Initial situation
The Hager Group is a leading supplier of solutions and services for electronic installations for residential, industrial and commercial properties. As part of the project "Digital Tool Management", the company is automating logistics processes, replacing manual SAP posting processes, visualizing tasks, consequently implementing the "Internet of Things" and in future, will realize the preventative maintenance of injection tools. The result is an increase of process reliability in logistics and increased machine and tool availability based on consistent information transparency.

Solution
By means of the ORBIS Multi Process Suite (ORBIS MPS) and the application of RFID technology, Hager is realizing the interlinking of injection tools, machines, forklifts and storage locations, based on SAP ERP. For this, each tool and each storage location receives an RFID tag for identification and individualization. Using the ORBIS MPS, tool data and movements are transferred in "real-time" to the SAP ERP system and at the same time visualized on forklift terminals in a user-friendly and appealing way. This allows for continuous tracking of the tools in the factory. This transparency allows for the optimal use of tools in terms of production planning and maintenance – and thus also a reduction of costs. The project’s ROI will be achieved in about 2.5 years. In the fall of 2015, the Hager Group received the renowned "Digital Transformation Award" from the "Wirtschaftswoche" magazine for this innovative Industrie 4.0 project.

Benefits at a glance
- Automated processes increase process reliability
- Automation of the entire tool management
- Optimized production control and maintenance
- Preventative maintenance of injection tools

“Digital Tool Management”

Source: ORBIS
BDE software practically doubles production output

**Initial situation**
Harburg-Freudenberger GmbH is a company in the HF MIXING GROUP specializing in the manufacturing of mixers for the rubber processing industry. It offers its customer complete end-to-end solutions from R&D, design, production and assembly to control technology and installation, to 24/7 service, training and after-sales support. This high standard, along with the success of the last ten years due to the merger, have presented the company with the daunting task of being ready for the fast pace and high volume of incoming orders.

**Solution**
Since mid 2011, production has been networked with PROXIA software and terminals. Thanks to BDE, transparency has improved considerably and output has increased. Before the system was introduced, Harburg-Freudenberger was able to produce about three machines per month. Today, the plant produces eight machines per month. In addition, Harburg-Freudenberger has also been able to meet the agreed deadlines – despite the significant increase in orders. Production Manager Karl-Heinz Linke is especially proud of this accomplishment: “Customers hardly ever have problems due to delivery dates!”

The BDE software by PROXIA that was introduced helps machine and plant manufacturers maintain an overview of all the steps in the manufacturing process so they can use their resources in an optimal way, thus ensuring production growth.

**Advantages at a glance**
- Greater production output – sales almost doubled
- More transparent processes – automated capture of operating data
- Faster feedback – production data available in realtime
- More economic planning – targeted use of resources and staff
- Better communication – immediate information on the current production status
- Easier application – easy to use, understandable display
Initial situation
The entire industrial sector is seeing groundbreaking changes right now. The fusion of production, information, and communication technologies is at the heart of these changes. To respond to them, companies need a direct connection between actual production and a piece of software for production planning that is capable of mapping the complexity of material flows, machine and staff utilization, and the current status of all orders as close to real time as possible.

Solution
Collaborating on a joint research project, SICK and Ortlinghaus-Werke GmbH have developed an innovative production information system that is capable of mapping many items of additional data. It is an identification solution for identifying materials based on RFID technology. One of these RFID systems has been installed at Ortlinghaus as an access gate on the way from the warehouse to the pre-completion zones. The system comprises an RFU63x RFID read/write device in conjunction with an external RFA63x antenna. The components are simply installed above a transport route in the production area so that they do not affect production processes.

With the help of antennae, the read/write device reads the order data on the tag without making direct physical or visual contact and transmits this information to the new production information system using the intelligent functions integrated within the sensor. These intelligent sensors are capable of using measurement data to provide quantitative or qualitative information about the production processes they are monitoring.

Benefits at a glance
• An updated overview of the status of all production orders can be called up and visualized at any time.
• The company is able to respond to disruptions in production as soon as they occur.