

# Increase OEE with real-time transparency

## Application of Visual Shop Floor at Alupress

### Challenge

- Lack of real-time representation of machine data
- Delayed data synchronization between MES and ERP
- Slow response times and decision-making

### Solution

- Customized information for different management levels
- Introduction of Smart Layout for digital shop floor representation
- Setup of digital workstations
- Real-time transparency for machine statuses and OEE

### Result

- Increase in output quantity
- Fact-based decision-making
- Greater transparency and shorter response times
- Focus on OEE instead of machine availability

# alupress

The family-owned company Alupress AG has been manufacturing die cast components since 1965, and since 1974 at its current headquarters in the industrial area of Brixen, South Tyrol. There, the company was able to continuously develop technically and qualitatively into an important supplier to the automotive industry, meeting standards for quality (ISO IATF16949) and environmental or energy management (ISO 14001 or ISO 50001). In order to meet the strong demand, a foundry in Thüringen (Hildburghausen) was incorporated in 2002 and a tool shop in Vahrn (South Tyrol) in 2008, which is now located at the Brixen headquarters. With the branch office in Laurens, South Carolina (USA) acquired in 2010, the company currently employs around 1,000 people.



Alupress AG, headquarter Brixen, South Tyrol

## New production concept with digitalization

---

In 2015, when the production concept was revised with an external partner, the need for software capable of providing real-time information about machines arose: "We no longer wanted to talk about yesterday's problems in our morning meetings, but to find answers for today's questions", reports Christoph Beikircher, who was involved in the selection project at the time and now manages the *Visual Shop Floor* solution as a key user and contact person.

"We wanted to become more efficient with shorter response times and faster decisions." However, since the Manufacturing Execution Systems (MES) and Enterprise Resource Planning (ERP) systems only synchronize once per shift, much data was delayed and not available in the correct format.

## Info Board and Smart Layout: Transparency at all levels

---

In the first phase of the project, ten Info Boards were installed in the production halls to display current machine statuses and OEE as key metrics.

Additionally, the Smart Layout module was used to implement a digital hall mirror. This virtual shop floor representation provides customized views for shift supervisors, department managers, plant managers, and maintenance personnel. Custom dashboards with relevant information are created for each role, accessible both on PCs and mobile devices.

## Digital machine stations

---

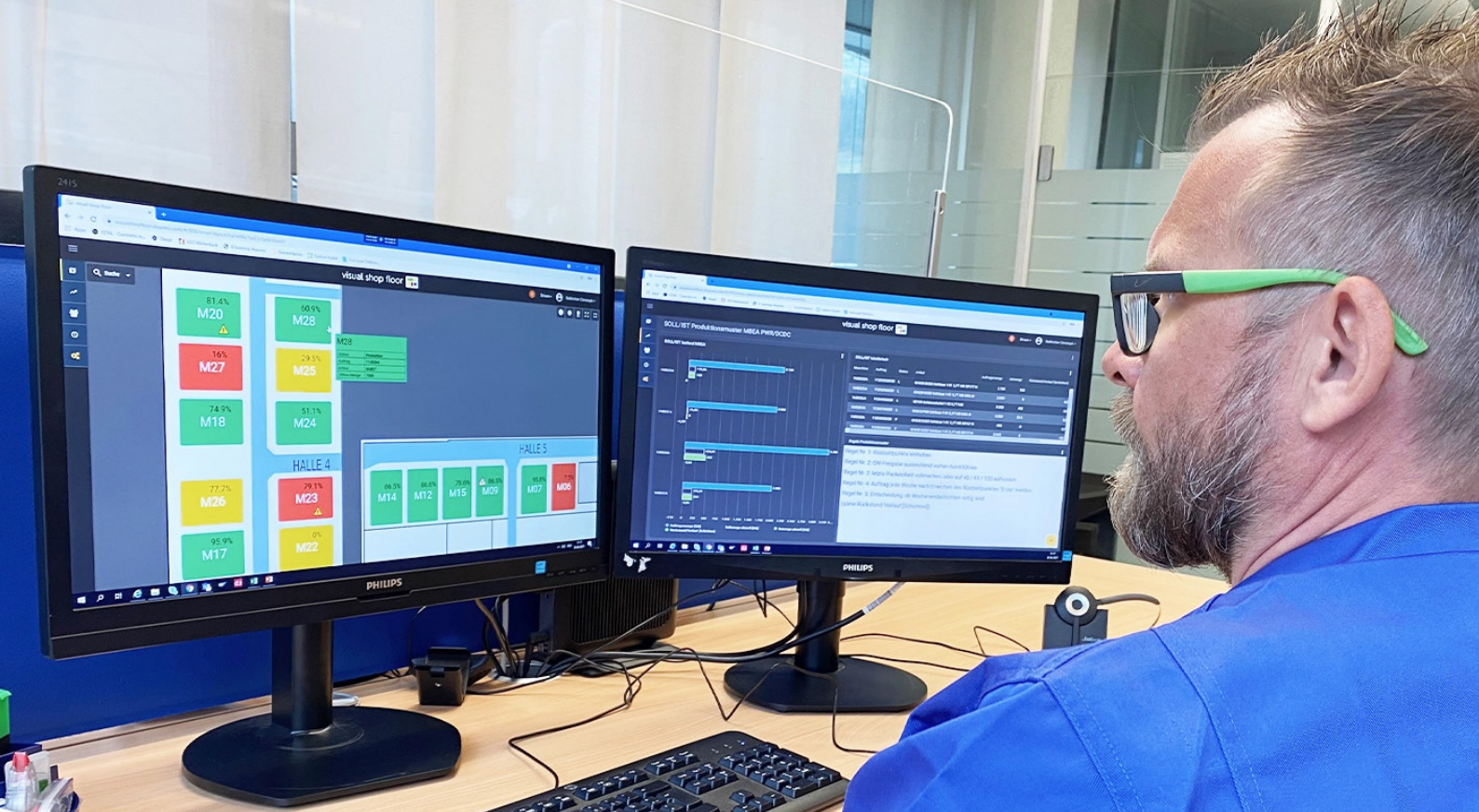
In the second step, digital workstations were set up at around 100 machines, all equipped with *Visual Shop Floor*. These workstations continuously display current information on target and actual quantities on a shift basis and also provide access to further information.

By early 2018, the project's preparation phase was complete. For the rollout to the plants, the data was processed so that the same key figures were calculated using the same information everywhere: "We defined cross-plant standards, pre-configured the software, and delivered it ready to use," says Christoph Beikircher.



*With Visual Shop Floor we no longer talk about yesterday's problems in our morning meetings, but find answers to today's questions."*

Christoph Beikircher,  
Head of Lean Management, Alupress



Visual Shop Floor – Smart Layout at Alupress

## Support in Shop Floor Meetings

The meeting module in *Visual Shop Floor* supports daily meetings. “Due to the pandemic, our meetings have changed significantly”, reports Beikircher. “We can no longer discuss issues in person at the boards, so we need new dashboards that we can present online.” Already, morning meetings no longer rely on slips of paper and notes, but on digital facts.

The dynamically growing company was able to further increase output. “We are in a much better position than before thanks to the information from *Visual Shop Floor*”, says Manfred Amort, production manager at the Brixen plant. Clear targets, greater transparency and shorter response times have helped Alupress to better manage its processes today. “Since the introduction of *Visual Shop Floor*, we only talk about OEE, no longer about machine availability”, says Christoph Beikircher.

## Using machine signals

The successful installation is now being further expanded. Machine signals are already being tapped via OPC-UA at highly automated plants with cutting machines with robot handling. The task management of *Visual Shop Floor* is to send notifications to robot technicians or machine setters depending on the malfunction. Another project is about visualizing quality control charts of the QA system via a widget.

“Solunio works excellently with us and is always open to new ideas and an exchange at eye level. We are also involved in further development and can contribute our requirements in an uncomplicated way”, says Christoph Beikircher.

## 3 questions for Christoph Beikircher, Head of Lean Management, Alupress

Why did Alupress choose *Visual Shop Floor* from Solunio?

“The web-based software *Visual Shop Floor* can extract accumulating data from different sources, logically link them, and present them in an appealing and comprehensible way on various end devices. In 2017, the company succeeded in convincing the management to make the investment: “There was no comparable software on the market that would have met our requirements.”

How did the employees react to the introduction of *Visual Shop Floor*?

“The initial skepticism among employees subsided after open discussions and the presentation of numerous advantages of the software. “You have to court trust and get the employees on board; after all, it's all about transparency and fast reactions, which we need for our processes.”

How important is your role as a Key-User in the company?

“*Visual Shop Floor* is now used more intensively at all levels. The high level of user-friendliness is a major contributor to this. Incidentally, this also applies to administration and further development: As a key user, I can handle 90 percent of all adjustments and changes without support.”



## About us – Solunio

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 management, 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.



📍 Via dei Campi della Rienza 46, I-39031 Brunico, South Tyrol

☎ +39 0474 64 60 57 | ✉ info@solunio.com

🌐 www.solunio.com/en

