MECHANICAL INTEGRITY

Never has the need for an effective Mechanical Integrity program been more important. How effective is yours?

INTEGRITY GAP ASSESSMENT

The Equity Engineering Group, Inc. (E2G) Mechanical Integrity Gap Assessment delivers the answer.

Increasingly, plants are finding that MI programs are not only a compliance issue (where regulated), but also good business – improved safety, improved reliability, improved environmental protection. An effective MI program is good for the bottom line and good for the company’s reputation.

The E2G MI Gap Assessment evaluate the current state of the MI program at your location (Site; Company; Unit; and Special Types of Equipment such as Tanks; Heat Exchangers; PRDs, etc.). This assessment evaluates for compliance with OSHA PSM-MI; evaluates against industry Best Practices; and recommends a clear path forward to compliance and/or business improvements.

COMPLIANCE AT PSM SITES, GOOD BUSINESS - BEST INDUSTRY PRACTICE

E2G is recognized experts in the field of asset management.

The MI team includes world-class subject matter experts (SMEs) in all aspects of the equipment life cycle with extensive industry experience.

BENEFITS OF AN E2G GAP ANALYSIS

An E2G Gap Analysis identifies compliance and best practice gaps. Facilities are informed of current industry best practices such as RBI and Non-Intrusive Inspections, preventative and predictive maintenance, efficient and effective risk, and cost reducers.
A TIERED APPROACH
Gap Assessments are offered as a tiered approach, depending on need and budget.

METRIC ASSESSMENT
A low-cost, high-value 1 to 2 day general assessment of basic MI practices at the site (design documents, procedures, inspections, maintenance, and repairs). Consists of a team of 1 or 2 subject matter experts.

FOCUSED ASSESSMENT
Detailed Best Practice Gap Assessment on specific areas
- Equipment: Tanks, Heat Exchangers, PRDs, Critical Valves, Critical Flanged Joints
- Processes: HF Alky, Ammonia, LDPE
- Damage Mechanisms: CUI, Piping Vibration, HTHA

SPECIAL EMPHASIS ASSESSMENT
Programs needing additional IT&M or Design Considerations:
- Pipelines (gas and liquid)
- HF Alkylation
- Liquefied Petroleum Gas
- Ammonia
- Chlorine
- Fuel Ethanol
- High-Temperature Hydrogen Attacks
- Sulfidation
- Critical Flanged Joints
- Critical Valves
- Small Bore Piping
- Corrosion Under Insulation
- Piping Vibration
- Injection Points and Dead Legs
- Heat Exchanger Reliability

INITIAL GAP ASSESSMENT
Site Assessment of Status of Current MI Program at an individual site or corporate level.
- Review/assess documentation, inspection, testing and maintenance programs, training, procedures, and other MI
- Consists of a small team of SMEs and Inspection Specialists
- Typically consists of a 2 to 5 day site visit

Results
- Report solutions to those MI gaps – agreed plans/schedules to make improvements
- Compare across Corporation – develop Best Practices
- Compare to experience with Industry Best Practices
- Reassess at an interval based on Initial Gap Assessment (IGA) results (check improvement) using a Follow-Up Gap Assessment (FGA)

FOR MORE INFORMATION:
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A HOLISTIC LOOK AT THE MI PROGRAM
The E²G Gap Analysis can be a holistic approach to the MI program – from the Initial Gap Assessment to a Comprehensive Corporation wide assessment of the Risk of Operation associated the company equipment.