# **Energizing your digital business**

CONTACT Elements for IoT: The industrial digital twin platform for data-driven processes





#### **Ensure and automate end-to-end processes**

The Internet of Things connects machines and components with software services that focus on optimizing manufacturing processes and implementing digital services for smart products. CONTACT Elements for IoT is our platform for solutions for data-driven processes using digital twins of industrial assets quickly and cost-effectively. The platform is characterized by its open archite cture, its simple and robust mapping of business processes, and its low-code philosophy.



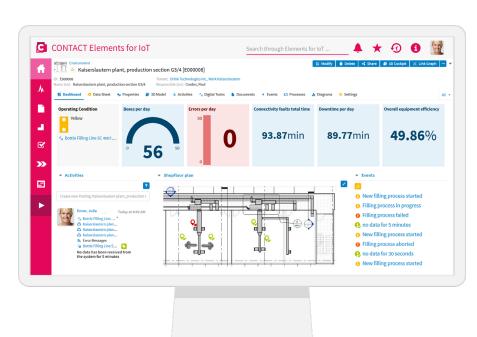


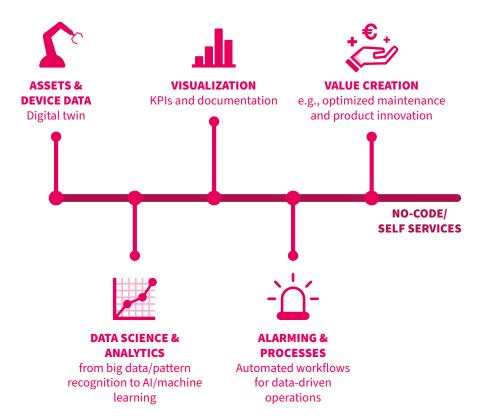
Gain increased revenues through digital services



## Digital twin as a key component

Industrial IoT solutions must provide an accurate view of the as-maintained state of each asset and its components, which is composed of many different data sources. Examples include asset field and sensor data, software and hardware configuration, 3D models, maintenance history, customer data and more. Based on the digital twin, Elements for IoT provides comprehensive capabilities to display, monitor and evaluate the history and current state of your assets according to the single source of truth principle. The Digital twin mirrors your objects in the field as a virtual representation and is the hub of all data-driven processes.





## Departments capable of taking action through automated insights

CONTACT Elements for IoT enables specialist departments to act independently. By using the no-/low-code principle they can easily meet new requirements and quickly define rules for identifying events and the desired software responses without the need for any programming or the support of central IT. By this, value-adding activities are implemented using automated workflows: for example, the execution of maintenance activities if measured values are exceded, the launch of routine services for defined maintenance intervals and automated spare parts orders.

#### **Our IoT partners**























## Connectivity by supporting industry standards

Machines and systems can easily be addressed by CONTACT Elements for IoT. The platform gives them a face when it comes to communication with operators or other IT systems. Elements for IoT uses standard protocols such as OPC UA, MQTT and PPMP and complies with industry standards for the Industry 4.0 platform. This opens up the possibility to use the asset administration shell to integrate your machines as active components in automated business processes. In addition, standard interfaces and powerful integration technology ensure end-to-end processes across different systems and applications.



































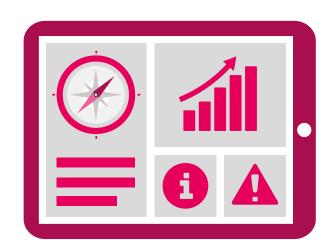


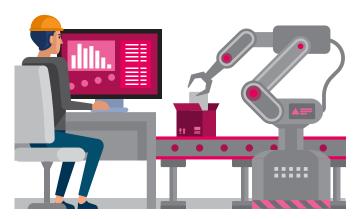


## Achieve lower costs through production optimization

## Synchronization of manufacturing and MRO with system and manual information

Manage your manufacturing and maintenance, repair and operation (MRO) processes through to operational scheduling in shifts. The integration of system information, manual messages from workers, and upstream systems provides a comprehensive overall picture. Harmonizing the different disciplines increases transparency and improves the ability to act during everyday work. This in turn reduces downtime and maintenance costs.





## Accurate basis for performance analyses, business processes and audits

DThe current state of machinery and plants is often different to its planning or as-delivered state. Modifications and replacement parts can have a significant impact on their properties. Map the as-maintained state of your assets with the digital twin on an industrial level. In this way, smart asset management creates the basis for targeted spare parts supply, efficient MRO processes, as well as secured compliance evidence and performance analyses.

## Process control and standardization in distributed organizations

The standardization of work processes and compliance with quality standards at globally distributed production sites is important when it comes to comparing the productivity of the sites and initiating improvement measures. In a multi-site scenario, these standards can be defined by the head office, and the KPIs from the different sites can be compared with each other. This allows to implement global processes and identify potential for optimization based on operations in the individual production facilities.



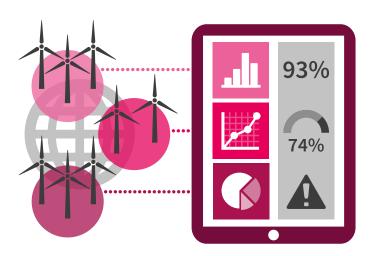
## Gain increased revenues through digital services



## Impress customers with automated services and pay-per-use offerings

Elements for IoT enables you to trigger and document business transactions, such as spare parts orders, using a template. Everything from the provision and invoicing of services up to the transfer to ERP systems can be fully automated. Create an appropriate basis by mapping customer-specific contracts or spare parts catalogs for product lines and offer your customers full flexibility with pay-per-use models for your products as an alternative to purchasing them.





## Fleet management and customer journey tracking

Compare performance and profitability of your fleets based on metrics and calculations in clearly organized dashboards. This allows you to identify available capacities at a glance and recognize replacement needs in good time. Define your fleets according to your needs – for example, in the context of individual customers or the assets of a product line.

## Monitoring and analytics as the basis for IoT business

Elements for IoT offers comprehensive condition monitoring, flexible visualization and analysis options as well as the integration of your expert tools. Tailor dashboards to meet the specific needs of customers or disciplines and thus create a transparent view of conditions and processes in the field. Use the potential that condition monitoring and analytics offer to improve your ability to act.



#### **Energized digital businesses: Our IoT success stories**

#### MITSUBISHI ELECTRIC

#### **Automation for the digital factory**

Mitsubishi Electric is one of the leading suppliers in the field of factory automation. The company manufactures robot, control and drive technology. As a member of the partner network e-F@ctory Alliance, CONTACT Software supports Mitsubishi Electric in providing its customers with complete solutions for intelligently networked production. The open low-code platform CONTACT Elements for IoT provides the modules for this.



© Mitsubishi Electric Europe B.V.



© SIG Combibloc

#### SIG COMBIBLOC

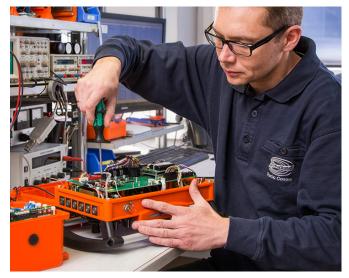
### Smart asset management creates the basis for service business

SIG, one of the leading manufacturers of packaging and filling machines for the food and beverage industry, links the production systems installed at customer sites worldwide with CONTACT Elements for IoT. The focus is on the infrastructure components for communication with the systems – failures and malfunctions in this area would make it impossible to provide a large number of services. With the help of health monitoring, SIG now manages connectivity to all lines worldwide and has a robust basis for implementing digital business models.

#### HBC-RADIOMATIC

#### Digitalization speeds up global service processes

HBC-radiomatic is the technology leader when it comes to industrial radio controls. The devices ensure optimum operation of excavators, lifting and loading cranes, heavy-goods transporters and many other machines. The company organizes the service requests it receives from customers and service and sales partners worldwide in an asset and service platform integrated via CONTACT Elements. It contains all the relevant information and manages the global service processes reliably.

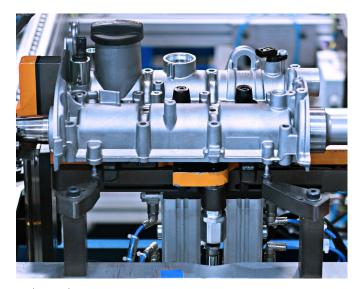


© HBC-radiomatic

#### **THYSSENKRUPP**

### Camshaft specialist controls global production with CONTACT Elements

thyssenkrupp develops innovative powertrain solutions in its role as partner to carmakers. The global leader is digitalizing shopfloor management at all its manufacturing sites and relies on the CONTACT Elements platform for production control and system maintenance. The objective of the powertrain division of the world-renowned German conglomerate is to increase productivity along the industrial value chain and enhance its position as a technologically advanced automotive supplier.



© thyssenkrupp



© MIXACO

#### MIXACO

#### Industrial mixer convinces with digital customer service

MIXACO develops highly efficient industrial mixers for food, paint and plastics. The machine manufacturer now supplements its products with suitable smart services and bundles these in the new MIXACO Control Center. The foundation for this is the CONTACT Elements for IoT platform, which was put into operation without any programming effort. Customers use it to monitor processes online, optimize the performance of their machines and take advantage of the benefits of predictive maintenance. MIXACO also offers its customers higher availability and faster response times in service.

#### MITSUBISHI ELECTRIC | DÜSPOHL

### Intelligent software support for high-end robotics solution

Mitsubishi Electric is one of the world's largest suppliers in the field of factory automation. The modular and flexible CONTACT Elements platform allows Mitsubishi Electric to offer end-to-end services to its customers and to exploit potential at business process level. Düspohl reflects the success of this collaboration: CONTACT's software picks up where the world of drive technology, servo/motion systems and robotics leaves off – a perfect match!



© Düspohl

# energizing great minds

**IoT Proof of Concept**Discover the IoT potential of your company!

