



"The design process should provide periodic evaluation of the design at significant stages. Such evaluation can take the form of analytical methods, such as FMEA (Failure Mode and Effects Analysis). The amount and degree of testing should be Related to the risks identified in the design plan."

IQS PRODUCT™ is critical for companies wanting to produce high-quality products. Knowing which blueprints are available, documenting the correct revisions and having a complete inventory of all product requirements will help support your quality efforts. **Product** change histories and change requests are managed. Complete **FMEA** and control plans are developed and maintained from a single file.

Why **IQS PRODUCT**?

Use it to...

- Effectively manage product specific documentation and requirements and changes to product requirements through **ECO's** (Engineering Change Orders).
- Maintain revision levels and communicate the revisions to ensure work is done to the
- Alert you as to the revision status of each product in your organization.

- Allow employees to focus on technical matters while the software tracks, inventories, schedules and performs all the time-consuming tasks involved with managing product documentation.
- Provide control plan information such as:
 - What tools are used to measure the **Product**?
 - How are we going to collect **Data**?
 - How often do I measure?
 - How many samples do I take?
- Develop and manage FMEA's: Engineering, manufacturing and quality departments will work with and maintain one system. This one system contains all key product **Characteristics** and their related data.
- Develop and manage FMEA's:
 - Manage **FMEA** items with action results and detailed information.
 - Flag **FMEA's** for review on revised products.
- Ensure compliance with quality standards such as ISO/ QS-9000/ISO 14001, etc.

PRODUCT is used for a repository of product information with inspection characteristics

Products

- Create a complete database of all part numbers and their complete revision **History**.
- **Link** to blueprint files, CAD drawings, etc.
- **Archive** revisions including all related tables and documentation.

Characteristics

- Create an unlimited number of **product** and **process** specifications that must be controlled in order to meet design intent.
- Automatically **download** them from drawings in your CAD system.
- **Characteristics** can be defined as variable with upper and lower control limits, or attribute with yes / no, go / no go, etc.

Process

- **Process flows** define operations and the characteristics they control.
- These operation characteristic combinations form the foundation of the **Process FMEA** and **Control Plan**.
- The three documents are synchronized so that edits to any one of them automatically updates

FMEAs

- Assign failure modes to **Design Item/Functions** and **Process/Function Requirements** and rank them by **Risk Priority Number (RPN)**.
- Define Effects of Failures, the Potential Causes and the Recommended **Actions** if and when they occur.

CONTROL PLAN													
Prototype				Pre-Launch				Production					
Number 01-0000 / 0102011 / Rev A						Key Contact Key / PPAP Date 4/15/2010				Date (Orig.) Prepared By Revision Level A		Date (Rev.) Approval Status	
Process Number/Latest Change Level 01-0000 / 0102011 / Rev A						Core Team gmsgmsgmsgmsgmsgms				Approval		Approval Status	
Process Description Customer Model Year 01-0000 / 0102011 / Rev A						Supplier Plant gmsgmsgmsgmsgmsgms				Supplier Plant sfsgsfsg			
Part Process Number	Process Name/ Operation Description	Machine, Device, Jig, Tool, Fixt. (Ref.)	No.	Product	Process	Special Char. Class.	Product Spec. Tolerance	Evaluation (Measurement Technique)	Sample Size	Freq.	Control Method	Reaction Plan	
OPER-10	Welding	Air Compressor	01	Height				Microbar		AL	X BAR AND R chart	Place on hold	
		Hydraulic Machine	02	Angle			3rd Angle Upper Part Hole Center	Visual Testing Device		AL	X BAR AND R chart	Return to Supplier	
		3rd Angle Cutter	03	Length				Go No Go page for Material and Inspection					
			04	Width									

Control Plans

- Define how each operation characteristic is going to be controlled.
- Manage the **equipment** required to produce your Product.
- Measuring **devices** used to measure it.
- Sample sizes, frequency of inspection and **reaction plans**.

Change Requests

- Track the employee, customer or supplier making the request, all details of the suggested change including **request date** and **response due date**.
- Automatically bring down approval lists. **Integrates** with email to provide serial and parallel workflow approval routing.
- Electronic signature on approval(s).
- Archiving system stores previous revisions.

Audits

- Ensure the product **Revision levels** on the shop floor are current and up to date with all necessary information. **Schedule** all audits to be performed on product documentation.
- Automatically calculate last and next **Audit** dates.
- Record auditor, audit date, comments.
- When appropriate escalate audit findings to **Nonconformances** and **Corrective actions**.

Reporting Capabilities

- **Crystal Reports™** from Business Objects allows for customized reports, charts and queries.
- Create and run reports such as:
 - A master listing of products with characteristics
 - A To-Do-List of FMEA action items with due date information
 - Review all change requests to a blueprint and email responses

POTENTIAL
FAILURE MODE AND EFFECTS ANALYSIS
(DESIGN FMEA)

Prototype				Pre-Launch				Production					
Number DFMEA-000000000000						Key Contact koffsfkgksgfsgfsg				Date (Orig.) 04/15/2010		Date (Rev.) 04/15/2010	
Process Number/Latest Change Level 01-0000 / 0102011 / Rev A						Key / PPAP Date 04/15/2010				Prepared By gmsfkgksgfsgfsgfsg		Revision Level A	
Process Description Customer Model Year 01-0000 / 0102011 / Rev A						Core Team gmsfkgksgfsgfsgfsg				Approval		Approval Status	
Supplier Plant gmsfkgksgfsgfsgfsg						Supplier Plant sfsgsfsg							
Process Function Requirements	Potential Failure Mode	Potential Effects of Failure	Effect Severity	Class	Potential Causes (if Mechanisms) of Failure	Occur	Current Design Controls Prevention	Current Design Controls Detection	Defect RPN	Recommended Action(s)	Responsibility & Target Completion Date	Action Results	
Enter Item/ Function data here.	More data to enter	Continued	5	5	wwwwwwwww	0	wwwwwwwww	wwwwwwwww	0 0			0	0 0 0 0
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dfuefuefuef			0	0		0			0 0			0	0 0 0 0

IQS PRODUCT Integrates with...

- ***IQS EMPLOYEE™*** - Create lists of employees assigned to approving change requests and responsible for follow-up to FMEA action items.
- ***IQS CUSTOMER™*** - Create lists of customers to which products are sold, assign and record change request approvals.
- ***IQS SUPPLIER™*** - Create lists of suppliers from which a product is purchased, assign and record change request approvals.
- ***IQS DEVICE™*** - Track measuring equipment to be used on a part throughout all operations.
- ***IQS NCM™*** - Record a nonconformance from a failed audit.
- ***ERP Systems*** - Share and synchronize the employee, customer, supplier, product and equipment tables with your ERP software to decrease redundancy in data entry and maintenance.