

Client's global asset management strategy starts with Reliability Centered Maintenance (RCM) pilot



Our client is one of the world's largest manufacturers of float, value-added and fabricated glass products and solutions. They have 25 float plants globally that produce high performance glass for architectural, residential, interior, transportation and technical applications.

The company was experiencing asset reliability issues on several coater lines, which are asset intensive and technical in nature. This was resulting in equipment availability and downtime constraints, impacting their ability to hit production targets.

The company was looking to improve its' asset strategies by implementing Reliability Centered Maintenance (RCM) to improve reliability and availability of critical assets. IE was engaged to execute workshops in:

(1) Asset Criticality Assessment (2) Failure Mode & Effects Analysis (FMEA)

- APPROACH**
1. Pilot Approach – IE began by developing tools, organizational awareness and training with the key stakeholders in order to develop and implement RCM processes and strategies to maintain critical assets on a key float line. This RCM model could then be replicated to the other areas of the plant and across the other plants around the globe.
 2. The criticality workshops began with the fundamental elements that need to be addressed: Equipment Hierarchy and Equipment Data
 - A total of 267 assets were evaluated during the criticality analysis
 - The equipment hierarchy analysis revealed there were 140 assets not included in the current registry
 Criticality ranking criteria was developed in the areas of: Safety, Environmental, Cost, and Production.
 3. The **RCM workshop** was conducted on assets based on the results from the criticality analysis evaluating the top critical assets. The FMEA executed for the workshop identified maintenance strategies and developed the Equipment Maintenance Plans (EMP) based on failure modes and the risk criteria of: Severity, Occurrence, and Detection; these criteria develop the overall Risk Priority Number (RPN).
 4. The workshops were attended by key stakeholders from the sites and the corporate reliability group. **Our client is now working on implementing these processes and tools across the global enterprise.**

52%

Percent of evaluated assets identified and added to the client asset registry

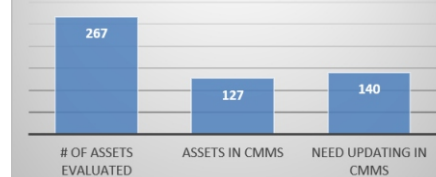
34%

Failure modes evaluated with a high or critical ranking that were not being addressed

55%

Reduction of the Risk Priority Number (RPN) based on the FMEA improvements

Assets Evaluated in Criticality Analysis



FINDINGS

By engaging with Implementation Engineers on a Reliability Centered Maintenance pilot, our client has now rolled this process out globally. The results across the enterprise will be substantial in reducing downtime and improving reliability of critical assets