

11 THINGS TO CONSIDER WHEN SELECTING RBI SOFTWARE

1 APPROACHES

The software should provide flexibility between qualitative to fully quantitative assessments.

2 STANDARDS LIBRARY

Different standards & material properties within the software library (ASME, BS, JIS, etc.) should be available.

3 ASSESSMENTS & CALCULATION METHODS

The software should be applicable to onshore and offshore assets, considerations for consequence calculations based on user's requirement. Capability to perform standard based calculations such as API 581 and/ or customize calculations.

4 CUSTOMIZATION

Customization options based on user's own methods for performing analysis other than standards should be considered.

5 DAMAGE MECHANISMS LIBRARY

Standard published or user's own degradation or failure mechanism data (parameters and logics for selection) shall be incorporated in the software.

6 INTEGRATED INSPECTION DATA MANAGEMENT

While this is not a mandatory requirement, it helps improve efficiencies, data analysis, and reporting in overall asset integrity management as well as simplifying RBI assessments.

7 INTEGRATION WITH CMMS/ ERP

This is a major requirement as this will automate the inspection related work order / notification system.

8 CAPABILITY TO HANDLE LARGE DATA

Some software tools have limitations to the number of tags they can handle. An estimate of the number of tags to be used in RBI vs the software's capacity should be considered.

9 USER ROLES

Software should be capable of defining user roles and their rights for performing assigned tasks and levels of software access.

10 OUTPUTS & REPORTING

Importing and exporting data to and from spreadsheets and word documents/PDF etc. is very helpful and should be a part of the software capabilities. Graphical representation of risk and other metrics to be used for RBI should also be considered.

11 CLIENT/ SERVER OR WEB-BASED

Web based software tools are easier to handle from the IT point of view when compared to the Client/Server based systems. IT should evaluate this criterion and recommend a suitable system from the organization's perspective.

Reference: Roadmap for Effective Risk-Based Inspection Implementation By Asad Ali, Senior RBI Engineer at ADNOC LNG, and Houssam Sabry, Manager of Corrosion and Inspection at ADNOC LNG at ADNOC LNG. This article appears in the January/February 2019 issue of Inspectioneering Journal