

Visualization of IoT Data with xInspect

All Information in the Field of View Thanks to Smart Glasses

LIEBHERR

Initial Situation

Liebherr-Werk Nenzing GmbH was founded in 1976 and employs about 1,650 people in an area of 254,000 m². The plant specializes in the further development of construction machineries such as crawler cranes, hydraulic rope excavators, and special underground construction equipment. In addition, the development of IT solutions and assistance systems plays an important role for the site in order to optimize processes on construction sites.



Austria



Construction Machines



Productive Use



Solution Deployment: 2018



Challenges

The construction machines developed by Liebherr contain a large number of sensors that supply the machine operators with important data on the status of the machine. Previously, the data was only displayed centrally on the machine controller. The crane operators therefore always had to look downwards at the machine control system, but at the same time pay attention to the load, its distribution, and the entire environment. This challenge was overcome with an innovative visualization of important sensor information via smart glasses.

TeamViewer Frontline Solution

TeamViewer developed an adapted version of the xInspect solution to solve the problem of supplying the machine operator with the needed information. A customer-specific workflow was created in the Frontline Creator using the IoT widget. The sensor data collected includes, for example, the angle of inclination, the load, and the wind force acting on the machine. This information especially benefits crane drivers. Either one or two components can be displayed at the same time so that they can be viewed in relation to each other. The smart glasses receive the sensor information via MQTT over a machine hub. The solution is used on the Glass EE and RealWear HMT-1 models. Liebherr also uses the Frontline Command Center to manage workflows as well as device and user administration.



Important Information
In Field of View



Transmission
Of Sensor Data



Short and Intuitive
Training

Results

The focus is on the benefits of the solution for the crane operator, who can better concentrate on his tools and surroundings by displaying the information in his field of vision.

After a short familiarization period, the employees were comfortable with the visualization and found the clear presentation of critical machine parameters to be positive.

As the cooperation progresses, Liebherr plans to continuously optimize the visualization according to the requirements of the machine operators in order to make the use of the spectacles even more efficient.

About TeamViewer

As a leading global technology company, TeamViewer offers a secure remote connectivity platform to access, control, manage, monitor, and support any device – across platforms – from anywhere.

With more than 600,000 customers, TeamViewer is free for private, non-commercial use and has been installed on more than 2.5 billion devices. TeamViewer continuously innovates in the fields of Remote Connectivity, Augmented Reality, Internet of Things, and Digital Customer Engagement, enabling companies from all industries to digitally transform their business-critical processes through seamless connectivity.

Founded in 2005, and headquartered in Göppingen, Germany, TeamViewer is a publicly held company with approximately 1,400 global employees. TeamViewer AG (TMV) is listed at Frankfurt Stock Exchange and belongs to the MDAX.

Contact

www.teamviewer.com/support

TeamViewer Germany GmbH
Bahnhofsplatz 2
73033 Göppingen
Germany

+49 (0) 7161 60692 50

TeamViewer US Inc.
5741 Rio Vista Dr
Clearwater, FL 33760
USA

1 800 638 0253 (Toll-Free)

Stay Connected



www.teamviewer.com