GenesisSolutions

GenesisSolutions Reliability Project Re-Cap

Pfizer Australia

During the fourth quarter of 2010 GenesisSolutions completed a reliability project for three Pfizer sites in Australia. This effort was targeted at enhancing reliability improvements at each plant by providing focus on:

- Reliability Engineering Methodology & Tools
- Equipment Changeovers
- Mature Asset Maintenance and Support

A number of Pfizer Global Reliability Program (GRP) tools were incorporated into the project in order to continue standardizing on the Pfizer Global Reliability methodology.

Work began in late September and continued through October 2010. The Genesis resource on the project was Dick Anderson – Senior Reliability Engineer. The approach at each site was similar: assess current state, apply reliability tools, complete a knowledge transfer and document improvements - but the application emphasis was different due to varied equipment issues. The site work summary follows:

- Melbourne - Vial Filling Machine
    - Deploy and demonstrate the following reliability tools and methodologies; functional flow diagram, functional failure modes and effects analysis, Root cause analysis, PM Optimization, etc. to address the rejects issue in the filling machine.
    - Tank Maintenance - Address recurring failures on mechanical seals. Review the stirrer seal selection process and maintenance program for better seals available and better predictive maintenance techniques available other than current which only detect failure.
    - Piping maintenance - Review diaphragm maintenance program and piping maintenance (de-rouging/passivation) program for possible improvement opportunities.

- West Ryde – The main theme to the West Ryde visit was "Maintaining Reliability in an Aging Facility." Key areas addressed were:

    - Spare parts inventory - Modular vs. Component.
    - PF Curve analysis - Failure modes application, reliability protection including PdM applications.
    - Maintenance Planning Process - Internal and external customers.
    - CMMS and EAMS optimization and utilization.

- Perth – Address reliability issues related to changeovers on Rommelag #6 Machine.

    Project activities included:

    - Reliability Engineering Methodology and Tools – Deploy, introduce/reinforce and document: Functional flow diagrams, Functional failures and effects analysis, Root cause analysis (RCFA). Apply the methodologies and tools to a "bad actor" (i.e. Rommelag #6) to provide the site with supplemental reliability improvement information and a formalized RE approach.
    - Equipment Changeovers – Evaluate current process for opportunities to improve/enhance. Document the choreography of an equipment changeover process to include an introduction of the methodology, an example of a prior application (case study) and discussion of the process mapping, role definition, coordinated scheduling, and documentation used in this standardized approach. The methodology will be applied to a changeover process on Rommelag #6.
    - Asset Maintainability for Mature Assets – Assess current maintenance support activities such as Planning, Spare Parts, and CMMS utilization & data capture. Compare existing practices to leading-edge practices and document opportunities to improve in the following categories: higher equipment availability, more uptime or lower maintenance cost.
    - Work Management Issues - Identify communication, coordination and cooperation issues that could be changed to improve reliability.

For more information on this project, please contact info@genesissolutions.com