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A 3-STEP WORKFLOW TO FIND THE RIGHT QUALITY MANAGEMENT SYSTEM

Whitepaper



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A 3-STEP WORKFLOW TO FIND THE RIGHT QUALITY MANAGEMENT SYSTEM

Quality is an essential element of any business and whether you specialize in automotive, medical, food and beverage, aerospace or another highly regulated industry, every manufacturer faces strict quality and customer requirements. In fact, many OEM manufacturers (such as auto makers) require a prerequisite level of quality before they will even consider you as a manufacturing partner.

In order to maintain customer satisfaction, earn a certain ISO/FDA/TS certification or court large customers, you need a quality management system to help you mitigate risk and manage your quality requirements. But when evaluating the plethora of quality management systems on the market today, how do you decide which one is best for your business? Below are three steps to help you find the software program that best fits your manufacturing needs.



Step 1: Quality Functionality Audit

The evaluation process begins by determining the functionality that you need in your quality management system. Below is a worksheet of the top 20 most common quality tools used by leading manufacturers. Review the functionality and check off the ones that your organization must have to succeed. But be sure to also consider your company's future needs: What quality functionality will you need five years from now?

Advanced Product Quality Planning (APQP)

Developed originally for the automotive industry, the APQP framework serves as a guide to the product development process.

Certificate of Conformance (CoC)

A document containing analytical results to verify that the manufactured good meets the required specifications

Corrective Action Report/Corrective Action Preventative Action (CAR/CAPA)

A process for the systematic investigation of the root causes of non-conformities in a manufactured product to prevent their recurrence or occurrence.

Coordinate Measuring Machine (CMM) Import Add-In

An application to automatically import your CMM data into your SPC module for analysis.

Cost of Quality

A tool to identify and eliminate poor quality and high production costs for tighter cost control.

Defective Parts Per Million (DPPM)

A process improvement measurement used by manufacturers to determine quality performance. One DPPM equals one defect in a million.

Device History Record (DHR)

A requirement for medical manufacturers, DHRs contain details about each batch, lot and unit produced during manufacturing.

Document Control

A document management solution that maintains critical revision controlled documents (procedures, work instructions, etc.) for adherence to quality regulations.

Electronic Signatures

An application that uses a mobile device to store hand-written signatures as part of the Bill of Lading documentation for better control of the tracking process.

Engineering Change Order (ECO)

A document outlining (typically last minute) changes in components, assemblies, specifications, processes and work instructions.

Failure Mode Effects Analysis (FMEA)

A step-by-step approach to identify all possible failures in a design, product or process.

Gage Repeatability and Reproducibility

Measurement tools to assess the accuracy of gages and operators in measuring parameters and calibrating devices.

Material Review Board (MRB)

A tool to manage the group of people who decide the proper treatment of a non-conforming material.

Product Lifecycle Management (PLM)

A program that manages the entire lifecycle of a product from inception and design through manufacture and disposal.

Product Part Approval Process/Product PQ (PPAP/PQ)

A program to help determine if all engineering design records and specification requirements are properly understood and if products are consistently meeting these requirements during production.

Quality Audit

Tools to help manufacturers efficiently audit internal and external processes and uncover crucial areas for improvement.

Return Material Authorization (RMA)

The process of returning a product for repair, replacement or refund, including both customer and supplier returns.

Serial/Lot Traceability

Through barcodes and labels, serial/lot tracking provides end to end traceability for every step in the production of a part. In highly regulated industries, such as medical, automotive and food and beverage, comprehensive traceability is a requirement.

Statistical Process Control (SPC)

In manufacturing, SPC is a methodology for measuring and controlling quality.

Workflows

An important tool in BPM, workflows automatically facilitate the routing, tracking and approval of documents and processes.

Step 2. Evaluate Fit

In step one, we evaluated functionality. Now it is time to consider fit. If quality functionality is the modules, tools and features available to meet the needs of your business, then software fit equates to how well those modules' functionalities meet the needs of your specific business type and practices. Two quality management systems can have the exact same list of functions, but behave entirely differently depending on your industry. Both functionality and fit are essential to finding the best quality management solution, so both should be given substantial consideration.

Step 3. Consider Third-Party Package Versus Comprehensive System

When purchasing quality software, there are two primary package options: a third-party program or a module within your current business management solution (typically an ERP program). While integration of third-party software into a core ERP system can work, it won't give you the end-to-end traceability and visibility required by many customers and regulatory organizations. Not to mention, the integration is typically fraught with challenges, such as duplicate data entry, information delays and silos, interface issues and customization expenses.

The alternative to a third-party program is to use the quality modules within a comprehensive ERP solution. Comprehensive is the key word here. With a complete solution that covers every aspect of your business, from EDI and sales orders to scheduling, production, quality assurance, shipping and more, you gain complete visibility into every step in your operation. Unfortunately, not all ERP solutions offer the quality functionality that manufacturers require. That is where steps 1 and 2 come into play. Understanding your functionality and fit requirements from the get go will ensure that you only evaluate solutions that offer what you need.

It may sound like a tall order to find the solution described above: Manufacturing-specific quality management software that is part of a larger ERP solution with all the functionality needed to excel. That solution does exist and the benefits of finding the right fit versus implementing a generic quality management system are well worth the search.

For more information, please visit www.iqms.com or call 1.866.367.3772

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