Windchill® Maintainability

## PREDICT REPAIR TIMES TO MEET SYSTEM AVAILABILITY OBJECTIVES

Windchill Maintainability (formerly Relex Maintainability Prediction) uses an industry-standard approach to organize maintainability analyses and to calculate a full range of maintenance related metrics.

By offering an organized approach to defining system repair properties, Windchill Maintainability provides an efficient framework for performing maintainability analyses. Based on globally accepted standards for reliability and maintainability predictions, Windchill Maintainability helps ensure you remain fully compliant. By analyzing the repair metrics of your system, you can accurately predict repair times, minimize downtime, and increase system availability.

Key Benefits

Fully Compliant

• Windchill Maintainability is based on the accepted standard for maintainability predictions MIL-HDBK-472, Procedures 2, 5A, and 5B

• Incorporates these methodologies into an easy-to-use, functional framework to help organize your analysis process

• Supports Fault Detection and Isolation (FD&I) outputs

• Defines repair tasks at any level assigned by the analyst: extremely detailed or higher level, functional repairs

• Supports Maintainability Group definition for Procedure 5A including fault isolation methodology and reassembly parameters

• Export data from Windchill Maintainability into an MIL-STD-1388 2B LSAR compatible format.
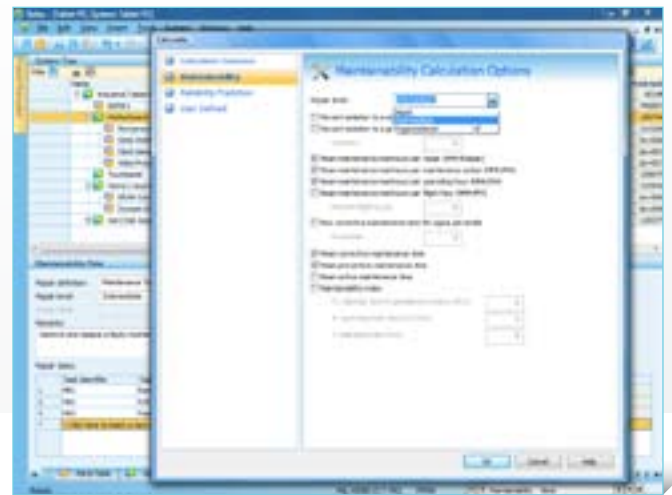
Windchill Maintainability supports a wide range of parameter results, from high level replacements down to specialized repairs.

Industry-Standard Task Libraries Provided

• Includes a task library taken directly from the MIL-HDBK-472 standard on maintainability

• Store component parts and assemblies in a searchable library with drag-and-drop functionality

Supports a Comprehensive Set of Calculations

• Calculates maintenance parameters including Mean Time to Repair (MTTR), Mean Corrective Maintenance Time, Mean Preventive Maintenance Time, and Maximum Corrective Maintenance Time

• Performs calculations using Percent Isolation to a Single Replaceable Item, Mean Maintenance Manhours per Repair, Mean Maintenance Manhours per Operating Hour, Maximum Corrective Maintenance Time, and Mean Time to Repair (MTTR)

- Use Fault Detection and Isolation files to identify maintenance procedures that should be followed based on bit indication, meter readings, or other symptoms

Supports User Definitions

- Use provided standards, or adapt to the needs of your analysis

- Add to the supplied task library or create your own task libraries

- Create and define custom repair levels, adding to the supplied repair levels Depot, Intermediate, and Organizational, to best represent your organizational processes.

Features and Specifications

Repair Levels Supported

- Organizational
- Intermediate
- Depot
- User-Defined

MTTR Elements Supported

- Preparation
- Fault isolation
- Disassembly
- Interchange
- Reassembly
- Alignment
- Checkout
- Startup

Task Library Items

- Connector, various
- Fastener, various
- Latch, various
- Plug-in-module
- Terminal connection
- Adhesive
- Conformal coating

- Display lamps
- Drawers
- Panels
- Soldering
- Threaded Connector

Supported Calculations

- Mean time to repair (MTTR)
- Percent isolation to a single replaceable item
- Percent isolation to a group of replaceable items
- Mean maintenance manhours per repair
- Mean maintenance manhours per maintenance action
- Mean maintenance hours per operating hour
- Mean maintenance hours per flight hour
- Maximum corrective maintenance time
- Mean preventive maintenance time
- Mean active maintenance time
- Mean corrective maintenance time
- Maintainability index
- Availability
- Preparation time
- Isolation time
- Disassembly time
- Interchange time
- Reassembly time
- Alignment time
- Checkout time
- Startup time

Task Types Supported

- Interchange
- Replace
- Remove

Sample Analysis Outputs

- Maintenance tasks
- Maintenance calculations by item
- Fault detection and isolation outputs

- MTTR per repair level

- Mean corrective maintenance time per item

- Mean preventive maintenance time per item

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 LCC, Windchill RBD, and Windchill Prediction

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

Supported Languages

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

For More Information

For more information on Windchill Maintainability, please visit: PTC.com/products/windchill/maintainability