

VISUAL SHOP FLOOR, THE WHOLE PRODUCTION PLANT AT A GLANCE

Case study TDK Electronics:
Visual Shop Floor in practice



TDK ELECTRONICS AG

Would you like a digital visualization of the entire production plant? A detailed status report and all production-related information in real time? Then welcome to the *Visual Shop Floor!*

This software solution has been in place at the TPS Business Group's sensor facility in Berlin since 2017. The advantage is that employees have a clear overview of all production operations at all times – and can respond immediately if any deviations occur.

“The whole system is designed to maximize transparency and flexibility,” says Martin Zennig, Head of Automation IT and Software Development and the platform's technical manager. Depending on the settings, the software can show a high-level view of the entire production plant, individual production lines or individual machines, including all relevant production data such as statuses, production orders currently in progress, units produced and quality. **Visual Shop Floor selectively forwards information in real time to whoever is responsible. The data can be accessed**

simply and at any time on a PC, tablet or smartboard.

Visual Shop Floor also has its own **meeting module**, which is used for daily operations meetings around the smartboard in the production hall. Based on the visualizations shown on the smartboard, engineering and manufacturing staff work with the production management to analyze outcomes and reports and define what needs to be done each day. Information of importance to the employees is displayed on large screens in the production facility.

Fig. 1: © TDK Electronics AG, Plant Berlin, Germany
url: www.tdk-electronics.tdk.com/en/373392/company/press-center/press-pictures



Fig. 2: TDK Electronics AG, Visual Shop Floor in action

Employees shape the digital transformation

Visual Shop Floor has been continually improved and developed since it was first implemented. “The size of our production facility in Beeskowdamm alone has tripled to about 3,500 square meters in this period,” says Sven Siedenburg, Head of Transmitter Operations and NTCs in Berlin. That meant constantly incorporating new machines in the system. But it also meant continually adding extra functionality.

“We get feedback from production and details of new requirements every week,” says Technical Project Manager Zennig. **As a result, the system now**

shows at a glance whether a new machine is operational and whether it is currently running a production order. If everything is fine with the machine, it is displayed as a little green box – in a red frame if it currently has no production order. “In the interests of fast and flexible further development, we are always striving to implement small improvements at short intervals,” Zennig says.

“Our people see their feedback flowing straight into the system,” adds Operations Manager Siedenburg. “They are actively shaping the digital transformation, which generates two posi-

tive effects at the facility. First, we are migrating to Industry 4.0 step by step. And second, our employees are buying into this project.”

Further expansion in the pipeline

Being able to access digital information quickly and easily at any time delivers all kinds of benefits for the workforce: *“Visual Shop Floor is an excellent tool to quickly and clearly display complex production data,”* explains Jan Lamla, Director Transmitter Operations Engineering.

In the next step, *Visual Shop Floor* will also display cleanroom parameters such as tempera-

tures and carbon dioxide concentrations. Additionally, plans exist to introduce the system at the sensor facility in Batam in Indonesia and at TDK Electronics' subsidiary Tronics Microsystems in Crolles in France. Corresponding knowledge has likewise been transferred to the CAP Business Group, whose capacitor plant in Gravataí in Brazil is already integrated in *Visual Shop Floor*.

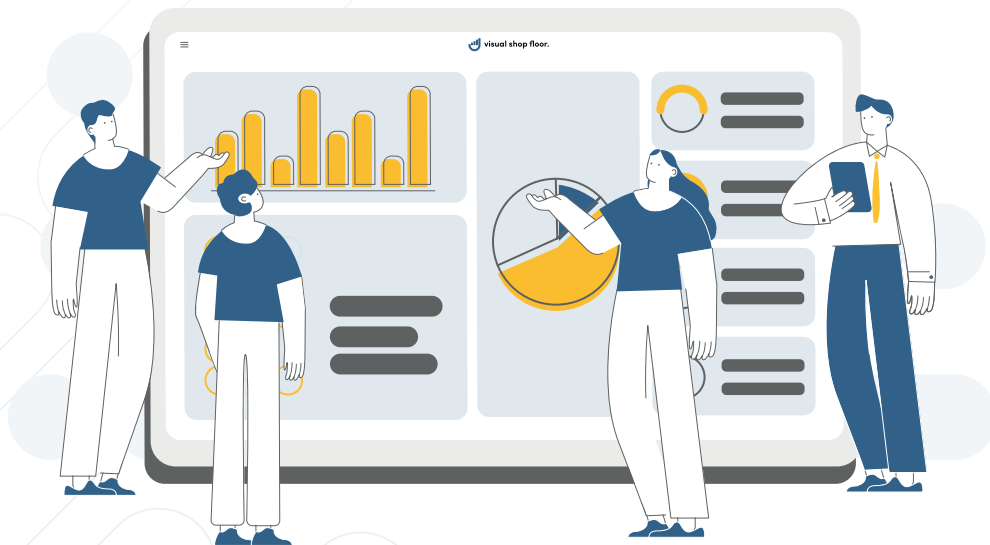


Fig. 3: Illustration Solunio: Shop Floor Meeting with Visual Shop Floor

” I joined TDK as working student in 2017 and was taken on as a software engineer in 2018. After studying automation systems, my first challenge was to work my way into programming in the world of ones and zeros. In the age of Industry 4.0, combining these two disciplines proved to be a good choice. I am now responsible for digital communication between humans and machines.

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Bastian Mielke

Automation IT & Software Development, TDK Electronics



ABOUT US

Solunio Ltd, founded in **2013** and based in Bruneck, South Tyrol, bundled extensive experience from software development and industry into the **Visual Shop Floor software in 2015**.

The comprehensive and end-to-end platform for shop floor management contains flexible tools for data manage-

ment, creating transparency, organizing collaboration and optimizing processes. This enables companies to unlock the potential of digitization to improve production and logistics processes.

Visual Shop Floor is used daily by well-known top industrial companies at a total of **90 locations worldwide**.

These include globally active groups in various sectors of industry such as **Alupress, Intercable, GKN Powder Metallurgy, TDK-Electronics and Plansee**.



Matthias Unterberger and Paul Leiter
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