

Windchill® LCC (Life Cycle Cost)

ANALYZE THE LIFETIME COST OF A PRODUCT

Windchill LCC (formerly Relex Life Cycle Cost) provides user-defined cost breakdown analysis throughout the life of a product, including design, manufacturing, maintenance, and warranty.

Used to calculate the cost of a product over its lifetime, Windchill LCC combines industry-standard or user-defined cost and work breakdown structures with a flexible equation editor to provide complete control over your life cycle cost analyses. Consider alternative designs, incorporate a range of variable types, and calculate sensitivity. Useful throughout design, development, manufacturing, and use, Windchill LCC can meet your cost analysis needs during any phase of product life.

Key Benefits

Comprehensive Life Cycle Cost Analysis Tools

- Accounts for many different types of costs, including design, production, warranty, repair, and disposal
- Supports parametric, analogy, bottom-up, and direct cost analysis calculation types
- Calculated costs include total lifetime cost, sensitivity calculations, and Net Present Value (NPV) calculations
- User-defined cost equations and variables allow for customized calculations
- Include design and development costs such as system planning and concept design, preliminary system design cost
- Include manufacturing and use costs such as product costs, maintenance costs, and disposal costs



Windchill LCC computes overall system costs as well as line-item costs.

Intuitive Interface Supports Cost Calculations

- Provides a Cost Breakdown Structure (CBS) to account for any cost
- Provides templates based on industry standards for automotive purchasing, battery storage, and manufacturing equipment
- Create your own CBS to meet your company or industry needs

Flexible Equation Definition

- A built-in equation editor assigns calculation properties to elements in the cost breakdown structure
- Select from pre-existing equations, define your own variables, or define your own equations
- Create simple or complex equations
- Define variables as changing over time, over design alternatives, or both
- Augment your equations with time, date, and common math functions
- Construct analyses for very detailed repair costs through to very high-level functions

Dynamically Link with Other Windchill Quality Solutions Modules

- Dynamically link variables in equations to calculated results from other reliability analyses
- Link with failure and repair rates from Windchill Prediction
- Link with availability and downtime costs from Windchill RBD

Features and Specifications

Supported Calculations

- Cost
- NPV (Net Present Value)
- Cost percentages
- NPV percentages
- Sensitivity analysis

Sample Constant Variables

- Days of operation
- Months in year
- Transportation cost
- Unit price
- Utility per day
- Warehouse cost
- Consumables
- Consumable supplies

- Electricity
- Maintenance contracts
- Salaries
- Transportation
- Transportation allowance
- Miles per year

Sample Varies by Alternative Variables

- CM (Corrective Maintenance) cost
- Inspection testing
- Labor cost
- Manufacturing cost
- Material cost
- Material handling
- MTBF (Mean Time Between Failures)
- Operating cost
- Packaging
- PM (Preventive Maintenance) cost
- PM (Preventive Maintenance) interval
- Production per year
- Quality control
- Insurance per year
- Miles between tune-ups
- Miles per gallon
- Purchase cost
- Salvage value

Sample Varies over Time Interval Variables

- Batteries
- Battery replacement
- Facilities
- Financing
- Load interface
- Monitors
- Power conversion
- Project management
- Start up

- Taxes
- Gas price

Sample Varies by Alternative and Time Interval Variables

- Purchase price
- Salvage value
- Cost per maintenance
- Initial cost
- Insurance cost

Sample Analysis Outputs

- Total system cost
- Cost per assembly
- Percentage costs
- Sensitivity results

Input and Output Data in a Variety of Formats

- 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 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
- Available integration with the Windchill PDMLink bill-of-materials 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 LCC, please visit:
PTC.com/products/windchill/LCC

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