

Shutdown Excellence: 111 Projects in Two Weeks Instead of Three

Manufacturing

Thomson Tube Operations (now Videocon) was manufacturing six million tubes a year at its plant in Piaseczno, Poland. Each summer, production shut down for several weeks allowing capital investment projects and deep maintenance to be performed. During this period, process changes, modifications, and additions, as well as a variety of maintenance activities were executed.

CHALLENGE

Historically, ramping up to full production capacity after the shutdown was a slow process with attendant quality issues. The organization recognized an opportunity to reduce the quality issues and costs of the annual shut by improving planning processes.

RESPONSE

Kepner-Tregoe worked with the plant leadership to improve project and risk management skills by introducing the common process and common language of the KT approach to Project Management and Potential Problem/Opportunity Analysis. Working with KT, Project Leaders improved project management and successfully accelerated the return to full production over the previous year. This success raised the bar for the next year: plant management wanted to not only improve the rapid ramp up, but also reduce the shutdown period from three weeks to two. During these two weeks, a total of 111 distinct capital investment and maintenance projects were to be managed.

Project lead-time to the shutdown ranged from three to nine months for the Project Leader responsible for each capital investment project. To minimize and manage the inevitable problems that can occur on a project, Project Leaders attended workshops to deepen their Potential Problem Analysis skills. Additional project management training prepared project teams to use the KT approach for all capital and maintenance projects.

Detailed project planning maximized the limited time available for the shutdown. The plant site was split geographically, and for each area, a coordinator integrated all project activities and acted as the liaison for Project Leaders, suppliers, sub-contractors, and other on-site personnel. Project Leaders created risk management plans and had responsibility for health and safety issues. During the shutdown, coordinators reported daily to the management group on progress against work packages and used



SCORECARD

- Reduced annual shutdown from three to just two weeks
- Ramped up to full production faster, saving the equivalent of two weeks of production
- Reduced scrap rate during shutdown
- Completed 111 projects on-time
- Improved teamwork and contractor relations
- Uncovered opportunities for future improvements

a problem escalation process for problems not covered by contingency planning. A temporary management structure that was in place for the duration of the shutdown was responsible for all activities and daily reporting to the plant director. As added insurance, triggers were set that would enable extreme contingent actions to be taken: if a project was delayed beyond a specific amount of time, it could be drastically altered or cancelled.

RESULTS

The structured, project approach to the shutdown had immediate benefits. Planning eliminated schedule conflicts that would have caused delays. During implementation, schedules were tightly managed. When projects slipped or contractors struggled to perform, immediate actions were taken to bring them back on track. Rapid decision-making based on good information, sustained project momentum. Contingency plans maintained order and control. When problems arose, they were dealt with swiftly.

The careful planning and tightly managed implementation achieved its goals, reducing the shutdown from three weeks to two, and saving the equivalent of two weeks of production by ramping up faster to full production. In addition, the scrap rate was significantly lower than during previous shutdowns. Enhanced communication reduced interdepartmental conflicts, improved project team cooperation, and built better contractor relations by clarifying responsibilities and scheduling. Another valuable outcome was that improved project documentation provided a useful road map for future shutdowns and exposed new areas for improvement.