Kontron AIS GmbH



SCADA Development for the TraXon Gearbox Housing Production



"Kontron AIS has played a key role in the successful launch of the new production line and demonstrated its expertise in the automation environment."

> Ralf Schmid, Project management TraXon, ZF Friedrichshafen



ZF Friedrichshafen AG Friedrichshafen

Platform: Microservices, Active Message Queue

Project:

Implementation of SCADA at a production line in the field of commercial vehicles

Kontron AIS services:

Project management, development, on-call standby, ramp-up, support



Goals

- Development of the SCADA level by means of Microservices
- > Assumption of the IT project management
- Ramp-up support for the line
- Assumption of the 24/7 standby



- Application Active Message Queue as a transmission medium
- > IT project management of the entire project
- > Usage of new connectors to machines



Result

- Start of production in May 2018 as planned
- Production of up to
 520 gearbox housings per day
- Tracking of the entire production process



In the second quarter of 2018, the ZF Friedrichshafen AG has started operations of a new production line for the gearbox housing production in the field of commercial vehicles. The Kontron AIS GmbH took over the SCADA development and adaptation to the manufacturing environment with various interfaces to machine suppliers, the MES and SAP of ZF. Furthermore, Kontron AIS assumed the entire IT project management.

Communication, data collection and project management

The implementation of the SCADA level is used for vertical communication between machines and the higher-level systems (MES, SAP), as well as for the central storage of process and production-relevant data. The resulting traceability of each produced gear housing is a basic requirement and of great importance in the automotive sector.

To communicate with the machines, on the side of the machine controllers (S7-1500 SINUMERIK), standard connectors are used for establishing the bidirectional communication to the SCADA level. The applied Microsoft services check and store the data in a corresponding database and provide the transfer to ZF's MES and ERP system (SAP). Via SAP, manufacturing orders as well as the order of the housing commission for final assembly on the line (just-in-sequence) are transferred.

Within the "TraXon" project, Kontron AIS took on the overall IT project management in Friedrichshafen. The main focus was on the communication and coordination between the IT department of ZF, production departments, suppliers as well as the Kontron AIS development department.

About ZF Friedrichshafen AG

The ZF Friedrichshafen AG, based in Friedrichshafen, is one of the world's largest automotive supplier and a leading company in the field of drive and chassis technology. The ZF Group operates 230 locations in 40 countries. In 2017, the group's turnover was around EUR 36.4 billion and currently around 146,000 people are employed.

For more information please visit: **www.zf.com**

About Kontron AIS GmbH

We set the benchmark in industrial software – for more than 30 years and with an experienced team of over 200 employees. Our proven software products and customized digitalization solutions enable machine and equipment builders as well as factory operators to break new ground in automation and secure long-term competitive advantages. Together with our customers we implement worldwide cross-industry, intelligent digitalization strategies and solutions for the smart manufacturing of tomorrow.

As a subsidiary of the Kontron AG, we offer integrated, end-to-end IoT concepts consisting of hardware and software as well as worldwide project management, service, and support thanks to a global network.

For more information please visit: www.kontron-ais.com