Risk-based inspection is now well established and extensively used in process industries for assessing equipment risks and planning inspections. Synergi Plant has multiple RBI modules: onshore plant, storage tank, offshore topside, and power plant RBI with embedded industry standards and configurability.

Key benefits

- Identify critical equipment, reduce risk exposure and improve plant reliability
- Optimize inspection intervals and methods without compromising asset safety and integrity
- Systematic and evidence based process and technical evidence for extending periodic maintenance period and asset life
- Flexible implementation of RBI projects with or without enterprise integrity management systems
- Flexible assessment of process risks, including qualitative, semi-quantitative or quantitative analysis
- Follow standard RBI methodologies or user-defined bespoke methods

Customers

The RBI module is used by more than 100 companies worldwide, including various types of oil and gas and process plant operators, EPC contractors, consultants, inspection service providers and educational and research institutions. It is a proven software tool for implementing risk-based inspection and integrity management in the industry.

“We recognized that Synergi Plant’s RBI module was superior to and more systematic than other analysis software.”

Mr Dong-Hun Yang, Inspection & Reliability Engineer at GS Caltex, South Korea.
Features

- Includes methods for qualitative, semi-quantitative and quantitative RBI
- Flexible workflow to support different levels of data readiness
- Detail calculation in quantitative modules for probability of failure, consequence of failure
- Calculation available for financial risk, cost benefits and optimization
- Supports wide range of damage mechanisms with damage identification
- Produces optimized risk-based inspection plan
- Comprehensive and expandable construction materials and fluid chemical database
- Works with Synergi Plant asset, inspection and integrity management modules in one database
- Works with Synergi Plant web platform to support web-based RBI data input, result sharing and KPI graphics
- Allows you to independently perform offline RBI studies or implement integrity management by phases
- User-friendly features, including grid editing, easy data export/import, reports with drill-in, etc
- Multi-language capability, including English, Chinese, French, etc

Multiple RBI solutions

- RBI Onshore is based on API 580/581, mainly used for onshore process plant RBI projects
- RBI Offshore is based on DNVGL-RP-G101, mainly used for offshore topside RBI projects
- RBI Power Plant is a specific variance for the power industry
- RBI AST for detailed RBI of multi-course atmospheric storage tanks that are part of a process plant, storage tank farm or terminal
- RBI Bespoke is for consultants and end users to configure their own RBI methodologies