Windchill® FRACAS (Failure Reporting, Analysis, and Corrective Action System)

MANAGE CORRECTIVE ACTION PROCESSES TO IMPROVE PRODUCT RELIABILITY

Windchill FRACAS (formerly Relex FRACAS) provides a flexible, comprehensive tool for controlling a range of closed loop corrective action processes.

By combining a workflow control resource with powerful reliability analytics, Windchill FRACAS provides key reliability metrics side-by-side with a company-wide process to report and correct product or system failures. Also known as DRACAS, PRACA, or CAPA, a FRACAS provides analysis capabilities that are useful throughout the design, development, prototype, manufacturing, and use phases of product life. Windchill FRACAS offers a web-based interface for enterprise-wide use, global standardization, role-based permissions, and security.

Key Benefits

An Organized Approach to Failure Analysis and Correction

• Collect, quantify, and control a large number of incoming incident reports
• Track incidents from diverse sources including test data, field data, and repair data
• Spot trends and prioritize issues early using built-in Pareto analysis and automated e-mail alert notification
• Track improvements in system performance gained through your corrective actions

Available Enterprise-Wide Implementation

• Convenient Web-based user interface supports multiple simultaneous users in a zero-client environment
• Enable global standardization across the enterprise
• Configure the system workflow to match your business processes

• Develop, organize, and implement a collaborative plan to address failures and prevent their recurrence
• Role-based administration, audit trails, and other security features

Flexible Interface Supports Any Corrective Action Process

• Flexible, intuitive interface tools support a broad range of standard corrective action methods or unique, user-defined processes
• Ensure product compliance using pre-configured, industry standard FRACAS solutions, or customize forms, tables, fields and filters with the unique information needed for your organizational processes
• Customize the workflow process with just the steps and stages you need, including user-based permissions, notifications, alerts, and management oversight where required

• Incorporate all customization using wizard-based design tools requiring no programming skills

Analyze System Performance

• Powerful analytics engine generates quality and reliability metrics, enabling you to measure system performance

• Output results directly to Windchill FMEA to reflect real-world performance, or generate a life data set for use in Windchill Weibull

Incorporate Windchill FRACAS into change management

With a connection established between the PDMLink BOM and a system tree in Windchill FRACAS, problems logged in FRACAS may be escalated to the Windchill change management workflow, ensuring an enterprise-wide, closed-loop process to address FRACAS problems and further integrating QLM and PLM functionality. This functionality includes:

• Launch a new CAPA request, change request, or problem report from inside Windchill FRACAS, when additional root cause analysis is required (problem report), when leveraging change management processes (change request), or when high-risk issues require closed-loop verification of change effectiveness (CAPA request)

• Automatically associate the new artifact with the corresponding parts and systems in the Windchill BOM against which the problem was originally logged in Windchill FRACAS

• Leverage the dynamic, real-time connection between FRACAS and change management to view the current status of associated request(s)

Features and Specifications

Preconfigured Solutions

• CAPA
• FRACAS
• RMA

Process Types Supported

• 8D process

• Nonconformance
• Reliability analytics
• COPQ improvement
• Customer quality and complaints
• Safety incidents
• Field failures
• Service and support
• Internal quality
• ISO 9000 compliance
• Software defects
• Maintenance optimization
• Supplier quality
• Manufacturing defects
• Testing issues
• Warranty analytics
• Failure Review Board

Supported Calculations

• Failure Rate
• MTBF
• MTTR
• MTBCF
• MTBM
• Custom MTB calculations
• Availability
• Cost
• User-defined

Sample Analysis Outputs

• Pareto of top (n) issues per assembly
• Actual MTBF per assembly
• Trend studies
• “Lemon” identification
• Issues per customer
• Issues per supplier
• Maintenance metrics
• Top (n) warranty cost drivers
• Pareto of top (n) incident causes
• No fault found summary
• Total cost per problem
• Failure review board (FRB) agenda/minutes
• Corrective Action Time to Close

Corrective Action Process Support Management Tools

• Alert notifications
• Role-based security
• Workflow emails
• Data queries

Integration Options to Obtain Data from External Systems

• Manual
• Scheduled
• Dynamic (real-time)

Input and Output Data in a Variety of Formats

• Easily import from or export to commonly used formats like Microsoft Excel, Microsoft Access, XML, and plain text files
• Create reports in Microsoft Word, Microsoft Excel, Adobe PDF, and Rich Text Format (RTF)
• User-definable, wizard-driven custom graphs and reports
• Dynamically link to other Windchill Quality Solutions modules, such as Windchill Prediction, Windchill FMEA, Windchill RBD, and Windchill Weibull

Available Web Interface Powered by Microsoft Silverlight

• Available zero-client, web-based interface provides for data entry and analysis anywhere, anytime; also supports out-of-browser installation
• Fully-featured Windows functionality and familiar Windows interface look-and-feel for easy usability

Access data and system metrics from a web-based Dashboard interface for management-level overview

• Fully customizable start page with drag-and-drop controls includes reports, tables, graphs, rich text control, insert incident, favorites, links, announcements, recent files, workflow items, etc.

Available Enterprise-Class Features

• Multi-user environment with login permissions, security features, administrator control, and audit trail functionality
• Database integration at enterprise level supports Microsoft SQL Server 2000, SQL Server 2005, SQL Server 2005 Express, SQL Server 2008, SQL Server 2008 Express, Oracle 9i, Oracle 10g, or Oracle 11g
• Feature-rich FlexNet license management tool
• Integration with Windchill PDMLink ensures a single, up-to-date version of the product BOM
• API support enables improved integration with existing business systems, including data entry or lookup without opening Windchill Quality Solutions

Supported Languages

• English, French, German, Japanese, Korean, Russian, Simplified Chinese

For More Information

For more information on Windchill FRACAS, please visit:
Ptc.com/products/windchill/fracas

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