



Process Management International

# Reducing Manufacturing Support Costs - A Project Case Study

## Context

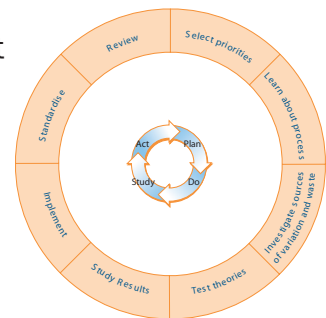
The client is a leading international manufacturer of glass and rock fibre insulation products. This is a mature technology, with competitive advantage being gained from relentless attention to the details of materials and production processes. PMI has been training engineering and related staff, and supporting key projects to achieve their goals.

## Challenge

Glass fibre insulation is produced by fibres generated by molten glass passing through a “spinner” that has 13-14,000 holes. These spinners are changed every 4-5 hours, and the project focussed on their manufacture and refurbishment. Prior to the project about 60-70% were made in-house, the balance outsourced. It was felt that there was capacity to make all of them and have further capacity to support the rest of the group, but this was not being realised.

## PMI's Contribution

The project was the focus of a delegate on PMI's Green Belt course. He led the team in applying the PMI Improvement Cycle, initially concentrating on the definition of the processes behind the problem. This highlighted new aspects to investigate, and the team worked through all the parts of the Improvement Cycle, understanding the variation, carrying out tests which validated the theories. and then implementing the changes.



## Achievements

Specific changes made as a result of the trials produced remarkable improvements, eventually cutting the processing time from 2 hours to 10 minutes. The financial savings amount to €500,000 per year on outsourcing.

## Lessons

The discipline of the Improvement Cycle forced the use of Plan Do Study Act, to investigate cause and effect, and of the 5 Why analysis for verification, to focus on solutions to test, rather than jumping to solutions. The full team was involved early on, and this proved invaluable in providing a breadth of experience to address the questions. Control charts were developed and made live, so that all could see the evidence building.

## Wider Applicability

This project demonstrates once again the validity of the whole PMI approach, ranging from PDSA for learning, through the Improvement Cycle as a structure and discipline for relevant use of the tools, to live use of visible control charts to understand variation. As we have often seen before, one successful project can produce cash savings that more than pay for a substantial improvement effort. It is also a typical example of savings achieved during a training programme by many delegates over the years.