



# KUENZ USES DATA TO DRIVE EQUIPMENT EFFECTIVENESS

Interview with Dietmar Nußbaumer, Head of Technical Sales, Kuenz

The Kuenz Information System (KIS) is an Internet of Things (IoT) solution which aims to improve customer Overall Equipment Effectiveness (OEE) and internal databases. Speaking to PTI Dietmar Nußbaumer, Head of Technical Sales, Kuenz, talks about how the company sought to use the KIS to develop an even more customer-oriented product.

## **KIS WAS OFFICIALLY LAUNCHED IN 2018, WHAT WERE THE KEY DRIVERS FOR THE LAUNCH OF SUCH A SOLUTION?**

The goal was to build an IIoT platform to collect, aggregate and analyse data from cranes around the world in real time. This was intended to close the "data gap" between the crane operators and the relevant departments at Kuenz. On the one hand, we wanted to optimise after-sales service and increase customer benefits through maximum availability, transparency and productivity. On the other hand, it was about making the data usable for our engineers. We want to understand how our products are

operated by customers in order to be able to offer the maximum customer benefit.

To increase the OEE of the customer's systems the platform provides customers with the data they need to calculate performance metrics. By simply adjusting shift schedules, the crane operator was able to noticeably increase the productivity of its terminal.

The solution also speeds up commissioning considerably. The correct setup of the machines can largely be monitored remotely via the Senseforce data apps.

The data from the platform also intended to increase the quality management. Today, Kuenz recognises very quickly when components wear out prematurely or are more likely to trigger faults.

## **WHAT DEVELOPMENTS HAVE BEEN MADE SINCE THE LAUNCH OF KIS?**

Anomaly detection with regard to improving the technical and organisational availability. Kuenz was also able to significantly reduce response times in the event of malfunctions with 24/7 monitoring. Automatic

notifications are sent in the event of downtimes or other adjustable events for the maintenance of cranes. The maintenance schedules can now also be adapted more precisely to the actual needs of customers.

## **WHERE IS THE SOLUTION BEING USED TODAY?**

We are currently using the product with all customers with a service contract. We show our customers the added value of the solution. With this platform our customers not only benefit from higher availability of their cranes, but also receive valuable advice on how to optimise their productivity.

## **HOW DOES KUENZ WORK WITH SENSEFORCE TO DELIVER THE SOLUTION?**

Senseforce offers an open, flexible data platform and the technology for big data collection and analysis. Due to the constant further development, we benefit from new possibilities in this area, which can help us to expand our business model in the future through digital add-on services.

## “WE WANT TO UNDERSTAND HOW OUR PRODUCTS ARE OPERATED BY CUSTOMERS IN ORDER TO BE ABLE TO OFFER THE MAXIMUM CUSTOMER BENEFIT.”



Dear valued customer,

Kuenz continuously monitors the performance of your cranes. Within the last 60 minutes the Kuenz Control Room noticed abnormal alarm activity on your asset.

If currently there is no ongoing service interaction taking place at 21218-20 and you received this message, please check with our technical advisor to address this potential issue.

Thanks and have a nice day.  
Kuenz Control Room

### WHAT ARE THE MAIN BENEFITS OF IIOT IN TODAY'S PORTS AND TERMINALS?

One of the main benefits is the ability to provide a faster customer service for unusual events. The platform can automatically send notifications when certain thresholds are exceeded, or potential disruptions become apparent. This enables service teams to act immediately and prevent interruptions to operations. Even spare parts can be provided to customers "just-in-time". Another benefit is the achievement of transparency through data, where all the decisions are based on facts. The aim of it is to increase productivity and keep it at a maximum level.

### WHAT USE CASES HAVE BEEN MOST SUCCESSFUL WITH THE USE OF KIS?

In the Kuenz Control Room which is operated by technical specialists, deviations are analysed very quickly and rectified with the customer - costly on-site work and downtimes are massively reduced to a minimum. It is possible to quickly visualise relevant data across the entire machine fleet and use it for further analysis and evaluations.

Especially with automatic systems, we see that there is great potential to optimise or-

ganisational downtimes (e.g. container jam at the entrance) and thereby increase overall availability and handling performance. Together with the customers, we have already been able to make essential improvements here. This is impossible without data!

### WHAT ARE THE MAIN CHALLENGES BEING FACED TODAY REGARDING CRANES AT PORTS? HOW DOES KIS LOOK TO OVERCOME THEM?

The automation will grow and thereby also the technical complexity. The key point is to operate the systems with the highest availability and performance. Therefore, KIS was developed with these challenges in mind. The fact that we have relied on open interfaces from the start is now proving to be an absolute advantage, as this is the only way to advanced digitisation on the basis of the value chain.

### WHAT IS NEXT IN TERMS OF GROWTH OF THE KIS SOLUTION?

Anomaly detection and the associated remedial measures for rectification are a field that we will continue to expand after the positive experience. In addition, the targeted notifications are in focus, which give the

customer and us the opportunity to act even more efficiently and quickly. Another important point for the necessary reduction in the complexity of the systems is an integrated and intelligent knowledge management, which is already on our roadmap. Of course, we don't lose sight of topics such as augmented reality and predictive maintenance.

### ABOUT THE ORGANISATION

Kuenz is an Austrian crane manufacturer founded in 1932 by Hans Kuenz. The company offers innovative and efficient RMG, RTG and ASC solutions for container transfer and handling in intermodal operations, by rail – road – or river as well as for harbor and rail yard operation, including custom-designed and manufactured spreaders. In terms of automation, safety, quality, continuous product improvement and new technology, Kuenz is one of the most recognised innovation leaders worldwide.