

Maximising Capacity and Customer Service

Minimising Costs

Improving Workplace Conditions and Culture

A Brief Overview of our Lean & TPM Methodology we call TPM³:

- An enhanced Australasian approach to applying the principles and practices of the Toyota Production System and Toyota Way (Lean).
- An improvement strategy ultimately involving and impacting on all employees, suppliers and customers.
- A flexible, structured and practical framework consisting of 10 integrated improvement activities, each with defined steps.

Key Features of TPM³:

- Provides rapid returns on investment while laying the foundation for sustainability
- Recognises that if your equipment and processes aren't working well, frustrations run high and attempts to introduce Lean thinking becomes unsustainable
- Progressively engages all employees so they can achieve and have ownership to the improvements
- Provides a significant positive impact on safety and morale
- Promotes a positive behaviour change of the whole workforce
- Takes the mystery out of integrating all the principles, tools and concepts from traditional Lean

CTPM Success Stories:

There are many success stories throughout Australia, New Zealand, Thailand and Indonesia covering Manufacturing, Mining, Process, Utilities and Service companies.

Some of the gains achieved include:

- **Telstra** - A telecommunications company achieved savings of \$110m over a 4 year period
- **Banpu Lampang Open Cut Coal Operations** - A coal processing operation at an open cut coal mine reduced average maintenance costs across the plant by 50% over 4 years
- **Juken New Zealand Northland Mill** - A timber processing plant reduced manufacturing costs by 50% along with an 88% reduction in Lost Time Injury Frequency Rate over 2 years
- **Simplot Australia Echuca Site** - A food processing plant closed the gap to Yield Excellence by 85% over 4 years
- **Simplot Australia Devonport Site** - A food processing plant closed the gap on OEE Excellence by 54% and the gap to Cost / Kg by 58% over 2 years saving over \$5M
- **Zinifex Rosebury Mining** - An ore processing plant at an underground metalliferous mine improved metal recovery by 3% over 1 year resulting in a \$1.6m saving

TPM³ Framework for Lean & TPM

incorporating 10 Improvement Activities supported by the Leadership Base



Problem Solving
Visual Workplace
Prevention at Source

Reward your People

Competitive Manufacturing - National Qualifications

Competitive Manufacturing Qualifications aligned with our Lean & TPM (TPM³) Methodology

Our unique approach links the training and assessment for Competitive Manufacturing Certificate III and IV to our TPM³ journey, thus allowing:

- Employees, once enrolled to be assessed for the required units while they are either Team Members (Cert III), or Team Leaders (Cert IV) of TPM³ Teams.
- Employees to be formally recognised with a National Qualification as they contribute to the company's strategically driven improvement initiative, rather than just complete a series of often ad-hoc projects to satisfy their training requirements.
- Practical assessments in the workplace rather than post training assessments in the classroom.



NATIONALLY RECOGNISED
TRAINING

Certificate III in Competitive Manufacturing alignment with TPM³ Methodology

To be awarded a Certificate III in Competitive Manufacturing, competency must be achieved in 8 units of which at least 3 of these units must be from the 400 series.

Certificate IV in Competitive Manufacturing alignment with TPM³ Methodology

To be awarded a Certificate IV in Competitive Manufacturing, competency must be achieved in 10 units of which at least 3 of these units must be from the 400 series.

Holders of Certificate III need to ensure that they have at least three additional series 400 units to any they may have gained competence in as part of the Certificate III.

Pathways also exist for Maintenance and Support (including Sales) employees for both Certificate III and Certificate IV

Certificate III in Competitive Manufacturing Certificate IV in Competitive Manufacturing

Certificate III Modules Incorporated into the TPM³ Methodology

- Apply Competitive Manufacturing Practices
- Ensure Process Improvements are sustained
- Manage the Impact of Change on Own Work
- Undertake Root Cause Analysis
- Improve Cost Factors in Work Practices
- Mistake Proof a Production Process
- Apply 5S Procedures in a Manufacturing Environment
- Contribution to the application of a Pro-active Maintenance Strategy

Certificate IV Modules Incorporated into the TPM³ Methodology

- Implement a Competitive Manufacturing System
- Ensure Process Improvements are Sustained
- Lead Change in a Manufacturing Environment
- Improve Cost Factors in Work Practices
- Mistake Proof a Production Process
- Use Structured Problem Solving Tools
- Lead a Competitive Manufacturing Team
- Lead 5S in a Manufacturing Environment
- Support Pro-active Maintenance
- Apply Statistics to Process in Manufacturing

Deployment Models – 3 Options

1. CTPM provides full Training & Assessment support
2. CTPM trains your TPM³ Co-ordinator* to carry out weekly support Assessments linked to weekly team meetings with CTPM providing formal assessments at midway and final presentations of each cycle
3. Client, as a RTO conducts the assessment and issues own National Qualification (CTPM only provides the training and assessment tools)

* Completed TPM³ Leadership / Instructor Program, plus one-day Assessment training

Government Subsidies are available in Australia and New Zealand.

Australian Government employer incentives of up to \$5,100 per employee may be available for eligible employees.

Recognise your site

5 Level Milestone TPM³ Excellence Award

Following requests from our members, CTPM created the 5 Level Milestone TPM³ Excellence Award supported by our TPM³ Milestone Assessment Process in 2002. The Milestone Assessment Process provides a ranking based on a series of self-assessment criteria which is the precursor to an external verification audit to allow the awarding of the achieved level of the 5 Level Milestone TPM³ Excellence Award.

Feedback from this audit also provides a gap analysis for planning future activities on your Lean & TPM (TPM³) Journey.

Overview of the 5 Level Milestone TPM³ Excellence Award

Key Objectives:

- Internationally recognised
- Multi-level award and assessment process
- To challenge and assist industry to strive for Operations Excellence
- A benchmarking tool to allow sites to monitor their progress on their improvement journey

The assessment covers four key aspects of your Lean & TPM (TPM³) journey:

- Leadership of the Improvement Journey
- Capability to support the Improvement Journey
- TPM³ Improvement Activities
- Impact on the Business

What are the 5 Levels?

Each level is a stepping stone covering three aspects of your journey

- How much of your site is involved
- The level of competence in each score sheet
- The number of TPM³ Improvement Activities involved

Level	Coverage	Score	Activities
5	100% of Site	90%	10
4	75% of Site	85%	8
3	50% Production & Maintenance Areas	80%	6
2	25% Production & Maintenance Area	70%	5
1	2 Production (Pilot) Areas	60%	4

5 Level Milestone TPM³ Excellence Award 28 Recipients since 2002



Level 1 (15)

- ACI Plastic Packaging – Kirrawee NSW
- Banpu Lampang Open Cut Coal Mine – Thailand
- Hynds Pipe Systems – East Tamaki NZ
- Juken New Zealand Limited – Northland NZ
- New Zealand Sugar – Birkenhead NZ
- Nobel Metal Processing – Edinburgh SA
- PT. Indominco Mandiri Coal Processing – Indominco
- PT Kitadin Tandung Mayang Coal Mine – Indonesia
- Simplot Australia – Bathurst NSW
- Simplot Australia – Devonport TAS
- Simplot Australia – Echuca
- Simplot Australia – Kelso NSW
- Simplot Australia – Ulverstone TAS
- Sugar Australia – Glebe Island NSW
- Uncle Toby's Company – Smithfield NSW



Level 2 (9)

- ACI Plastic Packaging – Kirrawee NSW
- Banpu Lampang Coal Mine – Thailand
- New Zealand Sugar – Birkenhead NZ
- PT Kitadin Tandung Mayang Coal Mine – Indonesia
- Simplot Australia – Devonport TAS
- Simplot Australia – Echuca VIC
- Simplot Australia – Ulverstone TAS
- Sugar Australia – Glebe Island NSW
- Uncle Toby's Company – Smithfield NSW



Level 3 (2)

- Banpu Lampang Coal Mine – Thailand
- Uncle Toby's Company – Smithfield NSW

Level 4 (1)

- Banpu Lampang Coal Mine – Thailand

Level 5 (1)

- Banpu Lampang Coal Mine – Thailand

Develop in-house capability

TPM³ Leadership / Instructor's Program

The TPM³ Leadership / Instructor's Program provides specialist training for nominated, eligible company employees whose primary role is to lead or facilitate the introduction and implementation of TPM³ within their organisation. The Program involves attendance at a 2-day Getting Lean & TPM to Work workshop, a 3-day Advanced TPM³ Training workshop and our 5-day live-in course. The training is complemented with assignments and exams to ensure key learning outcomes are achieved.

Key Attributes:

Since 1996 we have observed that the most effective and successful TPM³ Co-ordinators, TPM³ Champions, TPM³ Leadership Team Members and TPM³ Team Leaders are those that have been given the opportunity and time to develop not only good interpersonal and team development skills to facilitate change but most importantly the following key attributes:

Understanding of the 'inductive or pro-active' nature of Lean & TPM (TPM³) as opposed to our more traditional 'deductive or reactive' approach to improvement

Skill to handle the sensitive nature of 'pull' change within the workplace as opposed to our more traditional 'push' approach to improvement

Sensitivity to recognise the emotive nature of some of the concepts of TPM³ when delivering training to an audience more familiar with traditional equipment management thinking

Passion from experiencing success of Lean & TPM (TPM³) in their own workplace

Confidence to present new material to a doubting audience

Experience (both internal and external to their company) to handle the tough questions that all new change programs generate



Key Features of our Effective TPM³ Leadership Program

- Spans over a period of 3 -6 months rather than being one event
- Experience accelerated by demonstration, its the doing that creates the true learning
- TPM³ Leaders / Instructors are required to gain sufficient practical experience in their own workplace
- Initial assistance from a CTPM Navigator with the delivery of the first 2 or 3 workshops is given until the Leader / Instructor has developed both their confidence and experience to deliver the material effectively.

Companies that have followed this path have, in our opinion, produced both the best TPM³ Leaders / Instructors and achieved the most impressive cost effective performance results for their company as demonstrated by the sites that have achieved our 5 Level Milestone TPM³ Excellence Award. See previous page.