Optimizing product lifecycle quality management with Siemens PLM Software

Quality, traceability and compliance management for continuous improvement

www.siemens.com/mom/ibs-qms
The Siemens PLM Software cross-industry quality management software, IBS QMS, which has been on the market for over 30 years, provides you with proven production, quality and traceability management solutions to support the optimization of the processes involved in your product life cycle. The software helps you create the necessary degree of transparency of production processes to enable prompt and effective intervention in the event of target deviations.

The IBS QMS solutions are often used due to their synergies with existing ERP/product lifecycle management (PLM) systems and represent an integral component in the support of risk management. With our solutions, you can access real-time information on your company’s production and quality situation.

Traceability management can help you check product history and delivery-annotated information at the touch of a button. Based on lean management principles, traceability offers you complete transparency and process optimization. The compliance management software is used to control all corporate administration and production processes, as well as those involved in compliance with codes of practice, laws and guidelines.

Optimizing the product lifecycle

The IBS QMS solutions are often used due to their synergies with existing ERP/product lifecycle management (PLM) systems.
The plan-do-check-act (PDCA) cycle describes the phases of the continuous improvement process (CIP) and forms the basis of all quality management systems. The cycle is designed to promote consistent and sustainable improvements to production processes.

**Plan** involves analyzing the status, developing improvement potentials and the compiling conceptual realization.

**Do** embodies the practical realization of the concept, which is tested on a small scale using simple means and test equipment.

**Check** generates and checks results of the test run and sets the standard.

**Act**, the last phase, involves wide-scale implementation of the new standard and regular monitoring through audits.
Delivering unique range and depth

The IBS QMS solutions help you support quality management in the digital enterprise with the following functionality:

- Advanced product quality planning (APQP)
- Control plan (process flowchart)
- Audit management
- Failure mode and effects analysis (FMEA)
- Inspection plan management (IPM) including graphical options
- Concern and complaint management (CCM)
- Statistical process control (SPC) in-process inspection
- Warranty management
- Traceability management
- Incoming goods/outgoing goods inspection
- Integrated workflow management

**Plan:** Plan the product quality within the engineering process as well as how to control it during the manufacturing of the product.

**Do:** The manufacturing of a product is closely connected to the inspection and monitoring of the product.

**Plan**
- Project management control plan/flowchart
- FMEA/risk analysis
- Inspection equipment qualification/management
- Detailed production planning
- Inspection planning

**Do**
- Machine data acquisition (MDA) paperless repair
- Production-assembly-laboratory inspections
- Incoming/outgoing good tests/First Sample Inspection
- Machine visualization

**Plan:**

**Do:**
Eliminating waste in production facilities

Many production companies are aware of the waste that is generated in their production facilities. The source of this waste, however, is often unclear. To save costs and enable sustainable competitive improvements, your company must identify all information relevant to the production process, including how to:

- Reduce process times
- Reduce quality and defect costs
- Manage key performance indicators (KPI) and transparency for target decision support
- Provide a single solution for production, quality and traceability management
- Support lean management methodology
- Support corporate compliance
- Leverage vulnerabilities analysis, best practice software solutions, implementation in the existing information technology (IT) environment and professional training of your employees

**Check**
- Production controlling
- Process monitoring
- Evaluations
- Certificates/inspection reports
- Supplier management

**Act**
- Action management
- Warranty management
- Concern and complaint management
- Audit management
- “Lessons learned”

**Check**: Being able to visualize production results and compare them to the specifications minimizes analysis deviations

**Act**: Initiate the problem solving process to mitigate the deviation and support continuous improvement in product planning
One of the main demands made of computer-aided quality (CAQ) systems is the ability to integrate into existing, higher level systems. IBS QMS offers you an integrated, bidirectional solution for the exchange of all relevant order data, and helps you maintain a smooth flow of information and alignment of master data. The solution allows you to seamlessly link to existing PLM and ERP software systems through interfaces with Teamcenter, SAP, Infor, PSI, Baan and Navision and more.

You can implement IBS QMS solutions independent of existing production planning and control (PPC) systems. The interfaces are applied in accordance with the customer’s existing IT landscape. In addition to file-based data exchange, direct database connections are provided.

IBS QMS provides you with tools to simplify the connection of complex measuring devices, reducing manual inspection and associated costs. Interface to superior management systems is of particular importance in executing reliable data exchange among your company’s information systems. The acquisition and processing of data from subordinate systems, such as gages, measuring machines, analysis equipment or production facilities, are main requirements of a production management system.

Integrating ERP, PLM and the shop floor
The IBS QMS solutions from Siemens PLM Software are used in more than 4,500 customer installations worldwide including companies in the following industries: automotive, electronics and electrical engineering, medical technology, mechanical engineering, plastics and packaging, metal processing and many more, including:

- Original equipment manufacturers (OEMs)
- Mechanical engineering
- Suppliers
- Pharmaceuticals/medical
- Chemicals
- Alternative energies
- Mobility
- Packaging
- Steel
- Electronics

References

Car manufacturers (OEMS)

Suppliers

Alternative energies

Steel

Mechanical engineering

Pharmaceuticals/Medicine

Mobility

Electronics

Chemicals

Packaging
About Siemens PLM Software
Siemens PLM Software, a business unit of the Siemens Digital Factory Division, is a leading global provider of product lifecycle management (PLM) and manufacturing operations management (MOM) software, systems and services with over 15 million licensed seats and more than 140,000 customers worldwide. Headquartered in Plano, Texas, Siemens PLM Software works collaboratively with its customers to provide industry software solutions that help companies everywhere achieve a sustainable competitive advantage by making real the innovations that matter. For more information on Siemens PLM Software products and services, visit www.siemens.com/plm.

Headquarters:   +1 972 987 3000
Americas:      +1 314 264 8287
Europe:        +49 (0) 2624 9180-0
Asia-Pacific:  +86 (21) 3889 2765

© 2016 Siemens Product Lifecycle Management Software Inc. Siemens and the Siemens logo are registered trademarks of Siemens AG. CompliantPro, IBS, Prisma and QMS are trademarks or registered trademarks of Siemens Product Lifecycle Management Software Inc. or its subsidiaries in the United States and in other countries. All other trademarks, registered trademarks or service marks belong to their respective holders.

55200-A20  5/16  F