

Reference report

Contact person



Benjamin Apfelstädt
 ☎ +49 371 2371-216 📠 +49 175 2229885
 📠 +49 371 2371-150
 E-Mail: benjamin.apfelstaedt@sigmagmbh.de
 Internet: www.business-one-consulting.de/en

About SIGMA

As a renowned system house group, the SIGMA Group acts as a system integrator and partner of renowned providers in the IT sector. The more than 90 employees of the group form a competent team at the locations Chemnitz and Dresden. With know-how, competence and more than 30 years of experience we offer our customers reliable and powerful IT solutions. The group has ERP experience since 1993, and SIGMA Software und Consulting GmbH has maintained an intensive partnership with SAP in the area of mid-market solutions since 2007. All of our consultants, developers and sales staff are certified by SAP and regularly undergo further training. We love SAP Business One!

Seamless Integration: How an Industrial Company Bridges the Gap Between Machine Control and SAP Business One



Transparency Amid Rapid Growth

A rapidly growing manufacturer in the industrial sector has bridged the gap between its local machine control system and its ERP system. Thanks to close collaboration between SIGMA Software and Consulting and SIGMA Enterprise Solutions, production data now flows in real time into the SAP Business One cloud system.

The company has been active in the international market for several years. As the company grew rapidly, the complexity of its production processes also increased. Previously, there was a risk that data collected at the machine would not automatically be transferred to the ERP system. The goal of the project was therefore to connect the local control level (PLC-machines) directly to SAP Business One in order to eliminate data disconnects and provide reliable data.

The Solution: GRAIDWARE® as a bridge between the machine and SAP Business One

Direct Interaction in the Workplace

Manual data entry on a PC is completely eliminated. Instead, the operator confirms all relevant actions directly on the machine panel. To ensure that this information is transferred to SAP Business One immediately and in its entirety, the GRAIDWARE® middleware serves as the central interface for data transfer. The OPC UA protocol and a central controller ensure a stable and fast connection between the machine and the system in the background.

The result for the employee:

- **No need to switch screens:** Notifications such as “end of box” or “shift change” appear directly on the machine panel.
- **Clear job control:** The next job is visibly initiated.
- **Transparency:** Every action is automatically linked to the user and the job number, which greatly simplifies subsequent evaluations or error analyses.

SAP Integration and Automation

Incoming messages are securely received and processed via the SAP Business One Cloud system's modern REST API interfaces (ServiceLayer).

As soon as the operator confirms on the panel that a job is complete, the system automatically triggers the following processes:

- **Automatic Inventory Posting:** Produced quantities are immediately posted to inventory. The system precisely distinguishes between good and scrap products, which significantly improves the accuracy of inventory data.
- **Resource Consumption:** Components used in production are automatically deducted based on the submitted production order. This ensures that material inventory is always up to date without the need for manual entry.
- **Documentation & Reporting:** Shift changes and all machine messages are fully logged. This data is available for analysis, supports inventory tracking, and serves as the basis for quality-related measures.