HYDRA Success Story

WE CREATE SMART FACTORIES

OWA Odenwald Faserplattenwerk GmbH

OWA is a family business with almost 450 employees developing, producing and distributing ceiling tile systems made of mineral wool for more than 50 years. OWA provides its customers with complete ceiling systems that match the demanding requirements of individual projects. These requirements include room acoustics, appealing design and fire protection as well as hygiene, moisture resistance and air purity. About 70% of production goes into export, currently in more than 80 different countries. More than 100,000 m² of ceiling tiles are produced daily in the 200,000 m² site in Southern Germany, where the headquarters and production are located.

> Through the use of MES HYDRA, OWA is implementing Industry 4.0 in their processes, thus achieving more transparency and ultimately increasing efficiency.

Uwe Bruckner, Head of MES at OWA

- Access Control
- DNC & Configuration Data
- Incoming Goods Inspection
- In-Production Inspection
- Machine Data
- Material & Production Logistics
- Personnel Scheduling
- Process Data
- Personnel Time Management
- Shop Floor Data
- Shop Floor Scheduling
- Test Equipment Management
- Time & Attendance
- Tracking & Tracing

HYDRA Success Story

WE CREATE SMART FACTORIES

Task and solution

Due to the necessary capacity and in part due to the process, machines at OWA produce 365 days a year in different shifts, which makes OWA a classical serial producer. However, individual customer requirements and a broad product range ensure a high variety of products. Since the dimensions of the individual lines are approx. 400 m, it is possible to set up parts of the production line for the next job while an order is still running. Consequently, the production runs continuously. Nevertheless, optimizing setup times is of the utmost importance. With the ever-increasing diversity of products, a Manufacturing Execution System (MES) is the only way to achieve the necessary transparency in the processes and to produce efficiently in the long term.

For this reason, OWA introduced MPDV's MES HYDRA in spring 2012. Many isolated solutions and manual tasks using Excel tables could thus be replaced. It was pivotal for the selection of the MES provider that processes could be handled and mapped via the standard and on the other hand the spatial proximity of MPDV to OWA – the possibility to have a personal meeting on short notice if needed also played a major role.

Apart from the detailed planning using the HYDRA Shop Floor Scheduling module, the order processing with the HYDRA Shop Floor Data Collection, the Machine Data Collection and further HYDRA modules, OWA uses functions for in-production inspection and goods receipt. Furthermore, OWA uses various HYDRA Human Resources applications like Time and Attendance, Personnel Scheduling and Access Control. Sharing master data reduces maintenance efforts and enables comprehensive evaluations as well as the calculation of KPIs. In addition, the consistent use of HYDRA has replaced many paper-based processes and thus increased transparency and efficiency.

In future, OWA has planned to use HYDRA on a wider scale. For example, OWA plans to introduce the HYDRA module Tool & Resource Management for 2017 and thus implement a multi-resource planning in the shop floor scheduling. Therewith, tools, utilities and specific equipment will be considered during the detailed planning phase. In addition, OWA is already testing the flexible HYDRA client SMA (Smart MES Applications) to create a line monitor with relevant KPIs to be displayed on a large screen in production.

HYDRA in use

- Linux server with Oracle database
- Interfaces to ERP Brain, LVS Relag and LUG Hammer information management
- Ca. 50 HYDRA office clients
- Ca. 20 HYDRA shop floor clients (BDE/PZE Terminals)
- 9 connected production lines containing up to 15 aggregates

Chicago · Hamburg · Hamm · Heidelberg · Kuala Lumpur · Luxembourg
Mosbach · Munich · Serrig · Shanghai · Singapore · Stuttgart · Winterthur

info@mpdv.com · www.mpdv.com