

HYDRA Success Story



DEHN SE

DEHN SE is an internationally operating manufacturer of lightning protection devices and employs more than 1,800 people worldwide. The family business has made it its business to protect people, buildings, electrical and electronic devices as well as systems from dangers such as lightning and overvoltage. The product portfolio includes protective devices for installation in switch-gears, counter stations, terminal devices or distribution boards. The solutions are also used as fixed installations or adapters in lightning current, multi-voltage or overvoltage arresters for information technology. DEHN SE uses a variety of manufacturing processes in production. The spectrum ranges from metal and plastics processing to electronics production. The production depth is extremely high.

“ With the interdisciplinary MES HYDRA, we have succeeded in mapping the diversity and complexity of all our production processes in the best possible way and in ensuring more transparency in production. ”

Christina Wecker, IT Project Leader DEHN SE



Machine Data



Personnel Time Management



Premium & Incentive Wages



Shop Floor Data



Shop Floor Scheduling



Time & Attendance

Task and solution

Since the beginning of 2017, DEHN SE has been successfully using MPDV's MES HYDRA at its locations in Neumarkt and Mühlhausen, Germany. The DEHN SE team has connected more than 120 machines and manual workplaces with the support of MPDV's MES experts. We have here everything from the punch to the injection molding machine, automatic assembly machines, presses and production lines.

In phase one, the project team introduced the HYDRA modules Shop Floor Data (BDE) and Machine Data (MDE). In phase 2, the HYDRA Shop Floor Scheduling module (HLS) was introduced.



Previously, DEHN SE had no automatic data collection in production. Employees had to manually record the status of individual work orders. That consumed a lot of time and tied up resources. In addition, there were repeated errors or lack of information on the capacity load of the individual plants.

That has been a thing of the past since DEHN SE has been using the MES HYDRA. Employees now record all order-related events with HYDRA BDE. HYDRA MDE ensures that the automatically



recorded data like piece numbers, machine status or cycle time is supplied in real time. Thirteen planners manage and schedule orders in the SAP ERP system, which is connected to the MES via an interface. The HYDRA console visualizes the planning of machine assignment approved in SAP, so that the supervisors always have an eye on when an order change is due and how the machines are utilized overall. The conflict list in the HYDRA HLS clearly shows all schedule violations, resource bottlenecks and other planning inconsistencies.

Since the introduction of HYDRA, DEHN has managed to increase production efficiency by more than ten percent. The return of investment was achieved in under one year. In addition, with HYDRA the lightning protection specialists have managed to utilize their machines to such an extent that they have now capacities available and can produce even more parts with the same number of machines.

In the meantime, the employees are working on connecting more than 200 manual workplaces and 36 other machines and are creating a detailed concept for the use of the HYDRA modules Time & Attendance (PZE), Personnel Time Management (PZW) and Premium & Incentive Wages (LLE).

DEHN have plans for the future to carry on optimizing production. The team would then like to take a closer look at all its processes and procedures together with MPDV.

HYDRA in use

- ERP system SAP
- More than 120 machines and manual workplaces are connected
- 70 HYDRA shop floor clients
- 50 HYDRA office clients