

**MINIMISE**

Operational Risk  
Costs

**MAXIMISE**

Capacity  
Customer Service

**IMPROVE**

Safety & Morale  
Workplace Conditions



A flexible, structured and practical framework consisting of 10 integrated improvement activities. Each activity has clearly defined steps, with the goal of achieving excellence in:

**Problem Solving**  
**Visual Workplace**  
**Prevention at Source**

**NETWORKING**

Learn from other sites

**TRAINING**

Accelerate your Learning

**ON-SITE NAVIGATION**

Learn by Demonstration & Doing

**RESEARCH**

Learn from Analysis

**ASSESSMENTS/AUDITS**

Understand the Gap/Monitor Progress

## A Brief Overview:

An enhanced Australasian version of TPM & Lean developed by CTPM recognising our Australasian workplace culture and the critical role equipment reliability plays in Operational Performance especially in a Lean environment.

It is a Business Improvement strategy designed to minimise operational risk, maximise capacity, minimise costs and create a safe & productive workplace.

## Key Features:

- Provides rapid returns on investment while laying the foundation for sustainability and Operational Risk Minimisation
- Recognises that if your equipment and processes aren't working well, frustrations run high and Operational Risk is significantly increased
- Progressively engages all employees so they can achieve and have ownership to the improvements and take better care of their workplace
- Provides a significant positive impact on safety and morale
- Promotes a positive behaviour change of the whole workforce

## 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:

- **Banpu Lampung 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
- **Kaltim Prima Coal (KPC) Open Cut Coal Mine** - \$135m savings and benefits in 2 years
- **PT Kitadin - Tandung Mayang Open Cut Coal Mine** - \$6.5m in savings over 3 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
- **Simplot Australia Echuca Site** - A food processing plant closed the gap to Yield Excellence by 85% over 4 years
- **Telstra** - A telecommunications company achieved savings of \$110m over a 4 year period
- **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

Visit our website to learn more

[www.ctpm.org.au](http://www.ctpm.org.au)

# Improve your Business - Reward your People

## Competitive Manufacturing - National Qualifications

### Competitive Manufacturing Qualifications aligned with our TPM & Lean (TPM<sup>3</sup>) Methodology

Our unique approach links the training and assessment for Competitive Manufacturing Certificate III and IV to our TPM<sup>3</sup> 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 TPM<sup>3</sup> 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.



### Certificate III in Competitive Manufacturing alignment with TPM<sup>3</sup> Methodology

To be awarded a Certificate III in Competitive Manufacturing, competency must be achieved in 8 units

### Certificate IV in Competitive Manufacturing alignment with TPM<sup>3</sup> Methodology

To be awarded a Certificate IV in Competitive Manufacturing, competency must be achieved in 10 units

#### Example Pathway:

Production Operator		Month																										
TPM <sup>3</sup> Activity	Competitive Manufacturing Cert III Unit Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
<b>Area Based Team Activities</b>																												
WAM	1. Apply 5S procedures in a manufacturing environment				MSACM T240A																							
OEM-1	2. Contribute to the application of a pro-active maintenance strategy							MSACM T281A																				
OEM-2	3. Support Proactive Maintenance									MSACM T483A																		
OEM-3	4. Ensure process improvements are sustained													MSACM S401A														
WAM or OEM	5. Lead a competitive manufacturing team				MSACM C411A+																							
<b>Cross-functional Team Activities</b>																												
Mini Micro Problem Solving	6. Undertake Root Cause Analysis											MSACM T280A																
Mini Micro Problem Solving	7. Use structured problem solving tools													MSAPMS U P390A														
Micro FE&PI	8. Apply competitive manufacturing practices				MSACM S200A*																							

Pathways also exist for Maintenance and Support (including Sales) employees for both Certificates

### Deployment Models – 3 Options

1. CTPM provides full Training & Assessment support as we assist you on your improvement journey
2. CTPM trains your TPM<sup>3</sup> 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 of your improvement journey
3. Client, as a RTO conducts the assessment and issues own National Qualification (CTPM provides the training and assessment tools as we assist you on your improvement journey)

\* Completed TPM<sup>3</sup> Leadership / Instructor Program, plus one-day Assessment training

Government Subsidies are available in Australia and New Zealand.

Australian Government employer incentives of up to \$4,000 per employee may be available for eligible employees.

# Assisting your Site to Strive for World Class

## 5 Level Milestone TPM<sup>3</sup> Excellence Award

### What is needed to be World Class at Improvement?

There are 3 critical ingredients:

1. Gold Medal to strive for (Improvement Vision)
2. Great Coach with a Proven Training Plan
3. Discipline to follow the Training Plan

To assist our members on their journey to World Class performance, CTPM created the 5 Level Milestone TPM<sup>3</sup> Excellence Award supported by our TPM<sup>3</sup> 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 TPM<sup>3</sup> Excellence Award.

Feedback from this audit also provides a gap analysis for planning future activities on your Improvement Journey.

### Overview of the 5 Level Milestone TPM<sup>3</sup> Excellence Award

Key Objectives:

- Challenge and assist industry to strive for World Class Performance / Operations Excellence
- Provide a multi-level award and assessment process that is internationally recognised
- Provide a benchmarking tool to allow sites to monitor their progress on their journey to World Class Performance / Operations Excellence

The assessment covers four key aspects of your TPM & Lean (TPM<sup>3</sup>) journey:

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

### What are the 5 Levels?

Each level is a stepping stone covering three aspects of your Improvement Journey

- How much of your site is being assessed
- The number of TPM<sup>3</sup> Improvement Activities being assessed
- The level of competence (score) in each assessment sheet

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

### How good are you at Improvement?

#### 33 Awards achieved since October 2002

##### Level 5 (1)

Banpu Lampang Coal Mine - Thailand



##### Level 4 (1)

Banpu Lampang Coal Mine - Thailand



##### Level 3 (3)

Banpu Lampang Coal Mine - Thailand  
PT Kitadin Tandung Mayang Coal Mine - Indonesia  
Uncle Toby's Company - Smithfield NSW



##### Level 2 (11)

ACI Plastic Packaging - Kirrawee NSW  
ArcelorMittal Tailored Blanks - Adelaide SA (Ex Nobel Metal)  
Banpu Lampang Coal Mine - Thailand  
New Zealand Sugar - Birkenhead NZ  
PT. Kitadin Indominco Mandiri Coal Processing - Indonesia  
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 1 (17)

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 - Indonesia  
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  
Sugar Australia - Mackay Port Terminal SA  
Sugar Australia - Yarraville VIC  
Uncle Toby's Company - Smithfield NSW



# Develop in-house improvement capability

## TPM<sup>3</sup> Leadership / Instructor's Program

The TPM<sup>3</sup> 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 TPM & Lean within their organisation. The Program involves our 2-day Getting TPM & Lean to Work workshop, 3-day TPM<sup>3</sup> Advanced Training workshop and 5-day live-in TPM<sup>3</sup> Leadership/Instructors course. The training is complemented with assignments, case studies and open book exams to ensure key learning outcomes are achieved.

### Key Attributes:

Since 1996 we have observed that the most effective and successful Improvement Co-ordinators, Champions, Leadership Team Members and 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 TPM & Lean 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 TPM & Lean when delivering training to an audience more familiar with traditional equipment management thinking

**Passion** from experiencing success of TPM & Lean 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 change generates



### Key Features of our TPM<sup>3</sup> Leadership Program

- Typically spans over a period of 3 - 9 months rather than being one event to allow TPM<sup>3</sup> Leaders / Instructors to gain sufficient practical experience in their own workplace
- Experience accelerated by demonstration in the workplace from CTPM Navigators
- Focus on Doing to create the true Learning

Companies that have followed this path have, in our opinion, produced both the best Improvement Leaders / Instructors and achieved the most impressive performance results for their company as demonstrated by the sites that have achieved our 5 Level Milestone TPM<sup>3</sup> Excellence Award. See previous page.

**To Date: 334 participants from 70 companies throughout Australia, New Zealand, Thailand, India, Indonesia and Saudi Arabia have completed our program**

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