

LCE's Asset Management Services Team Creates Stability and a 25% Increase in Production Rate

In the spring of 2008, Life Cycle Engineering (LCE) was engaged to implement a Reliability Excellence (Rx) Program for the largest and most complex grain elevators owned by one of the world's primary food producers. LCE's current state assessment of the plant's reliability processes revealed the facility to be fully reactive in its performance. Because this reactive state was significantly limiting the plant's production capacity, LCE integrated a limiting factor tactical approach into the work process implementation project. This addressed the immediate need to increase capacity and reduce costs while corporate resources and LCE focused on the business processes re-engineering and change management efforts that were imperative to the plant's long-term, sustainable success.

LCE's Asset Management Services Team conducted a criticality analysis of the plant and determined that the dust conveyance system was having the single, largest negative impact on the plant's production capacity. The team conducted a root cause failure analysis and created a plan of action that included evaluating standard work and assessing human performance.

The team's completed analysis uncovered 276 discrepancies in the system's integrity. The analysis also identified several predominant failure modes that had a high likelihood of occurrence. Previously, no suitable control plans existed for these failure modes. Corrective actions were put in place and the elevator's maintenance crews worked diligently to address the issues.

Next, the AMS team introduced benefits tracking. The outcome, with 65% of the issues addressed, was a 70% reduction in failures, and a 25% increase in production rate. The increased capacity resulted in an additional five million bushels being loaded in the month of November, compared to the same period the previous year. The gross financial benefit was worth nearly \$30 million dollars at the current market price of \$5.90 a bushel.

This tactical solution provided the necessary stability for the LCE- led focus teams to put into practice the new processes for work control, materials management, operator care, and reliability engineering that will sustain and further improve the production capacity at the plant.

About LCE

As a leading maintenance and reliability solution provider for over 30 years, Life Cycle Engineering (LCE) (www.LCE.com) helps public and private enterprise gain increased profitability through greater capacity, lower operational costs, and decreased downtime. By combining a range of industry experts, unique processes with proven success, and a comprehensive array of educational courses, LCE has gained reputable status as the premier provider of innovative and successfully executed reliability and maintenance solutions worldwide.

