SF SMARTPRODUCTION

ROIM ® - RISK ORIENTED INSPECTION AND MAINTENANCE

Optimization of Repair and Maintenance Intervals

Globalised and deregulated markets result in an increased competition and cost pressure for business enterprises and do force them to search for new possibilities to reduce operation- and maintenance costs of technical facilities. The focus of companies is on the preservation of safety and reliability for the production plants..

Optimized Maintenance with Risk Assessment

A sound basis for decision making in the field of repair- and maintenance optimization comes from reliability and risk assessments in relation with information coming from the documentation of the suppliers, recommendations of experts as well as physical model calculations. With the consideration of safety-, HSE and governmental aspects it is possible to improve currently defined maintenance intervals to save costs as well as minimize downtimes of machines and equipment.
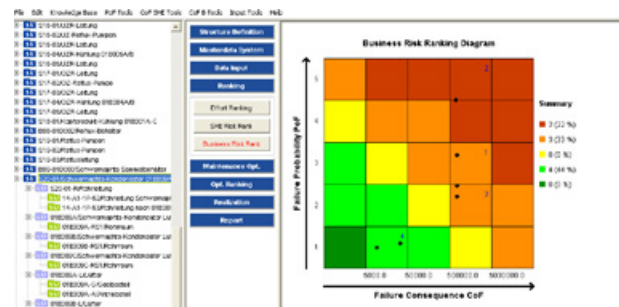
Software Factory developed on behalf of TUEV Services South GmbH a software solution, which supports enterprises in the creation of risk analysis and can be used as basis for assessments of "risk oriented maintenance".

Based on the technical data of the facilities reports based on the parameters "probability of failure" and "consequence of failure" are generated. Based on these reports the risk for each component is automatically computed. Subsequently an assessment of the cost under consideration of the consequences in regards of health, safety and ecology (HSE).

The result is generated in a risk matrix which displays the critical components. These are the areas for an optimization of the inspection and maintenance. The solution is realized as a pure JAVA application and uses a MySQL database..

Features

- Representation of complete facilities (system, components, sub-components)
- Definition of Event (function failure, damage and aging mechanisms)
- Definition of risk categories
- Administration of inspections

Risik representation in a risk matrix

- Master data maintenance on client, assets and assets areas level.
- Visualisation of lifecycle of the components
- Calculation of failure probability
- Graphical Representation of risk ranking and optimised risk ranking.
- Administration of documents and instructions
- Internationalisation (incl. currency and SI-units)
- Export/import to XML, CSV and Excel
- Reporting functions
- Multi client capability
- User and role administration

Summary

- Automated calculation of component-related risk
- Risk representation in a risk matrix to allow detection of critical components