

Aucobo & Wieland



Source / Link: Personal interview & <https://aucobo.de/en/success-story-wieland/>

Technology area:

- Artificial Intelligence
- Big Data
- Digital Twins
- IoT and IIoT
- Cybersecurity
- VR/AR
- Robotics
- Automation
- System Integration
- Smart Sensors
- Additive Manufacturing
- Other: Human-machine interaction

Type of good practice:

- Company
- Project
- Initiative
- Programme
- Other

Target group:

- Discrete (smart) manufacturing
- Automotive
- Aerospace
- Metal processing
- Consumer goods
- Pharmaceuticals and chemistry
- Food and agriculture
- Health
- Textiles
- Others

Summary:

The machine-human communication is outdated. Signal lights and static screens are not targeted, cause overstimulation and increase the need for coordination. This leads to inefficient processes and machine downtimes. Aucobo increases productivity through a new way of connecting humans and machines in the manufacturing environment. Their technology enables autonomy, precision and world-class productivity to every member of the global manufacturing workforce. The Aucobo solution consists of the aucobo connector, -core and -mobile. The system optimizes the human-machine interaction, prevents silos, enables automated prioritization and delivers crucial real-time data for your decision-making.

As the leading global specialist for copper and copper alloys, Wieland supports its customers' success from numerous locations and continents – with reliable, flexible supply and the best service in consistently high quality. For the global challenges of our time such as climate change, digitalization, resource conservation, Wieland designs sustainable and innovative solutions with its products, services and technologies.

Wieland knows how to listen in order to offer its business partners exactly what meets their requirements and convinces its customers with the right solution – and has been doing so for 200 years and 8000 employees. Always striving for innovation, Wieland was looking for a process to digitize surface inspection in production.

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With the help of the interaction between the aucobo solution and smart wearables, more than the originally set project goal could be achieved. Quality assurance was significantly optimized, and employee productivity increased. Since this could be implemented quickly and smoothly, there was still time to carry out another implementation, which was not planned at the beginning.

Detailed description

The challenge was to simplify the surface inspection process and the associated documentation. Previously, there was a document on which employees manually recorded the inspection information. This was then forwarded to the foreman's office and many other stations before finally being filed. The process was not only time-consuming, but also harboured sources of error. As soon as an employee forgot his signature, for example, the whole process had to be followed up to obtain complete documentation. To make this process more secure and timesaving, Wieland sought a digital solution, initially with a competing product. However, for a number of reasons, this did not meet its goals, so Wieland had to reorient itself. Since the company was still committed to the idea of digitization, it was clear that a new smart solution had to be found.

With the help of aucobo, the solution was identified to be the digitization of the inspection process with the help of smart wearables. The use of the aucobo system allows Wieland to have a much smoother process, better communication, as well as increased productivity in production. With the integration of the smart wearables, the workflow of the employees has been significantly simplified. The smartwatches are connected to the central MES (Manufacturing Execution System) so that employees are notified at regular intervals when they need to perform a surface inspection. In addition, once at the respective machine, employees can scan a QR code and are then automatically redirected to the inspection process. Once the inspection has been performed, the employee can select on his smartwatch whether everything is in order. If not, he will be shown various error options to choose from. Here, the employee can ensure that the correct information quickly reaches the responsible person by simply selecting a category.

Beneficial Results

The project turned out to be very successful and beneficial for Wieland and some of the achievements that were accomplished are:

- Quality assurance was significantly optimized.
- Significant minimization of organizational effort.
- Employee productivity increased, especially for the production staff, which is often under pressure due to production targets and deadlines, and the previous paperwork was slowing down the workflow.
- The distances within the production halls could be reduced significantly by improving the communication. The employees now only have to go to the respective plants when an inspection is required, and the reminder appears on the smartwatch.
- Digitization of the ordering of auxiliary and operating materials - previously, paper kanban cards were used for reordering auxiliary and operating materials. The data noted on them had to be manually transferred to the ordering system when ordering. This process has been greatly simplified by adding a QR code to the kanban cards. Now the cards are scanned, and this triggers the ordering process.

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