

## CASE STUDY

# South American PVC Plant Optimizes Maintenance Efficiency



<b>Aim</b>	Optimize management, maintenance and overall plant efficiency
<b>Status</b>	Active supervision corrected planning and monitoring deficiencies
<b>Client</b>	A chemical firm's South American plant manufacturing 300,000 tons of PVC a year
<b>T.A. Cook</b>	Selected for three-week analysis, six-month process improvement implementation project

### Background

An international chemical company wanted to optimize their maintenance management processes at a South American PVC plant. Although the plant had an annual maintenance budget of approximately €13 million there were irregular patterns of expenditures, sloppy inventory management, and rising salary costs, which were higher than their European partners.

T.A. Cook was selected to conduct a three-week analysis program of the 175,000 square meter plant, with two units for PVC manufacturing and one unit for chemicals.

### Approach

The analysis revealed that there were a multitude of issues in planning and monitoring, stemming from passive management. To address maintenance performance, the consultants implemented new management tools for planning and job preparation. Norms and standards were created and communicated to optimize worker efficiency and ensure work order creations. Finally, a gate-keeping process was created to allow for stronger prioritization.

To enhance supervision, staff were robustly organized with clearly defined performance goals. Defined methodology was implemented and all training and coaching the maintenance

staff may need was provided. A "standard" day framework for expectations and maintenance technician behaviour was developed. Daily, weekly and monthly performance review meetings were scheduled. Finally, a process to evaluate contractors' performance based on safety, quality and price was implemented.

Practical solutions were put in place to increase maintenance productivity. First, a preventive maintenance plan for clarification of tasks was established. Then, a system for analysis of breakdowns and their reasons and agreement of future preventive action was put in place. Finally, the company SAP software was updated and employees were trained.

### Achievements

Following the creation of a capable maintenance team with clearly defined responsibilities and schedules, a system of accountability and proactive supervision was created and significant financial benefits and costs savings were enjoyed.

### Benefits

- Maintenance costs reduced by 17%; maintenance efficiency increased by 25%
- A strong in-house maintenance team established
- Maintenance standards and transparency of processes created
- Work orders organized and prioritization tools implemented
- Maintenance mind-sets and processes harmonized
- Overtime reduced by 75%

### T.A. Cook & Partner Consultants GmbH

Leipziger Platz 1  
10117 Berlin, Germany  
Phone +49 (0)30 88 43 07-0  
Fax +49 (0)30 88 43 07-30  
www.tacook.com  
service@tacook.com