

Relex Maintainability Prediction

Predict Repair Times to Meet System Availability Objectives

Using an industry-standard approach to organize maintainability analyses, Relex Maintainability Prediction calculates a full range of maintenance related metrics.

By offering an organized approach to defining system repair properties, Relex Maintainability Prediction provides an efficient framework for performing maintainability analyses. Based on globally accepted standards for reliability and maintainability predictions, Relex Maintainability Prediction 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

- Relex Maintainability Prediction 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 Relex Maintainability Prediction into an MIL-STD-1388 2B LSAR compatible format.

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

The screenshot displays the Relex Maintainability Prediction software interface. It features several overlapping windows, each containing detailed data tables. The primary window shows a list of repair tasks with columns for Part Number, Ref Des, Qty, Failure Rate, Repair Level, Repair Description, Time, and Mean Time. Other windows provide summary statistics, including 'Maximum Corrective Maintenance Summary' and 'Mean' values. The interface is clean and professional, with a blue header and clear data presentation.

Relex Maintainability Prediction supports a wide range of parameter results, from high level replacements down to specialized repairs.

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

Repair Levels Supported

- Organizational
- Intermediate
- Depot
- User-Defined

MTRR Elements Supported

- Preparation
- Fault isolation
- Disassembly
- Interchange
- Realignment
- 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 removable item
- Percent isolation to a group of removable 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
- User-definable, wizard-driven custom graphs and reports
- Dynamically link to other Relex analyses, such as Reliability Prediction, OpSim, or Life Cycle Cost

Available Enterprise-Class Features

- Enterprise Edition supports a multi-user environment with login permissions, security features, administrator control, and audit trail functionality
- Database integration at enterprise level supports Microsoft SQL Server 2008, Oracle, Microsoft SQL Server Express, and Microsoft Jet Engine (Access compatible)
- User-specific login page provides system-wide announcements

For More Information

For more information on Relex Maintainability Prediction, please visit: www.relex.com/products/maintpred.asp

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