Optimized Risk-based Inspections for US-based Fortune 500 Downstream Major
Client
The client is a leading US-based Fortune 500 downstream major that owns 12+ refineries, with a total capacity of 2.0+ million barrels per day, and 18,000+ miles of crude and product pipelines.

Business Challenges
- Unplanned shutdowns due to too many incidents of leakages & hydrocarbon releases
- Lack of adequately defined RBI (Risk-based Inspections) programs & processes leading to time-based inspections
- Need for an integrated system that could minimize the unproductive time spent in not only gathering the necessary data & documentation, but also the post inspection analysis

Solution Highlights
- Establishment of the basis for managing risks through methods, coverage and frequency of inspections based on API RP 571 and WRC 489 Standards
- Definition of RBI processes including definition of what is acceptable risk and movement from time-based programs to risk-based programs
- Definition, quantification and ranking the risk of process equipment failure to target the most important elements in a process plant
- Establishment of a system for maintaining documentation, personnel qualifications, data requirements, consistency of the program, and analysis updates
- Integration of the RBI program into the MOC program and maintenance management system

Business Benefits
20% reduction in maintenance costs due to optimized risk-based inspections
Extended inspection intervals, reduced inspection scope and increased equipment availability and reduced turnaround exposure
Prioritized allocation of inspection resources to high risk equipment, leading to systematically reduce the likelihood and consequence of failure