

Product Lifecycle Management Integrated with Automotive Core Tools

ISOQualitas.PLM® is a comprehensive and integrated software that optimizes all Product Lifecycle Management activities, from the Advanced Product Quality Planning (APQP), through the Process Production Part Approval (PPAP), and all the way to manufacturing, according to the requirements and standards of the automotive industry.

ISOQualitas.PLM® is a tool that will enable your company to fully comply with quality management standards IATF-16949, VDA, EAQF and their respective reference manuals APQP, PPAP, FMEA, SPC, MSA, VDA2, and others, as set out by the automotive industry.

With ISOQualitas.PLM® your company will also meet specific requirements from global automotive manufacturers.

Benefits and Advantages

All-in-one software.

ISOQualitas.PLM comes with all features integrated into one software package to manage and develop requirements for product lifecycle from product concept to use. Software implementation and maintenance is simpler, faster and cheaper, and all development data across all modules and users benefit from the user-friendly interface with full visibility of tasks on any ongoing project.

Eliminate consistency errors.

All product and process data are fully integrated in such a way that development data and reports are consistent with data and information used at the shop floor. Besides data integration, ISOQualitas.PLM automatically checks product characteristics, process parameters, process operations and all documents and reports for consistency.

Powerful planning tools

All planned activities such as APQP Planning, FMEAs, Global 8D, and others are centralized in a single management tool with automated notifications and alerts to keep track of activities and help manage deadlines.

Constantly updated to new requirements.

Includes the new AIAG-VDA FMEA Handbook with an intuitive interface and easy migration from the outgoing 4th Edition. An intelligent FMEA Family approach helps optimize your analysis and actions.

Elevating performance and
going beyond the
Core Tools





Features

Easy and Fast Configuration

ISOQualitas.PLM has a simple, fast, and easy configuration and installation requiring only a small investment in time and resources:

- Organization information (including multi-plant in the same corporation).
- Users registration with access level definition to each module.
- Customer registration.
- Suppliers registration.
- Configuration of favorite modules set by each individual user.

Project Planning and Management

The Planning and Management modules allow users to set, organize, and assign all project tasks, deadlines, and critical paths, with real-time alerts, progress reporting, and monitoring, including:

- Configurable list of tasks.
- Automatic task duration calculation.
- Group/ungroup tasks.
- Determine "critical path" tasks.
- Gantt diagrams based on tasks and deadlines.
- Link tasks to ensure consistent deadlines.
- Tasks status automatically updated based on activity completion.
- Set follow up e-mail and popup alerts for tasks.
- Set e-mail notification alerts for completed tasks.
- Automatic task update across all modules and functions.
- Automatic task status verification prior to project completion.
- Tasks management report for individual user, for specific teams or general (all users).
- Management of changes that impact multiple products.
- Layout inspections planning and management.
- Dashboard with planning KPIs.

Product Data Management

The Product and Process Data Management modules stores and manages product and manufacturing process data. From these modules, users have a robust control over any product or process data change at any time during the product lifecycle.

- Parts management.
- Product characteristics / Process parameters.
- Manufacturing process operations.
- Documents repository (for each part and clients).
- Repository of images and CAD/CAM/CAE data (including 3D) with viewing capabilities.
- Product family management.
- BoM - Bill of Material.
- ECR – Engineering Change Request with approval workflow.

Product Development

The Product Development modules support product design requirements from concept to final configuration, including:

- Product/Process data management - PDM.
- Design FMEA – (as per FMEA VDA / AIAG).
- DVP&R - Design Verification Plan and Report.
- Prototype Control Plan.
- Definition of product special characteristics.



Features

FMEA AIAG-VDA Handbook

Six-step process with automatic AP definition, Actions Management and Reports to easily identify Risks and Recommended actions:

- Fully compliant with the new handbook definitions.
- Easy migration from outgoing 4th Edition FMEAs.
- Severity, Occurrence and Detection Criteria.
- Tips for each FMEA column.
- Automatic AP definition with easy access to AP logic.
- Powerful and consistent Family FMEA approach.
- Structure Analysis Libraries for better consistency and productivity.
- Ability to copy data between FMEAs.
- Direct access to Non-conformities and Lessons Learned database.
- Preventive and Corrective Actions with Task Management, Alerts and e-mail notifications.
- Consistency between PFMEA, Control Plan, Flow Chart and Characteristics Matrix.
- Tasks management report for individual user, for specific teams or general (all users).
- Print to standard paper or large paper for better viewing.

Manufacturing Process Development

The Process Development modules support the product manufacturing process according to specific automotive industry requirements, including:

- Data Management Product/Process - PDM.
- Manufacturing process operations management.
- Process Flow Diagram.
- Characteristics Matrix (Process/Product).
- Process FMEA (as per FMEA VDA / AIAG).
- Pre-launch and Production Control Plans.
- Process Reaction Plans.
- Work Instructions, Visual Aids.
- Process Setup Instructions.
- Setup control and Inspection Reports.

APQP Requirements and Core Tools

ISOQualitas.PLM has everything to ensure compliance with IATF-16949 and the Core Tools requirements. All activities from product concept to end of life disposal are addressed in a logical, consistent, and user-friendly manner, including:

- APQP Planning.
- Design and Process FMEA (as per FMEA VDA/AIAG).
- Team Feasibility Commitment.
- Process Flow Diagram & Characteristics Matrix.
- Process Control Plan.
- Work Instructions.
- Measurement Systems Analysis.
- Statistical Process Control.
- Dimensional/Material and Performance Results.
- APQP Checklists & APQP Summary and Approval.
- Production Part Approval Process (PPAP).
- VDA Requirements (German OEM Suppliers).

Process Capability Studies

The Process Capability Studies module supports all studies required by the SPC Reference Manual 2nd. Edition, including:

- Process Stability Assessment (X-R Chart, X- σ Chart, Individual-Moving Range Chart).
- Samples Distribution Assessment: Normal, Lognormal, Exponential, Weibull and Real (Kernel).
- Process Capability Indexes: Cp / Cpk, Pp / Ppk; Cm / Cmk, PPM, etc.



Features

PPAP and VDA2 Approval Processes

The Product Approval Processes modules support all requirements of the PPAP Reference Manual 4th Edition and the VDA Band 2 Version 2012, including:

- Dimensional, Material and Performance Test Results.
- Part Submission Warrant – PSW - EMPB.
- Product Structure - BoM (VDA).
- Report of Acquired Materials.
- Appearance Approval Report.

MSA - Measurement Systems Analysis

The Measurement Systems Analysis modules support all studies required by the MSA Reference Manual 4th. Edition, including:

- Measurement System Management, including the calibration management as per ISO-17025.
- Stability, Bias and Linearity studies.
- R&R Study - Variables (X-R and ANOVA Methods).
- R&R Study - Attributes (Cohen Method and Gray Zones).

Production Execution Support

The Production Execution Support follows the product and process development phases and benefits from ISOQualitas.PLM's full integration by sharing the same database, across different functions and phases in a consistent and reliable manner. The Production Execution Support modules include:

- Registration and management of Production Lots.
- Inspection records with automatic SPC analysis.
- Quality Certificates.
- Layout Inspection Report.
- Process Ongoing Monitoring - SPC.
- Run@Rate and Time and Cost analysis.
- Non-Conformance records and CAPA - Global 8D.
- Full integration with ISOQualitas.ACT system to support shop floor activities.

CAPA and Global 8D

ISOQualitas.PLM has several Corrective and Prevention Actions modules as an integral part of the manufacturing support process. This enables management to implement and validate the problem-solving process and the recording of nonconformities throughout the product lifecycle. The following modules are included in the CAPA/Global 8D modules:

NCR Modules

- Nonconformities Registration.
- Powerful search for nonconformities and graphics history of nonconformities.
- Management of corrective and preventive tasks and actions (popup and e-mail alerts).

Global 8 D Modules

- Registration and management of 8D Solving Problem Process.
- Searching with filters of 8Ds and Global 8Ds history.
- Management of corrective and preventive tasks and actions (popup and e-mail alerts).

Incoming Materials Management

The Incoming Materials Management modules records and shares data of received materials, which avoids duplication of data entry later in the process, while also ensuring that data is consistent and reliable. The Incoming Materials Management modules include:

- Registration and management of Incoming Materials.
- Skip Lot sampling plans (configurable by users).
- Inspection instructions.
- Receiving Inspection Records.
- Record of non-conformities and CAPA.
- Direct integration with the ISOQualitas.ACT software to support control of incoming materials.



Features

Full Production Support

ISOQualitas.ACT[®] is an add-on module that extends ISOQualitas.PLM[®] to the shop floor for those companies seeking a truly integrated and automated paperless solution for increased productivity and quality assurance.

With ISOQualitas.ACT[®] shop floor operators and quality inspectors receive instructions directly at their workstations and have a range of tools to support and provide immediate feedback during the manufacturing process.

With ISOQualitas.ACT[®] the data defined within ISOQualitas.PLM[®] during APQP is captured effortlessly at the shop floor by operators and inspectors through a user-friendly interface. ISOQualitas.ACT[®] has specific modules to register and report quality control events and results as required during manufacturing by worldwide automotive standards.

Additionally, ISOQualitas.ACT[®] makes all manufacturing process execution documents created by the APQP teams through ISOQualitas.PLM[®] available at the shop floor, assuring full consistency with planned activities.

System Requirements

Hardware

Processor: 1Ghz Minimum, 4Ghz recommended

RAM Memory: 1Gb Minimum, 4Gb Recommended

HD available space:

Workstation: 2Gb Minimum

Server: 4Gb Minimum

Display Resolution: 1280 x 768px minimum

Software

Our products are tested to ensure stable operation in the following operating systems:

Workstation:

- MS-Windows 7, 8, 8.1, 10 and 11

Server Systems x86 or 64bits:

- MS-Windows Server 2008/R2 and MS-Windows Server 2012/R2 or later
Cloud Database on MS Azure, no Server requirements apply

Databases

- MS-SQL Server 32bits, 64bits, x86 - Version 2008 or later, including MS-SQL Server Express and MS Azure Cloud Environment.

Visit us and Setup a Demo Today
info@isoqualitas.com

