



INCREASING UPTIME AND PLANT STABILITY WITH A TAILORED SOLUTION

A customer in South-East Asia was operating a new acid plant and a slag flotation plant – both of which typically require a lot of maintenance. Carrying out the right maintenance work at the right time is vital for high availability. This not only requires a solid maintenance strategy and plan, but also the right tools to carry out the work.

Evaluating the situation

Although another supplier had built the smelter plant just six months before, the customer was already having problems with plant availability. Language issues and a lack of suitable training aids and detailed knowledge meant that operator and maintenance training was deficient.

The customer also lacked the relevant manuals and information on maintenance procedures. When it came to spare parts, they had only been provided with a list of plant consumables without any details. This meant there was great potential to improve plant availability from its current level of 67%.

CHALLENGES

- Plant was operating at 67% availability at best
- Reliability needed to be increased by 10 to 20% in a short time period

SOLUTION

- Customized asset management solution built on Outotec services
- Create work instructions and support documentation for the maintenance management system
- Rapid processes and benchmark database

BENEFITS

- Fast implementation – project completed in just 10 weeks
- Improved tools for preventative maintenance and establishing a more efficient way of working
- Improved plant availability
- No induced errors

The customer wanted us to achieve a 10 to 20% increase in plant reliability in a short timeframe. Our review confirmed that there were several areas for improvement – lubrication was poor and the plant had not implemented preventive maintenance procedures. Spares management was causing delays and there were maintenance induced errors caused by lack of tradesman knowledge.

A comprehensive asset management solution

The customized solution was designed from the following Outotec services: Equipment Inspections, Maintenance Strategy and Program, and Preventative Maintenance.

During the ten-week project, we created hundreds of supporting documents for the customer's computer maintenance management system CMMS. These included preventive maintenance plans for electrical, mechanical, and instrumentation equipment, work instructions for repairing every piece of equipment, lubrication plans, and condition monitoring plans.

Condition monitoring routes and tasks were also created, as well as a bill of materials for each repair task. We also provided practical support for project management and helped with resource leveling. Weekly progress meetings improved documentation and helped the customer reduce their existing work backlog.

In our experience, organizations take several years to create documentation, improve ways of working, and adopt preventative maintenance practices. With our asset management solution, the customer was well on their way toward their reliability target in only ten weeks.

About our tailored performance solutions

The asset management solution described in this case study is a good example of our performance solutions. The services chosen to build a solution always depend on your current situation and the desired outcome. All of our performance solutions are based on proven processes and an extensive database of successful projects around the world.



We offer efficient, cost-effective, and sustainable solutions that increase equipment and plant performance. The first step is to evaluate your current performance levels and identify any shortfalls. Only then can we make tailored improvement recommendations. Our extensive experience in implementing maintenance and asset management solutions covers a wide range of industries.