



# Factsheet

## Total Productive Maintenance (TPM) Implementation

Today, world-class organisations operate with cross-functional teams that eliminate departmental boundaries and allow staff to focus on the company's goals, making the company more responsive to the needs of stakeholders. These teams require very little direction, leading to flatter and leaner organisations.

With the implementation of Total Productive Maintenance (TPM), many world-class organizations enjoy steady increases in productivity and a more participative environment in their manufacturing and processing plants.

By focusing on eliminating plant related losses, TPM brings together production and maintenance to improve performance and responsiveness.

This environment fosters commitment, innovation and flexibility, which lead to much greater productivity.

### The TPM philosophy

TPM is a continuous improvement philosophy that focuses on eliminating:

- Downtime
- Performance Losses
- Yield Losses

Eliminating losses becomes a shared goal for the plant and the organization and it is achieved by:

- Improving equipment condition
- Shifting some basic maintenance to production
- Improving preventive maintenance
- Creating teams to solve chronic problems

**Operators** do simple mechanical tasks such as cleaning, inspection, lubrication and adjustments

**Technicians** train operators on equipment care and carry out tasks requiring high technical skills

**Cross-functional teams** involving maintenance, production and engineering work together to eliminate chronic and sporadic manufacturing losses.

### How we can help

Lysis will:

- Train management supervision and other key personnel on TPM principles and how TPM integrates with other elements of any broader Operations Excellence programmes
- Assist in the selection of TPM teams

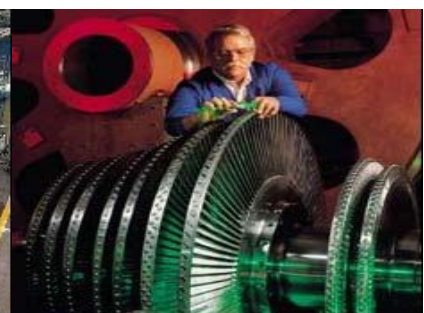
- Train the TPM teams on both Change Management and the specific TPM steps
- Establish maintenance by operators
- Coach and facilitate during the implementation of both the pilot and roll-out programmes
- Jointly prepare and manage the programme (including communications and interfaces) with the in-house group

Our approach (see next page) guarantees optimum results regardless of the industrial sector where TPM is introduced.

### Our track record

As an independent resource with many successful implementations worldwide, Lysis provides objectivity and insights to minimize projects risks during the change process. Increases in plant performance ranging from 25-50% were realized in most implementations. Some implementations were done to rescue previous failed attempts by others.

Our Operations Consulting practice works with leading companies on all aspects of asset management (plant, processes, systems and people) to achieve their goals.





# Approach & Work Example

Over the last 15 years, the Lysis TPM model has been fine-tuned to deliver maximum benefits at minimum time and cost. Our structured methodology is tailored to the needs of major industrial clients, in Energy, Utilities and Manufacturing. Its key elements are highlighted below.

## Example of Work

Applying TPM in a developing country poses various cultural challenges not normally encountered when introducing the same approach in the West.

In this example, a leading oil company based in the Middle East had to ensure that lifting costs and oil deferment were kept to a minimum. It was furthermore accepted that Engineering modifications alone could not prevent the deterioration that causes ageing equipment to fail. The 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. TPM was chosen as the methodology to enable this to happen and Lysis was engaged to facilitate its implementation.

The Company decided to pilot the implementation of TPM in its largest oil plant that produces 240,000 barrels per day. The TPM project was divided into two key phases: Planning and Implementation.

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 consultants provided all the teams with the necessary training, coaching and facilitation that resulted in the Company fully understanding and embracing TPM well beyond the completion of the project.

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 \$3 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.

The Company's 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 the bottom line. A great achievement!"

## Contact Details

**Head Office Address:** Lysis Ltd, 68 Parkfield Avenue, Uxbridge, UB10 0DG, UK

**E-mail Address:** [contact@lysis-consulting.co.uk](mailto:contact@lysis-consulting.co.uk)

**Web Site:** <http://www.lysis-consulting.co.uk/>

