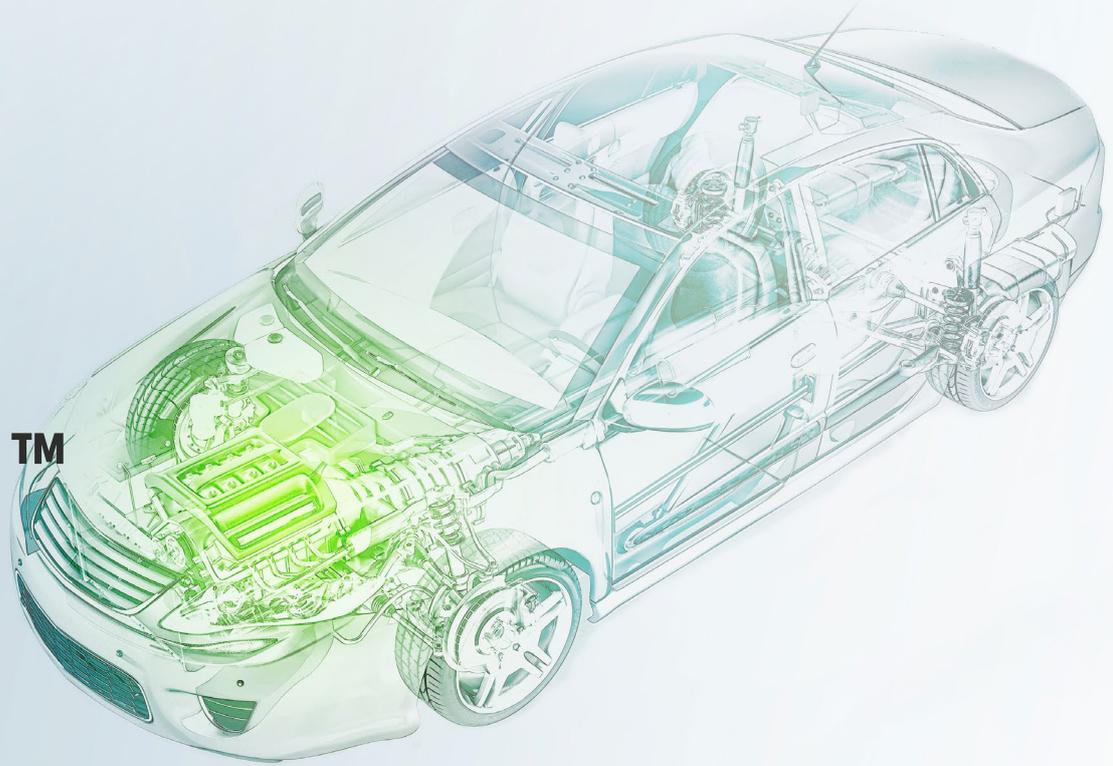


Uptime LOCATE™



Supporting your product validation process

Uptime LOCATE™ is a software application developed to support the product validation process. Advanced model based analytics are applied to time-series data and statistical values are derived to evaluate the quality of validation programmes. Expected product usage (customer duty cycle) and connected reliability targets are taken into account.

Uptime LOCATE™ aims at identifying the highest reliability risks during the product development and reducing them by appropriate methods. If required, warranty cost predictions can be derived. The systematic approach is a great benefit especially for large and decentralised product development teams.

+ Benefit 01

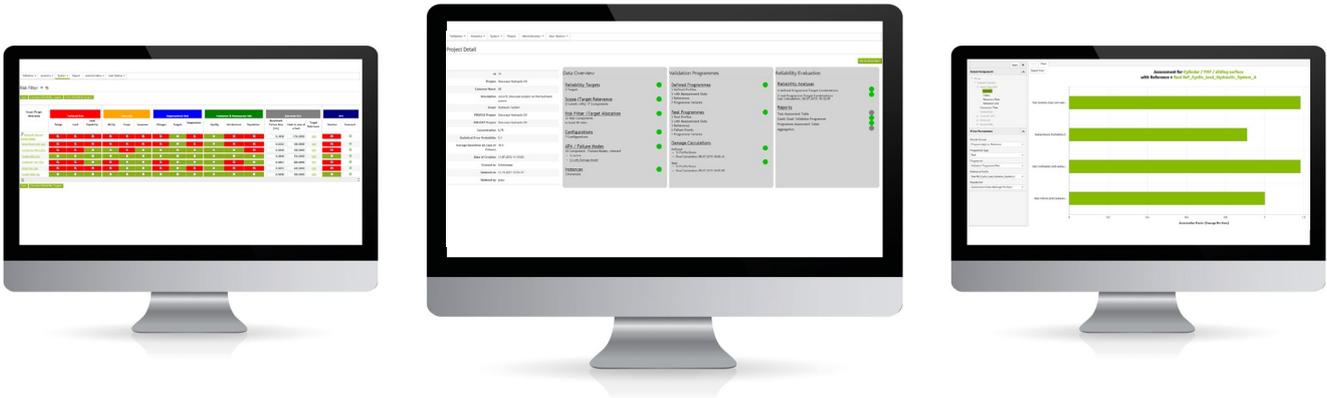
Uptime LOCATE™ provides a single tool for the planning, execution and monitoring of testing activities during the product validation process, with respect to reliability. The software amongst others supports the validation of product variants for various markets and diverse customer duty cycles.

+ Benefit 02

Uptime LOCATE™ integrates test design(s) with respect to customer duty cycles and targets. It offers the option to create a knowledge base on failure mechanisms. Scenario evaluations for an optimized validation programme can be run with Uptime LOCATE™.

+ Benefit 03

By implementing Uptime LOCATE™ a reliability centred product validation process can be established. For the efficient management of the quantitative evaluations various KPIs, spreadsheets, drill-down GUIs are available in Uptime LOCATE™ and the achievement of final targets can be controlled.



Planning

Uptime LOCATE™ simplifies the life of a product development team that is seeking to integrate product requirements, and reliability, durability relevant into their product validation process. The software provides the product development team with a common platform to efficiently plan the product development process to uncover any potential risks. For a successful planning, the definition of a product

reliability target, documentation of testing activities incl. test durations and test sequences and well defined project responsibilities and milestones (e. g. Q-gates) are essential. Based on Uptime's extensive experience with the product development process, design methods are applied to uncover the potential of a joint development between OEM and suppliers.

Features

- ✓ **Reliability risk assessment and Risk based target allocation** to components, subsystems and the overall product
- ✓ **Damage modelling** with physics-of-failure models
- ✓ **Calculation of test accelerations** for known failure modes and optimization of test procedures
- ✓ **Coverage of unknown failure modes** by representative testing
- ✓ **Validation programme assessment** compared to defined duty cycles at defined project milestones
- ✓ **Evaluation of reliability demonstration level** with statistical methods
- ✓ **Estimation of expected failure rates** through consideration of technical expertise, production risks, time lines and organisational aspects
- ✓ **Aggregation of reliability estimation** from component to the overall system level
- ✓ **Reporting** to management and engineering staff for a continuous and effective progress monitoring

