



CASE STUDY – SHELL OMAN (ENERGY SECTOR)

The Company/Organisation

PDO is Oman's largest oil company and part of the Royal Dutch/Shell group. The extraction of oil is carried out within large production facilities, in Oman's interior.

The Challenge

With many of PDO's assets reaching their mature stage, it was essential to ensure that lifting costs and oil deferment were kept to a minimum. It was furthermore accepted that Engineering enhancement alone could not prevent the deterioration that cause ageing equipment to fail. PDO's Operations team felt that the solution could be to empower dedicated, cross-functional teams to take ownership of plant performance and to apply their collective expertise in closely managing production.

Working in teams however, required PDO technicians to embrace change by undergoing through a rigorous, structured organisational development programme, based on the principles of TPM – Total Productive Maintenance. TPM is a methodology for re-aligning a vertically structured organisation into multi-disciplined teams from Production, Engineering and Maintenance. Those teams continually improve asset performance through measurement, analysis and problem solving. PDO realised that outside TPM expertise was required to achieve the organisational changes that will guarantee quick and sustainable results and selected a Lysis TPM expert to provide steering and guidance to the Operations team.

The Solution

PDO chose to pilot the implementation of TPM at Yibal, its largest oil facility. The TPM project was divided into two key phases: an initial, planning phase and the full implementation phase.

During the planning phase, four TPM groups (called Station Teams) were formed and were given initial training in order to establish clear objectives, well-defined responsibilities and the required management support. A performance review resulted in each team framing the challenges of its focus area and setting out the priorities, targets and potential risks.

This led to a clear plan for each team that was implemented over a period of 9 months. The plan was centred on tailored training in the 8 TPM building blocks, followed by hands-on application of the TPM steps. The Lysis consultant provided all the teams with the necessary training, coaching and facilitation that resulted in PDO fully understanding and embracing TPM well beyond the completion of the project.

Benefits

The application of TPM produced quantifiable, sustainable results, as well as unifying and optimising operating practices, procedures, systems, and behaviours across the organisation. Results included: In excess of \$2 million annualised benefits achieved through reductions in unscheduled deferment and maintenance costs; a new organisational structure that supports core business; better teamwork, communication, skills and working practices; improved Environment and Safety record.

Yibals' Operations Director summed up the project's achievements as follows: "By working together in station teams and accepting ownership of the plant & equipment, the TPM teams have contributed greatly to reducing downtime and PDO's bottom line. A great achievement!" And Yibal's General Manager added: "The application of the TPM methodology by the station teams enabled them to make a significant contribution to the asset's performance and has led the way for instilling a culture of continuous improvement via workforce empowerment".