



## ***Update on our 2010 Operations Capability Innocence to Excellence Rating results from Australian Sites***

Since 2002, we have been recording the individual ratings from all our 2-day Getting TPM & Lean to Work workshop delegates. In 2010 we had 78 attendees from 21 companies covering 24 sites with the average score for the rating being 45%.

### **Details of the 2010 Survey Results**

**Location of Workshops:** Sydney – NSW, Yarraville – VIC, Albury – NSW, Melbourne – VIC, Mulwala – VIC, Benalla – VIC, Mackay – QLD, Mt Gambier – SA, and Girraween – NSW

**Respondents to Survey:** 78 from 21 Companies covering 24 Sites

Baxter Health Care

Bega Cheese

B&D Doors & Openers

Boral Clay & Concrete Masonry

Boral Resources

Cochlear Ltd

Donaldson Australasia

Electrolux Home Products

Gibson Shopfitters

Goulburn Murray Water

Hoya Lens Australia

Kavanagh Industries

Kraft Foods

Mars Petcare

Micro Pacific

Nestle Australia – Uncle Tobys

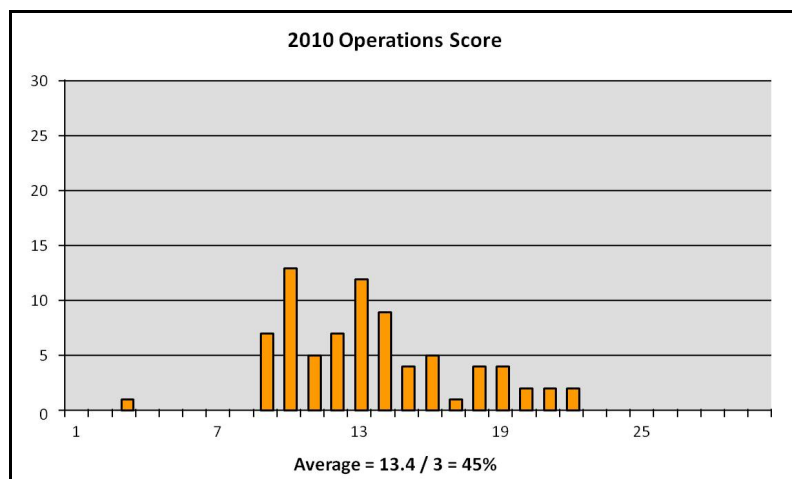
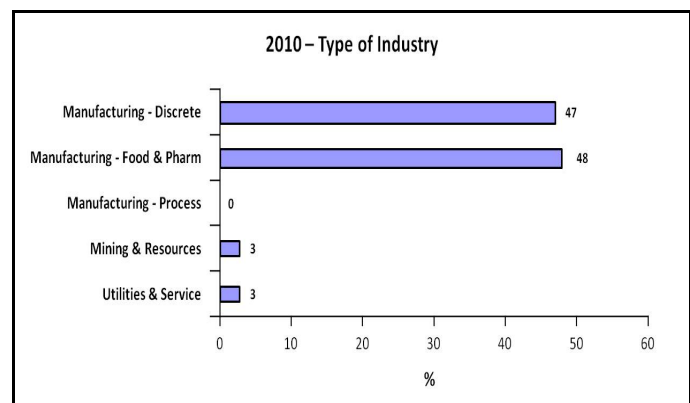
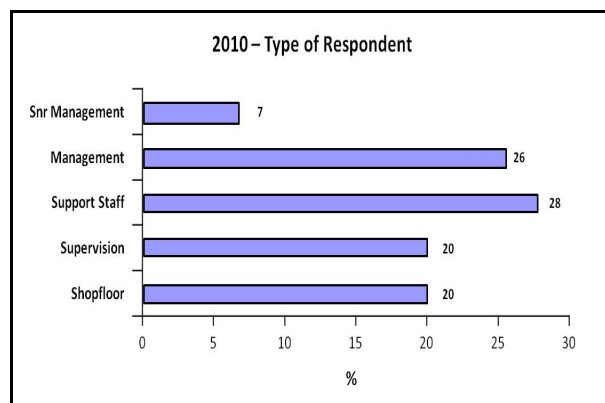
Norske Skog

Sugar Australia

SunRice

Thales Australia

Veyance Belting





## How does this result compare to past years?

Below is a table summarising the ratings to date.

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010
Companies	39	41	49	35	33	27	63	21	21
Sites	45	49	65	44	42	33	73	31	24
Respondents	102	162	186	126	108	81	178	72	78
Rating	50%	49%	49%	49%	47%	47%	46%	45%	45%

The majority of attendees at the workshops have not commenced their TPM & Lean journey with CTPM, however many may have been involved in other improvement initiatives at their site.

After 9 years there has not been much change to the average results. If anything we may be able to conclude that in recent times the attendees are more aware of what Excellence is based on, due to their greater exposure to literature and events about Lean or Six Sigma. However the broader Australian Industry (CTPM clients excluded) hasn't really made much impact on their Operations Capability.

***To encourage Site Leadership Teams to better monitor their overall improvement journey progress, we now encourage all sites to include the Operations Capability Rating (along with the Maintenance Rating and Culture Rating from the 2-day workshop) on their Baseline Analysis Sheet and re-do each rating (especially the Operations Rating) at least every 12 months with their employees who are involved in their improvement journey.***

We have also found that as our clients progress the 5 Level Milestone TPM<sup>3</sup> Excellence Award there is a correlation emerging between their Operations Capability Rating score and the Level they are at on the TPM<sup>3</sup> Excellence Award.

TPM <sup>3</sup> Excellence Award Level	Operations Capability Rating
1	60-65%
2	65-70%
3	70-75%
4	75-80%
5	80-90%

## What do we need to focus on to improve ratings?

In reflecting on all the results to date, we have identified that there are 3 fundamental ways of improving a site's rating:

1. Technology & Automation (when justified) to eliminate or minimise human error;
2. Project or Event Improvement eg Kaizan Events or 6σ Projects etc; and
3. On-going Improvement through the engagement of the entire workforce to enhance their practices and behaviours eg on-going regular Area Based Team improvement activities such as Work Area Management / Operator Equipment Management activities, and on-going regular Cross-functional Team improvement activities such as 12-14 week cycles of Focused Equipment & Process Improvement.



When we ask the delegates at our workshops, we find the most common approach in Australia appears to be to focus on the first 2 ways as the 3<sup>rd</sup> way has either not been thought about (lack of understanding or lack of desire to develop their frontline people), or is perceived to be too difficult and time consuming.

When challenged further it appears the 'quick fix' (Kaizen Event) or 'expert intervention' (6σ Project) is perceived the easiest way forward.

## Embracing the On-going Improvement Option

We recognise that some sites believe the 3<sup>rd</sup> approach of **enhancing practices and behaviours** is perceived as too difficult as it requires good leadership at all levels. However we learnt as far back as 1996 from Proctor & Gamble's very successful experience with TPM at their Wyong NSW site that it is the 3<sup>rd</sup> way that really lifts performance through unleashing the full potential of people, equipment and processes.

## New learning leads to new support material

A more recent learning we have had, is that even when sites do embrace the concept of On-going Improvement by setting up Area Based Teams and introducing Work Area Management and Operator Equipment Management to develop the Mastery Skills of their Operators, they struggle because their Operator's and Team Leader's Base Skills are not in good shape.

As an outcome of this, CTPM has developed a **Micro Education & Training – Base Skills Team Member Manual** to assist sites to focus on a Defined Production Area (or part thereof) and determine what Base Skills are required especially to address any Speed (such as ramp up after set-ups) or Quality Losses due to poor adjustments etc. The manual uses the learning from the TWI (Training Within Industry) methodology developed in the USA during WW2 and used by Toyota, along with a focus on Standardised Work.

We have trialled the manual at NZ Sugar with some very good results which were reported at our 2011 Annual Forum. Following their feedback and further research on Standardising Work we have recently released Edition 2 of the Team Member Manual.

This has also led to further development of our Team Skills and Leadership Skills modules (refer to the latest Resource Material for TPM<sup>3</sup> Leader / Instructors 7 page document) to assist in developing the Leadership Skills of Team Leaders.

We recognise the vital importance of Frontline Leaders (Team Leaders) having good Base Skills, Team Skills, Team Leadership Skills & Mastery Skills to not only assist team members in achieving the production plan but also to teach and develop their team members. By not having effective Team Leaders with the above skills, the next level of management, (i.e. Production / Shift Managers) are forced to manage down a level to compensate, therefore not allowing them to effectively manage what they need to focus on. This can have a whole knock on effect on the entire management structure.

***For more information about CTPM's 9 Year Operational Excellence Rating Result, our Micro Education & Training – Base Skills methodology or our Team Skills and Team Leader Skills modules please contact your CTPM Navigator or CTPM Head Office on +61 4226 6184 or email to [ctpm@ctpm.org.au](mailto:ctpm@ctpm.org.au).***

***Note: Please use the Operations Capability Rating Survey on the next page to rate your own site.***

## Operations Capability Rating Survey used during the 9 Year Study

For each of the 3 categories, please score your site out of 10 using the words in each block as a guide to giving a rating ie if the words in the first block described your site you would rate your site somewhere between 0 and 3 depending on how close the words described your perception of the site. If the words in the second block better described your perception of your site then you would rate your site somewhere between 3 and 7 etc.

0	1	2	3	4	5	6	7	8	9	10
<b>Quality Performance</b>										
Machines and processes unable to hold desired tolerances, high rate of 'off-spec'.				Good machine and process capability supported with Statistical Process Control monitoring and quality improvement tools training but with limited application.				Excellent machines and processes capability continuously monitored using Statistical Process Controls supported by the application of quality improvement tools with low process variability.		
Large and powerful inspection departments, 'off-spec' discovered by inspection and customers.				Strong quality assurance department with analytical capability and charged with primary quality responsibility.				Very low 'off spec' rate measured in parts per million.		
Low Skills training.				Good skills training.				Highly trained and versatile work force responsible for quality inspection and corrective action.		
Large discrepancy between documents and the actual practices, frequent non-conformances.				Few non-conformances.				High application of mistake - proof devices to ensure no non-conformances to specification.		
Large number of customers' complaints.				Low number of customer complaints, however problems do remain and are handled by QA department.				Virtually no problems with complaints and customer inputs solicited for continuous improvement.		

0	1	2	3	4	5	6	7	8	9	10
<b>Response Performance</b>										
Frequent replanning / rescheduling of production.				Relatively stable production schedule with limited expediting.				Production schedule directly coupled with market demand.		
'Fix it when it breaks' maintenance.				Established preventive maintenance, infrequent breakdowns.				TPM as the key equipment management strategy.		
Low process flexibility, lengthy changeovers, set-ups, or transitions.				Faster changeovers, set-ups or transitions, however frequent bottlenecks.				Quick changeovers, set-ups or transitions (measured in minutes) and virtually no bottlenecks.		
Inventory levels between equipment or process high.				Inventory levels under control.				Inventory levels stable and low.		
Long Lead Times.				Relatively shorter Lead Times for selected products / outputs.				All Lead Times less than one-day		

0	1	2	3	4	5	6	7	8	9	10
<b>Employee Engagement Performance (supporting Innovation &amp; Learning)</b>										
Adversarial labour management relations.				Stable labour management relations.				Labour management relations based on trust and continuous two-way communication.		
Little employee involvement (especially all operators) in formal improvements				Some formal employee involvement in formal improvement activities with main focus on Cross-functional teams.				All employees involved in formal improvement activities through both Cross-functional and Area Based Teams ensuring a high rate of implemented improvements.		
Leadership based on seniority rather than skills with many job classifications.				Structure is based on cascading team environment where each organisation layer is seen as a team of people.				Cascading team organisation structure is 'purpose' aligned and is capable of supporting continuous learning by all employees through well-led synergistic Area Based Teams along with dedicated support.		
High employee turnover or high use of casuals.				Stable work force with good employee morale.				High focus on learning by employees with low turnover and high morale.		
Highly demarcated work force resulting in high inefficiencies.				Skills training well developed to achieve both flexibility and expertise in well-defined areas.				Continuous training to achieve skill versatility and team problem solving skills.		

The three scores out of 10 are added to give a total score out of 30. Divide your total score by 3 and then multiply by 10 to get your percentage score. Use the guide on right to identify and understand your sites rating.

### What does your score mean?

00% – 20%	In need of urgent attention
21% – 40%	Great opportunity for improvement
41% – 60%	On the right path but ways to go yet
61% – 80%	Well managed with further improvement potential
81% - 100%	World Class Performance