Open up new, data-based business models
Tailored services thanks to Industrial Analytics
Let’s connect.
Added value from machinery and production data

Benefit from extensive modular analytics solutions

Just imagine that your top sellers in the future will no longer be certain types of machines, but instead the availability of the machines or a guaranteed number of parts produced using said machines. We will work together with you to make this vision a reality, using tailored analytics solutions to implement predictive quality and predictive maintenance solutions, for example.
New business models
Generate advantages over your competition by means of data-based smart services, such as the sale of production availability.

Reduced costs
Predictable, need-based maintenance and service measures result in markedly lower life cycle costs for your machines.

Maximum productivity
Predictive maintenance measures ensure failure-free operation and increase production efficiency.

Top product quality
High-quality products are guaranteed thanks to seamless automated process monitoring and production quality forecasting procedures.

Satisfied customers
The offer of higher machine availability and an increase in productivity will raise your customer relationships to a new level.

Impetus for innovation
By using the knowledge of how your machines are used, for example, you can further develop future generations and data-based services in a targeted manner.

Whitepaper
www.industrial-analytics.weidmueller.com/wp2018/
Get the most out of your machine data
From machine learning to integration into your production

Our offer is comprehensive: starting with the development of data models that work based on machine learning via visualisation of the data collected to the development of data-related services – if desired with connection to the specific system and machine landscape.

Model development
Our data scientists determine the most important features of your machine data and develop a model that is trained before it goes live.

Development of micro services
At the machine level, on-premises or in the cloud – our solutions are adapted to individual needs.

Visualisation
Thanks to our flexible, individually designed visualisation solution, you always have an overview of essential data.

System connections
Tailor-made: our solutions can be perfectly integrated into existing SCM, ERP or MES systems.
Analytics modules for the performance of data-based services
From condition monitoring to a glance into the future

Anomaly Detection

Detecting unusual machine behaviour
Data-based modules help to automatically identify deviations from normal machine behaviour during runtime. Faults and errors that would be overlooked by rule-based condition monitoring are detected quickly and can be rectified in good time by machine operators and service technicians.

Anomaly Classification

Finding and fixing failure roots
The machine condition is transparent at all times thanks to the acquired information. Errors on machine modules are detected and can be localised easily. This dispenses with the need to carry out extensive causal investigations. Quicker diagnoses result in noticeably shorter downtimes and therefore an optimal output.

Predictive Maintenance

Predicting failures before they occur
Support machine operators and service technicians through the use of proactive notifications. If knowledge of imminent errors or unwanted conditions is available, machine operators and service technicians can make decisions more easily, plan maintenance measures in good time and minimise downtimes, thus ensuring increased and reliable availability.

Predictive Quality

Monitoring and predicting product quality
By constantly monitoring sensor, status and process data, the quality of products can be predicted throughout each individual production phase. This means that production parameters can be adjusted in good time in order to reduce waste. The early detection of missing parts increases resource efficiency.
Wide range of uses – all with added value

Weidmüller Industrial Analytics in practice

Boge Kompressoren

Task
• Prediction of the wear behaviour of critical compressor modules
• Identification of the optimal operational configuration of the compressor
• Monitoring of the compressed air supply
• Prediction of compressed air availability

Benefits
• Implementation of new business models due to data- and platform-based services
• High levels of efficiency in the supply of compressed air
• Guaranteed availability of compressed air
• Lower maintenance and service costs

Grenzebach Maschinenbau

Task
• Monitoring of welding process during runtime
• Monitoring of weld seam quality
• Prediction of tool wear

Benefits
• High-quality welding seams guaranteed
• Reduction of waste
• Higher plant availability
• Lower maintenance and service costs

Ferag

Task
• Monitoring and prediction of changes in chain length
• Identification of individual damaged chain sections
• Increase of service efficiency by means of analytics-based service technician support

Benefits
• Improved production planning by means of the provision of support in the decision-making process and transparency regarding plant condition
• Reduction of service and maintenance costs by means of predictive service work
• Consolidation of customer loyalty and of our competitive position by means of data-based services
Future-proof Industry 4.0 solutions
With a combination of automation and digitalisation

Digitalisation
- Combination of automation and digitalisation in order to optimise production output
- Leading edge thanks to data-based business models such as application-specific Analytics solutions for the detection of anomalies and Predictive Maintenance
  www.industrial-analytics.weidmueller.com

Automation
- Open, platform-independent automation toolbox u-mation
- Optimally tailored components u-control, u-create, u-remote and u-view for customised automation solutions
  www.u-mation.com

Communication
- Communication-capable components such as PROtop allow for the quick provision of process data for intelligent networking of machines and IT systems
  www.weidmueller.com/protop

For further information, please visit:
www.industrial-analytics.weidmueller.com
As experienced experts we support our customers and partners around the world with products, solutions and services in the industrial environment of power, signal and data. We are at home in their industries and markets and know the technological challenges of tomorrow. We are therefore continuously developing innovative, sustainable and useful solutions for their individual needs. Together we set standards in Industrial Connectivity.