

Reliability Based Maintenance (RBM)



Proactively Maintain and Optimize the Performance of Valuable Plant Assets

OVERVIEW

KBR's RBM solution helps organizations implement and practice a maintenance strategy focused on asset reliability to increase equipment lifespans and optimize savings.

The solution develops a corporate-level maintenance strategy intended to optimize the overall maintenance program of an organization or facility. The end objective is to implement an all-encompassing maintenance strategy for each of the critical assets at the facility to improve plant productivity and ensure that it is maintained using cost-effective maintenance techniques.

KEY OBJECTIVES OF RBM



VALUE DRIVERS

- Well established industry proven criteria to perform asset prioritization and shortlist critical assets
- Ready to use library of FMEA and condition monitoring indicators for major assets in process industry
- Successful track record of RBM implementation and support for existing customers and repeat orders from them
- KBR's product agnostic approach to select the right product and its modules based on the customer's existing and desired architecture
- Solution design is based on the KBR's several decades of experience in plant operation and maintenance

BENEFITS

- Minimize overall outage hours (planned and unplanned)
- Maximize production output
- Increase asset efficiency
- Reduce maintenance costs
- Reduce cost of quality
- Reduce risk, environmental and safety impact
- Improve overall equipment effectiveness (OEE)
- Improve asset replacement cycle

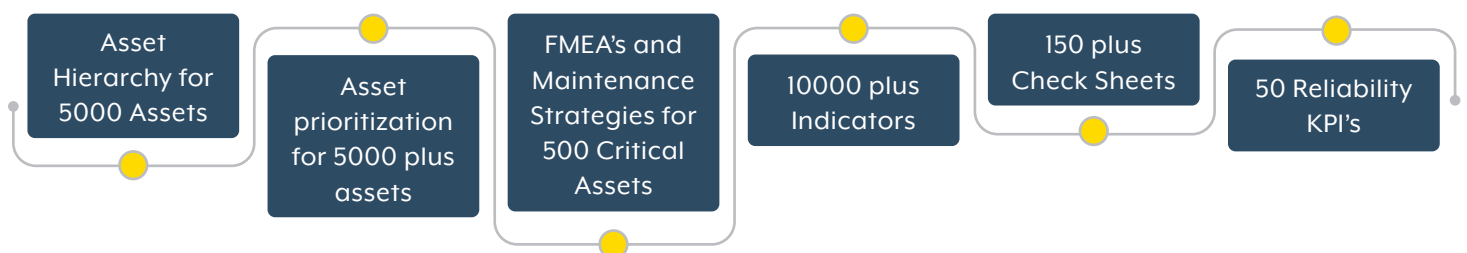
ABOUT THE SOLUTION

The Reliability module is the backbone of an RBM solution. The pre-requisite modules include Computerized Maintenance Management System (CMMS) and historian, with multiple add-on modules such as 3D Asset Visualization, AI-ML based Predictive Analytics and Smart Inventory.

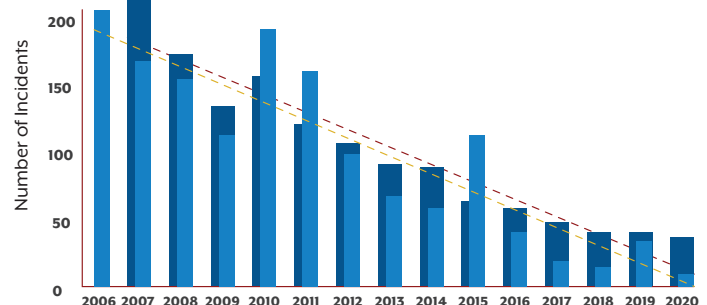
Once the plant asset hierarchy is defined in ERP EAM, the primary step in RBM is to perform asset prioritization and identify critical assets for which maintenance strategies needs to be defined. Industry proven methodologies such as MTA or RCM are used to perform FMEA and to develop action plans that includes creation of indicators with normal and abnormal states defined in the reliability module and preventive maintenance tasks creation in EAM.

Once the action plans are deployed into production, the indicators start collecting data from their respective source, the plant operators can observe the indicators status in the RBM dashboard. When an indicator of an asset deviates from the normal range, an alarm is triggered which notifies the operator. He can generate a request for work in EAM, and if required a failure record is generated and RCA is performed.

KBR RBM SOLUTION HAS FOLLOWING DEVELOPED LIBRARIES FOR AMMONIA PLANT:



FINANCIAL BENEFITS REALIZED BY A MANUFACTURING PLANT



Quantity of Reliability Incidents decreased by over 5 times

Financial Impact (losses) from Reliability Incidents was reduced over 14 times. Over USD 161 min was saved

About KBR

ABOUT KBR, INC.

We deliver science, technology and engineering solutions to governments and companies around the world. KBR employs approximately 28,000 people performing diverse, complex and mission critical roles in 34 countries.

KBR is proud to work with its customers across the globe to provide technology, value-added services, and long-term operations and maintenance services to ensure consistent delivery with predictable results.

At KBR, We Deliver.

WWW.KBR.COM

CONTACT US

To know more about KBR RBM please contact us at TLIS@kbr.com

Follow us on social media:



© 2022 Kellogg Brown & Root LLC.
All Rights Reserved 01/2022