

Press release MPDV

## Manufacturing Analytics

### Component for the „Smart Factory Elements“ model

**Mosbach, September 3<sup>rd</sup>, 2019** – Manufacturing Analytics or Analytics overall is an important element in the control loop of the "Smart Factory Elements" model. According to this control loop, production is planned (Planning & Scheduling) based on specifications from different sources and this plan is then implemented or executed (Execution). The data collected is analyzed (Analytics) in order to make predictions which, together with other findings, can then be included in planning. The Industrial Internet of Things supports this cycle by collecting and providing data.

#### **Analytics as a basis for optimizations**

The functions and applications of the "Analytics" element use both conventional and innovative methods to prepare data recorded in the shop floor for KPIs and reports. In addition to classic dashboards, MPDV's Manufacturing Execution System (MES) HYDRA also provides extensive long-term analysis and big data evaluation as well as flexible self-service analytics applications. The latter are particularly useful if a great deal of data from different sources is being correlated and evaluated using different criteria. Based on this, optimization measures can then be initiated in the shop floor.

#### **Advanced Analytics**

Future analytics applications will increasingly rely on Artificial Intelligence (AI) methods. Machine Learning in particular has proven to be a suitable technology for detecting irregularities in the production process. A first example of such so-called Advanced Analytics is Predictive Quality from MPDV. This allows the quality of a product to be predicted on the basis of recorded process values. Further application scenarios are the analysis and optimization of maintenance processes (Predictive Maintenance) and the early detection of deviations in everyday production.

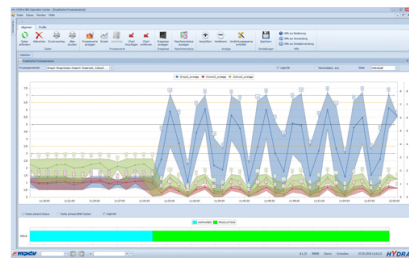
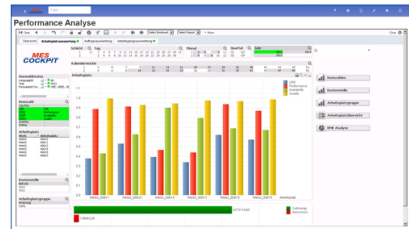
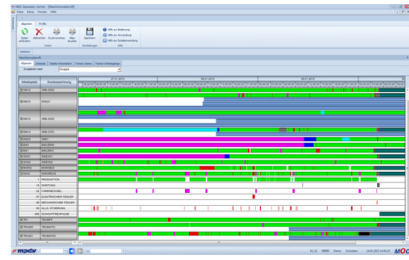
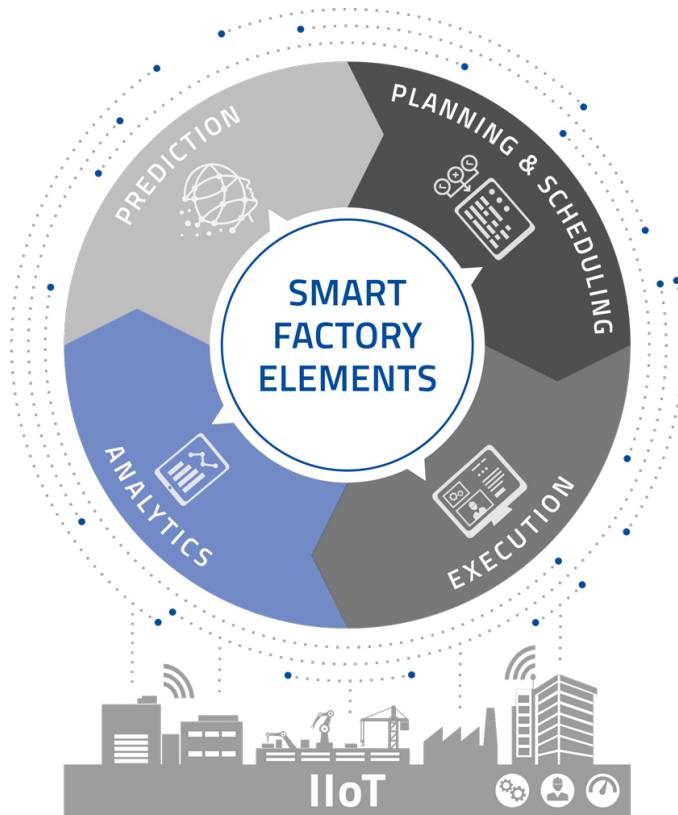
Ultimately, MES HYDRA already meets many of the requirements that the "Smart Factory Elements" model places on a modern IT tool for Manufacturing Analytics. The increased use of Artificial Intelligence will gradually lead to new applications.

More on the Smart Factory Elements model at <http://mpdv.info/prsfanalytics>

More on MES HYDRA at <http://mpdv.info/prsfhydra>

*(approx. 2,200 characters)*

## Images



*As part of the "Smart Factory Elements" model, Analytics includes a wide range of functions and applications for evaluating and analyzing production-related processes.*

Source: MPDV

## Keywords

MPDV, Model Smart Factory Elements, Manufacturing Execution System (MES), HYDRA, Analytics, Artificial Intelligence

## About MPDV

MPDV headquartered in Mosbach, Germany, is the market leader of IT solutions for the production sector. With more than 40 years of project experience in the production environment, MPDV has extensive expertise and supports companies of all sizes on their way to the Smart Factory. Products such as the Manufacturing Execution System (MES) HYDRA by MPDV or the Manufacturing Integration Platform (MIP) enable production companies to streamline their processes and stay one step ahead of the competition. The systems can be deployed to record and evaluate production-related data along the entire value chain in real time. If the production process is delayed, employees can immediately detect the problem and take proactive measures. More than 800,000 people in over 1,250 production companies worldwide use MPDV's innovative software solutions every day. These include renowned companies from all industries. MPDV employs around 480 people at thirteen locations in Germany, China, Luxembourg, Malaysia, Singapore, Switzerland, and the USA. Further information under [www.mpdv.com](http://www.mpdv.com)

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