these challenges.

*Jan Schipper, Director Asset Management Technology at Stork*

9.30-10.00 AM



## Leap into the Industrial Metaverse

There is an enormous buzz around the metaverse with tales of fully virtual spaces mimicking real life and extending it via games or online collaboration. Taking a closer look though, the metaverse does not seem to offer much for businesses from the industrial space. It is so far leaving out people that are already solving real-world problems across industries and processes. TeamViewer strongly believes in a continuous convergence between the physical world and technology in general. So, it is way beyond time to leap into the "industrial metaverse" and redefine frontline work in the 21st century – with the help of AR solutions and the power of AI.

*Sudhanshu Kapoor, Vice President Sales AR/MR EMEA at TeamViewer Germany GmbH*

10.00-10.30 AM



## How to ensure the quality of an intelligent maintenance deployment from FMEA to prognostics?

Predictive maintenance plays a vital role in enhancing the productivity of machine tools in the 4.0 manufacturing context. The management of the replacement of parts (including the tools) needs to rely on a global procedure including basic steps like Failure Mode and Effect Analysis. Detection, diagnosis and prognosis (residual useful lifetime) may be addressed by reliability-based approaches (Weibull and Cox models), physical degradation models, or measurement data driven approaches using machine learning techniques. Results obtained for tool wear will be presented and discussed with pro and cons of each approach. The presentation will conclude on the need for decision aid platforms as the maintenance management cannot be reduced to the reliability issues and should include sustainability aspects as well.

*Pierre Dehombreux, Professor and Head of the Laboratory for Machine Design and Production Engineering at the University of Mons*

3.00-3.30 PM



## Social and cognitive digital twins. A metaverse approach

A digital twin is not a static model but a responsive system connecting physical and digital systems, with numerous potential applications in industry. Other terms for digital twin are digital shadow, digital mirror, digital model, and digital avatar. However, this is a one-to-one digital twinning process, and industry demands a more attractive proposition i.e. the creation of a virtual scenario where virtual instances gather together with the twins of real ones. We call this scenario the 'metaverse,' a digital replica of our reality where all physical assets are twinned along with entities that only exist in the digital dimension. The metaverse is the digital dimension where the digital entities interact. The metaverse is the expansion of DTs with more content and social meaning.

*Prof. Diego Galar, Lulea University of Technology*

3.30-4.00 PM



# KeyNotes

## Wednesday 19 April

### Trends in Enterprise Asset Management and the power of teamwork

A presentation of the key findings of the Ultimo EAM Trend Report 2022 and a practical case study of Rijnland Water Authority. The EAM trend report is based on a major international survey and concludes that enabling teamwork is a key driver of improved asset management and a safe place to work. Rijnland Water Authority is on a journey from data to wisdom and moved from an organisation-based way of thinking to an asset-minded approach. With the disruption brought on by the pandemic and the war in Ukraine, economic uncertainty, widespread supply chain challenges and material shortages, the impending skills gap, sustainability issues, and skyrocketing energy costs, asset owners have a lot on their plate.

*Ewout Noordermeer, MSc., CMO IFS Ultimo and Alex Veersma, Rijnland Water Authority*

9.30-10.00 AM



### Bridging the transformation chasm: empower your people

It is not easy to make transformation stick in your organization and many transformation initiatives get stuck when scaling up from a successful pilot to the other sites in the enterprise. "Copy and paste" is not a strategy. LNS Research analyst Bob Francis explains the five stages of the transformation journey and how to successfully cross the transformation chasm as companies pivot from vision to value and roll out across their enterprise. The presentation includes a framework, case studies, best practices, and LNS Research data you can implement in the domains of people, processes and technology. Moderated by Mark Mulder, CEO of MaxGrip.

*Bob Francis, Research Analyst with LNS Research*

10.00-10.30 AM



### Our Way towards closing the Carbon Cycle

Today, about 80% of BASF's Greenhouse Gas Emissions stem from combustion-based energy generation. Hence, changes in generation and use of energy are key to reach our ambitious emission reduction targets. The set of measures to be pursued comprises the switch from fossil-based to green energy sources, the decoupling of steam from power generation, the use of new technologies, e.g. driven by electricity instead of combustion-based thermal energy, the use of renewable and recycled feedstock but also continued efforts in productivity enhancement. This requires an orchestrated approach across different business lines and production sites that aims to keep carbon inside the value chains and avoids leakage particularly via CO2 into the atmosphere.

*Dr. Joerg Unger, Senior Vice President, Low Carbon Emission Technologies & Projects BASF*

2.00-2.30 PM

