A winning team: MES & MTP

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Due to changing market requirements, the pharmaceutical industry is constantly faced with new challenges.

This is particularly true for production management. A wide variety of products must be produced with different batch sizes and shortened delivery times.
And time-to-market for newly developed products is requested to become shorter and shorter.

To efficiently run a manufacturing business, tailor-made production planning and an effective production execution are required. This calls for maximum flexibility of the production facility and its supporting systems. Modular production systems and the use of suitable technologies such as MTP for automation are a key to success.

As more and more software tools to support production management are becoming available on the market, the need for data and information exchange is increasing dramatically.
The data from different sources must be converted into information and prepared for a wide variety of users.

This requires a clear presentation of the data as well as the ability to relate them to each other. Depending on the source and application, data quality and sampling rate are also important factors for further use and must be well considered.

Manufacturing Execution Systems (MES) are suitable hubs for data exchange. They build a bridge between the data-centric IT world and the status-monitoring OT systems, and merge business processes, insights and controls into one uniform environment. This so-called IT/OT-convergence leads to the vision of a connected factory.

However, an MES is not just a data hub - it is basically responsible for the entire manufacturing process. Before production starts, it checks the availability of raw materials, operating supplies and production units, and then guides the operators through the process. It records operational and production data and creates production reports. It enables quick intervention in the event of deviations and displays important KPIs online on dashboards. This is also reflected in the continuous improvement of process analytics and data science.

The three major requirements to increase quality, efficiency & sustainability:

- the right data from the systems
- expertise in processes, automation, and data handling
- and flexibility on the shopfloor with suitable equipment

ZETA has been pursuing the concept of modularization for more than 15 years. MTP is now giving us a standard to improve and optimize our automation concepts for PEA-Controller, POL and SCADA solutions.

The combination of MTP and MES makes lean manufacturing flexible and efficient

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