Honeywell Solutions for Corrosion Risk-IT™ 2.0
Product Information Note

Framework for Risk and Integrity Analysis of Plant and Pipeline Facilities

Risk-IT provides a framework to achieve two primary objectives of Risk Based Inspection:

- Archive critical facilities’ equipment information for purposes of inspection prioritization and analysis.
- Quantify risk and consequence issues related to surface facilities as a function of potential for occurrence of all likely equipment failure mechanisms, and a basis to plan against failure-related losses (con- sequence analysis).

BenEFITS

- Provides an easy solution to characterize and evaluate complex risk-based inspection processes.
- Incorporates substantial expertise for corrosion and degradation assessment, inspection planning and RBI analyses.
- Provides a pathway to encourage a consistent approach to company-wide RBI implementation.
- Intuitive interface simplifying the process of data capture and analysis, enabling substantial cost and time savings over and above traditional manual RBI tasks.

Risk-IT is a software tool for automating Risk Based Inspection (RBI) and is designed for use by operational personnel to quantify and manage risks while prioritizing equipment inspection to ensure optimum equipment service life and safety.
Risk-IT encapsulates real-world data and experience related to RBI-based evaluation of facilities equipment in oil and gas industry applications. The data for Risk-IT stemmed from studies of failure probability related to corrosion and cracking mechanisms - relationships have been identified and developed, and the resulting probabilities and failure consequences are integrated within Risk-IT to facilitate rank ordering and RBI.

While Risk-IT captures industry-standard API 581 risk-based inspection and mechanical integrity program guidelines, it is designed as a framework that can be customized to address specific equipment service data and company-specific requirements for risk analysis and inspection planning.

**Risk-IT In Use**

Risk-IT data and processing modules include:

- Determination of probability of failure based on critical corrosion, cracking and mechanical failure mechanisms (16 mechanisms)
- Integration of probability and consequence of failure
- Quantified evaluation of environments, equipment and materials based on multiple engineering parameters and a complex risk rating generation model
- Ability to generate risk ranking and inspection planning matrices, per API 581
- Risk sensitivity analysis

Based on the input data, Risk-IT outputs the following key analyses:

- System pH
- Environment Severity Matrix (ESM)
- Equipment Damage Matrix (EDM)
- Material Resistance Matrix (MRM)
- Failure Mechanism, Likelihood, Likelihood Category
- Consequence, Consequence Category
- Risk Cost, Risk Category

Risk-IT is compatible with Microsoft® Windows-based workstations and networks.

Licenses are available for single and network (multiple) users.
Honeywell Predict® Corrosion Suite

Honeywell Predict Corrosion Suite provides next generation corrosion management solution or oil and gas and refining industries seeking to move from reacting to corrosion damage to a more proactive and effective approach. Honeywell Predict Corrosion Suite provides the next generation of corrosion management solutions. Unlike conventional corrosion management methods, we employ unique prediction models that encapsulate deep expertise and extensive process data to correlate corrosion rates to specific process units, damage mechanisms, and operating conditions. Using Honeywell’s tools, global major companies have achieved significant operational and business benefits.

The Honeywell Predict Corrosion Suite is a unique solution for today’s industrial facilities, driving a paradigm shift in tackling difficult corrosion problems, and enabling efficient and safe operations. These software tools help users move away from a reactive response to corrosion based on qualitative, manual inspections, to a proactive, reliability-centric predictive approach based on quantitative information from soft sensors, sound process deviation management, and “what-if” scenario analysis tools.

Why Honeywell?

Your operation can benefit from partnering with a proven leader in corrosion asset integrity and preventive/predictive corrosion management. Honeywell has extensive intellectual property in the corrosion field, including unique corrosion prediction and material selection models, and patented corrosion monitoring technology. Our deep expertise includes an in-house team of experts with decades of experience in developing corrosion solutions. Honeywell’s IP-based models are licensed and used by many global oil & gas majors, and our company has a recognized track record of world-class execution of projects.

Honeywell has also established a unique corrosion knowledge community through our Center of Excellence (COE). We assist customers with expert local and remote support. Our state-of-the-art corrosion and materials research and engineering laboratory provides a host of standard and tailored services. Utilized in Joint Industry Programs and customized testing, this facility can simulate any service environment.

For More Information

Learn more about Risk-IT, visit our website www.honeywellprocess.com/software or contact your Honeywell Account Manager, Distributor or System Integrator.

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