

Planned Maintenance Shutdown Is Ahead of Schedule and Under Budget

Manufacturing

CLIENT

Cement Australia is the leader in cement in Australia. In Gladstone, Cement Australia has the largest cement kiln in Australia and uses state of the art technology. Cement Australia Gladstone has a production capacity of over 1.6 million tones per annum and processes limestone, clay, silica sand and ironstone to produce and supply cement throughout Australia.

CHALLENGE

Cement production starts with mining limestone, crushing it into meal, and then converting it at high temperatures into clinker, the intermediate product for making cement. Cement Australia produces half of its clinker at its Gladstone plant. Each year, necessary maintenance is performed during a major plant shutdown. If the shutdown runs over the budgeted timeframe, it has a significant financial impact on the business. Capacity is constrained and the plant cannot service the market.

SOLUTION

After experiencing cost and time overruns in the past, in 2005, Cement Australia Gladstone asked KT to help improve the quality of the next shutdown; KT collaborated with a multi-functional team to launch a three-phase improvement project.

In phase I, KT conducted an analysis of the existing project management process and used this to recommend and implement improvements. Special emphasis was placed on using KT Potential Problem Analysis (PPA) and Potential Opportunity Analysis (POA) to minimise risk, plan contingencies, and exploit opportunities during the shut. In phase II, KT worked with Cement Australia during the shut to monitor the project performance in terms of time and cost and to provide coaching to support the use of the KT processes. Phase III began after the shut, to close out the project, evaluate performance, and identify opportunities for improvement.

RESULTS

The teamwork and planning paid off. The shutdown exceeded expectations, coming in 4.5 days ahead of schedule and a half million dollars under budget. Based on this success, there is a confidence that there will be new successes in future shutdowns.



SCORECARD

- Performance dramatically improved against the previous year and beat all KPI targets
- The shut came in \$500,000 under budget
- Time to return to best demonstrated performance fell from 1 ½ weeks in the previous year to just 36 hours.
- The shut was completed 4.5 days ahead of schedule