

Case Study

Rees Zerspanungstechnik GmbH

IBS:MES in the Metal Processing Industry





IBS:MES in the Metal Processing Industry

Best Practice in Quality and Production Management at Rees Zerspanungstechnik GmbH

Rees Zerspanungstechnik GmbH, with its head office in Wehingen, is an independent, owner-managed company. Founded in 1938, Rees today employs 80 members of personnel and is a system supplier of precision turned parts, milled parts and component assemblies.

The company's key competences lie in a wide vertical range of manufacture, combined with a broad manufacturing structure offering flexible dimensions, materials and batch sizes. From precision turned parts of high-end quality to complete component assemblies – everything under one roof.



This relies on the following criteria:

- Simultaneous engineering and Lean Production
- Constructive pre-production consulting
- Professionalism in work preparation
- Diligence in the production process
- Process reliability, thanks to quality assurance and complete documentation
- Logical fine-tuning with production intervals

Rees Process Management

The highest objective of Rees Zerspanungstechnik GmbH is continuous process optimisation for greater effectiveness in the production process, to enable greater management efficiency and better machine capacity utilization.

The company developed “Rees Process Management” in order to achieve this goal. This comprises the following:

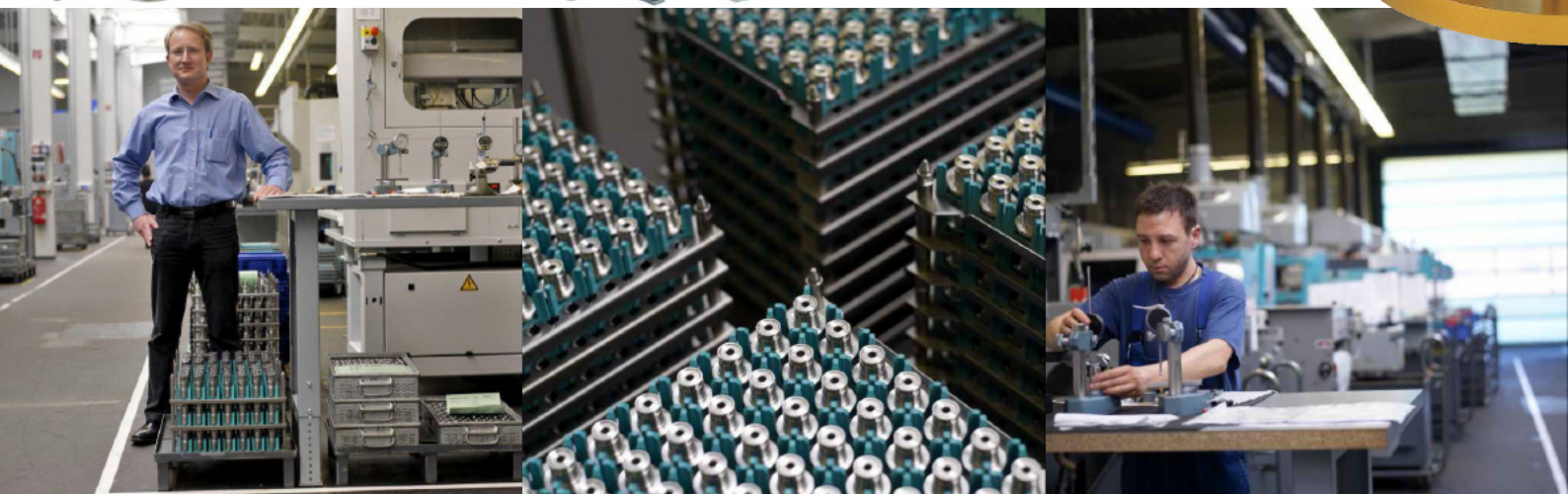
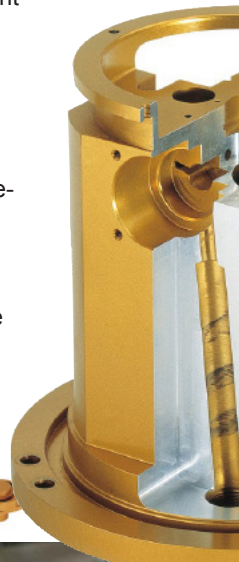
- Lean Production with principles and measures for efficient planning and organisation of the entire supply chain (value-added)
- Lean Management with methods for continuous process organisation and
- Lean Maintenance for the efficient use of production processes with value-stream-oriented failure management and plant development

Lean Production comprises three central aspects for further optimisation of the production process:

- 5S methodology: This involves improvement of work quality by systematic organization of workplaces, the main categories of which being sorting (concentration on the essentials), straightening (organizing), systematic cleaning, standardization and sustaining (discipline).
- The detailed analysis of work processes enables set-up time optimisation and thus an increase in plant capacity utilisation
- Lean Logistics involves the continuous monitoring of all logistics processes for consistent material flow optimisation.

When aimed at the efficient organisation of value-added processes, Lean Management helps achieve defect avoidance and cost reduction.

This also includes visual management and value flow analysis and design.





Lean Maintenance - for uninterrupted plant operation and optimal capacity utilisation – comprises the methodologies

- Failure management
- OEE – Overall equipment effectiveness
- Continuous improvement process

Best Practice Solution for Quality and Production Management

Rees Process Management is supported by the use of IBS software solutions for industrial quality and production management.

In 2008 the Rees company was faced with the decision to replace its previous quality management system. This was due to the requirement of an FMEA tool and Control Plan and an interface with the existing ERP system ProAlpha. At the same time Rees also expressed the wish for a new ODA/MDA system. Since the company was looking for a seamless, fully integrated system, the decision was finally made in favour of the IBS:MES solution.

The following software modules are currently in use at Rees Zerspanungstechnik GmbH:

- APQP Advanced Product Quality Planning
- Gage Management
- Supplier Assessment
- Audit
- SPC Statistical Process Control
- Incoming Goods Control / Outgoing Goods Control
- FMEA Failure Mode and Effect Analysis
- Quality Management Analysis
- Concern and Complaint Management
- ODA Operational Data Acquisition
- MDA Machine Data Acquisition

IBS:MES thus supports the company with the transparent and complete mapping of all production and process-relevant information at production level.

Winner of the Bosch Supplier Award

Rees Zerspanungstechnik GmbH was presented with the highly-coveted Bosch Supplier Award in July 2011. The distinction is awarded to a selection of top suppliers on a biannual basis. The award is the result of the consistent implementation of the Lead Production principle at Rees Zerspanungstechnik GmbH.



The System Solution at a Glance

Industry:

Metal Processing

Project:

Introduction of a quality and production management system (MES)

Products and modules in use:

CAQ=QSYS Professional with the modules IP, APQP, GM, SAM, Audit, SPC, IGC/OGC, FMEA, CCM

IBS:prisma with the modules ODA, MDA



Rees Zerspanungstechnik GmbH

Rees Zerspanungstechnik GmbH is an independent, owner-managed company. Its 80 employees focus on precision and reliability.

The company produces precision turned parts in medium and large lot sizes in its 2,500m² production facilities at its Wehingen plant.

The company's key competences lie in a wide vertical range of manufacture, combined with a broad manufacturing structure and flexible dimensions, materials and batch sizes. From precision turned parts of high-end quality to complete component assemblies – everything under one roof.

Rees Zerspanungstechnik GmbH received the Bosch Supplier Award in 2011.



Accomplishments achieved with the use of IBS:MES at Rees Zerspanungstechnik GmbH

- Motivation with information
- Inspection cost reduction
- Standardisation of gages and inspection
- Low-paper production
- Reduction in the number of complaints
- Short control loops
- Increase in productivity
- Less pressure on quality assurance
- Continuous improvements with inspection plan optimisation
- Transparency of production stock

The Future

Further expansion of the software solutions for quality and production management is planned for the coming year.

This will enable the digital processing of all internal complaints and the compilation of the respective digital workflows for the automatic distribution of information. The fundamental aim is the consolidation of quality management evaluations.

In terms of production management, the entire machinery will also be connected to the MDA. The introduction of digital OEE acquisition and job time monitoring via machine data are also planned.



Thomas Rees, Managing Director

"It is great that our employees apply the Lean methodology and are able to identify with the system, in each of the individual areas and without any insistence from me. This is not least also due to the integrated approach of the IBS solution."



IBS AG | Rathausstrasse 56 | 56203 Hoehr-Grenzhausen | Germany
Tel.: +49 (0) 26 24/91 80-0 | Fax: +49 (0) 26 24/91 80-200
<http://www.ibs-ag.de> | info@ibs-ag.de

LOCATIONS: Hoehr-Grenzhausen (D) · Neu-Anspach (D) · Boston (USA) · Shanghai (PRC)

A Siemens Business

