

## T.A. COOK IN THE PRESS

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# Case Study

T.A. Cook provides content-rich asset performance management consultancy services to companies around the globe and works together with its clients to ensure that staff fully understand operational processes.

### The challenge

At a European refinery, we identified opportunities across all phases of turnaround (TAR) preparation, from productivity to overall performance improvements. Initial assessment identified a savings potential of 23% on direct labor for a scope exceeding 200,000 hours. During an initial three-week analysis, a number of key areas for improvement around the preparation and execution of the TAR were identified. These included:

- » Low level of execution productivity compared to industry good practice. Only 35% of the paid available time was spent on value-adding activities versus the 60-65% recognized industry best practice
- » Insufficient management and coordination of the TAR execution schedule leading to overtime, delays and poor productivity
- » The planning base (the time and effort required to carry out a mechanical task) had been overestimated by up to 100% in comparison to the industry average
- » Absence of adequate TAR scope challenge processes
- » Inadequate work permit process leading to loss of productivity at the start of the day.

### The solution

Defining and developing operational improvements during the preparation phase was essential if execution with fewer mechanical resources but a roughly similar scope was to be achieved. Negotiation with mechanical contractors was also vital and required the team to begin working on the key improvement levers one year before the actual execution date.

An improved permit system with predefined clusters – such as area, equipment, systems, entry and special – was developed in order to move from an administrative and time-consuming process to a leaner and safer one. This was vital in order to meet the safety requirements for working in a “cold plant” environment.

Additionally, by defining a Management Control and Reporting System – including KPIs, performance review meetings and next day preparation standards – the client’s decision making and problem solving abilities were vastly improved. Activities could then be planned and scheduled correctly and according to priority.

### Results

By promoting one single line of report and reviewing and improving the planning base, 18% of mechanical hours were reduced. Alongside the key levers needed to achieve productivity improvements, additional solutions were developed to optimise the client’s current practices in a number of different fields, such as logistics, material management and scope processes.

The above steps resulted in an increase in productive time of 100 minutes per craftsman per day, as well as a 2% scope reduction.



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