



RISK-BASED INSPECTION STUDIES

Preventing shutdowns and protecting the environment.

In today's highly competitive market, it has become a priority for continuous operations to avoid any unplanned shutdowns. Additionally, worldwide regulatory incentives are also pushing for improved risk management aimed at protecting the environment and citizens from major industrial hazards. Organisations are required to ensure that their equipment is safe, reliable and does not create threats to the surrounding environment.

An integral part of the development of the RBI system is the RBI process and Carab Technologies can assist clients to develop an RBI methodology based on international standards aligned to client specific needs and RBI software. In South Africa, Carab Technologies can also assist clients to develop an RBI management system ready for verification by a certification body, accredited by the local accreditation authority.

Carab Technologies can also offer support to our clients in the implementation of RBI at their facilities by providing services in the following:

- Data collection and analysis
- Identification of process streams and corrosion loops
- Database population and risk assessments
- Risk reduction through the selection of an adequate inspection strategy and other mitigating activities

Our involvement can vary from full implementation and management of the program to partial involvement, such as facilitation of the RBI assessments.

Key benefits

- Increased knowledge of equipment that may pose a potential risk;
- More reliable equipment and plant operation;
- Increased safety;
- Cost optimisation while substituting non-invasive inspection techniques;
- Possibility to tailor shutdown scope;
- Option to extend run lengths where applicable national regulations permit it;
- Increased teamwork during the implementation process; and
- Development of a knowledge database, including equipment design, process features, damage mechanisms and inspection strategies.



Related services

- Pipeline integrity management (PIMS)
- Structural integrity management for fixed steel structures
- Fitness for service (FFS) assessments
- In-service inspection, including shutdowns
- Machinery diagnostics and troubleshooting
- Operating and maintenance procedures
- Asset maintenance strategies and plans