

## Creating Area Based Teams to achieve World Class Performance

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### Preamble

During the initial TPM<sup>3</sup> Pre-cycle Strategy planning workshops the issue of whether to establish formal Area Based Teams is often raised especially in regard to progressing to the Work Area Management (WAM) and Operator Equipment Management (OEM) Core Pillars of TPM<sup>3</sup>. To assist Leadership Teams to more fully understand how to prepare for Area Based Teams the following background information has been prepared.

The information is based on our learnings and research over the past 10 years regarding the formation and value of what we now refer to as Purpose Driven and Learning Area Based Teams focused on both achieving the production plan and formally improving through TPM<sup>3</sup> activities.

### Background Information on Improvement Teams

In 1996 when we first visited Proctor & Gamble's site in Wyong NSW where they were attempting TPM for the second time with very impressive results (OEE up from 35% to 86% across their site), we were intrigued by their comment regarding Area Based Teams. They originally commenced TPM in 1992 following the Japanese approach, which only lasted for about 6 months. In 1994 with OEE still around 35% they decided to have another go but this time modifying their approach based on their learning in the USA and Europe.

They found initially by using cross-functional improvement teams they were able to raise OEE up to about 70% before hitting a 'wall' ie very little improvement from further Cross-functional teams. After some analysis and review they realised several factors. First, they had a policy of moving their employees around departments / areas every 6 months to ensure maximum flexibility at the site. This, however, did not allow the development of mastery skills (how the equipment functioned as opposed to how to operate the plant, which is fundamental to the success of TPM). Secondly, the people related issues were not being solved by the Cross-functional Teams due to lack of ownership of the solutions by the employees who had to apply the solutions from the project orientated Cross-functional Teams.

Once they realised that TPM was more than just a project based improvement strategy they moved forward rapidly to reach the plus 85% OEE target along with zero accidents and zero quality problems.

This learning was similar to MM Cables experience in 1999 when after 12 months of project focused TPM<sup>3</sup> activities they moved into *formal* Area Based Team activities with significant results. Uncle Toby's also attribute their success due to their *formal* Area Based Team TPM<sup>3</sup> activities.

To assist Leadership Teams to understand the difference between Cross-functional Teams and Area Based Teams we have prepared the following table.

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### The Difference Between Cross-functional and Area Based Improvement Teams

|                | Cross-functional Teams   |  | Area Based Teams   |
|----------------|--|--|--|
|                | Macro FE&PI  | Micro FE&PI  | WAM / OEM 1-7  |
| <b>Focus</b>   | Defined TPM <sup>3</sup> Area – All Losses (Big picture)                                   | Specific Loss / Issue  | Defined Improvement Area   |
| <b>Make-up</b> | Different Disciplines  | Specific disciplines   | Everyone in the Defined TPM <sup>3</sup> Area / Area of Responsibility                             |
| <b>Skills</b>  | Requires skills of different Departments / Groups  | Requires specialised skills  | Improve within their skill base  |
| <b>Impact</b>  | Requires planned time off job  | Requires planned time off job  | Integrated into normal activities  |
| <b>Timing</b>  | 1.5 hrs/wk meeting (fixed time and place) supported by up to 1.5 hrs/wk support activities | ~ 1.0 hr/wk meeting (fixed time and place) supported by up to 1 hr/wk support activities | ~15-30 minute / weekly planning meetings (variable) supported by 1-2 hrs/wk improvement activities |
| <b>Culture</b> | Breakdown Barriers and Build Relationships   | Learning about working together  | Building Team <b>Synergy</b>   |
| <b>Life</b>    | Kick-off plus 12 weeks then disband  | Up to 12 weeks then disband  | Ongoing with 12 week cycles  |

Formal Area Based Team activity is where employees are placed in full-time teams of 4-8 employees including a designated Team Leader with an expected indefinite life. They are given a clearly defined Area of Responsibility and boundaries for 'Achieving the Production Plan' in a safe, quality, cost effective and environmentally sound way; and secondly given a clearly defined Improvement Area and boundaries to 'Formally Improve' the way they achieve the production plan. Where multi-shifts are involved, the Improvement Area will be only a part of the overall Area of Responsibility for Achieving the Production Plan.

In TPM<sup>3</sup> a key role of the initial Macro Focused Equipment & Process Improvement Cross-functional Teams is to create opportunity through increased OEE for Area Based Teams to carry out formal area-based improvement activities. These activities in a TPM<sup>3</sup> journey include the TPM<sup>3</sup> pillars of Work Area Management (typically an initial cycle of up to 12 weeks) and Operator Equipment Management (typically 2-3 year process of 7 steps and multiple 12-week cycles). By extending your employees through the structured continuous steps of Work Area Management (WAM) and Operator Equipment Management (OEM) you achieve sustainability of your TPM<sup>3</sup> journey and a work force capable of World Class Performance.

### Learnings from establishing Area Based Teams

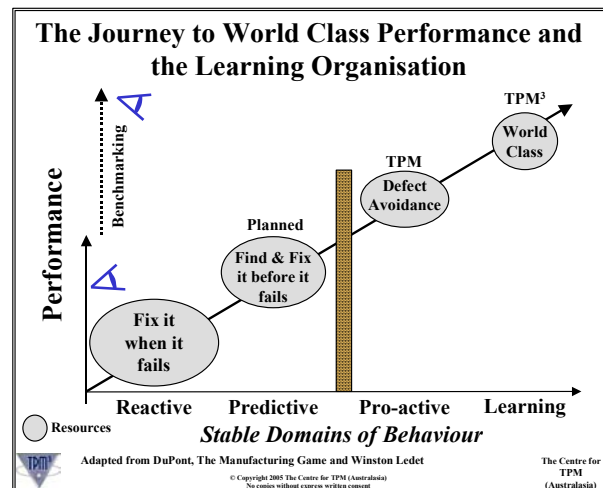
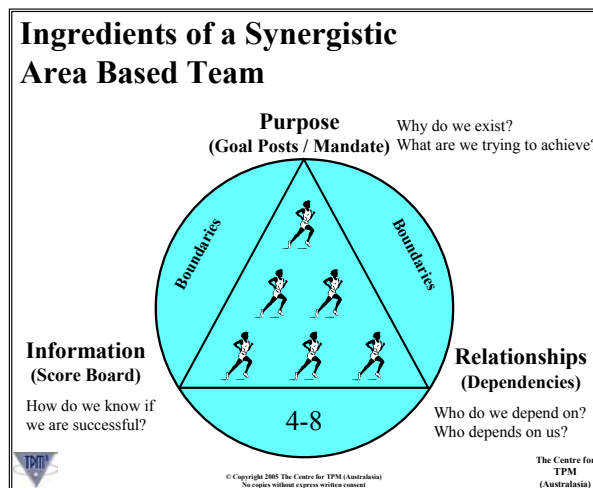
Source: 'Seminar on Workplace Teams in Australian Industry' 26 March 1997

- Establish what your vision for Area Based Teams is first; recognising the 4 stages of Area Based Team development;
- Communication is critical so everyone understands why, what's in it for them, how the business is performing, and where they contribute to this performance;

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- Sharing is necessary to ensure the understanding continues, it also helps to develop trust;
- Individuals must be taught how to communicate and how to handle conflict in the early stages of being Area Based Team members;
- Must impart skills to team members, so they can perform as a team;
- Everybody must be involved;
- There needs to be a structured process;
- Process is important (and necessary), however the relationships are critical;
- Use an outside Navigator - someone who can be seen as independent, but is also experienced; and
- Turn failures into learning opportunities.

### Why Purpose Driven & Learning Area Based Teams?



In order to create a learning environment that allows employees to:

- take on new challenges created by an ever changing, innovative business climate;
- take on new training to enhance knowledge and skills;
- care for their workplace (equipment and work area) to address the root cause of failure;
- care for their fellow employees to address poor safety behaviours which lead to near misses and accidents; and
- reach their greatest potential;

we need to create a 'Purpose Driven & Learning' Area Based Team environment with the ultimate goal of developing mature synergistic Area Based Teams focusing on both:

- achievement of the production plan in a safe, quality, cost effective and environmentally sound way; and
- formal continuous improvement in the way this is achieved.

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Firstly the size of each Area Based Team needs to be considered. Why 4-8? We have found any less than 4 permanent employees tends to reduce the flexibility of the team, while any greater than 8 tends to make creating the right team chemistry (an essential ingredient for synergy) more difficult to achieve. Also a key feature of Area Based Teams is the ability of all team members to be able to carry out the tasks within the team's defined Area of Responsibility (flexibility) and as the size of the team increases so does the number of tasks that need to be learnt by the team members.

All team members should be working the same shift pattern and be permanently allocated to the team. The team should have a designated Team Leader responsible for the team achieving the production plan in their allocated Area of Responsibility and for their formal continuous improvement activities.

We have found that there are 3 critical foundations for a successful Area Based Team:

**Purpose:** the Area Based Team needs to be 'purpose driven'. In other words, there needs to be clear goals and mandates set for the team for both achieving the production plan and formal continuous improvement.

**Information:** the Area Based Team needs to have formal regular (preferably weekly) feedback on not only their improvement performance (addressed through weekly WAM / OEM meetings), but also the entire performance (all shifts) of their Area of Responsibility (Defined TPM<sup>3</sup> Area) in order to support the notion that the Area Based Team is also part of a bigger team (all employees in the Defined TPM<sup>3</sup> Area across all shifts). For this reason we see it as critical that a TPM<sup>3</sup> Noticeboard and Scoreboard is established in each Defined TPM<sup>3</sup> Area (key function of the Macro FE&PI team) so that weekly 5-10 minute toolbox meetings can be held for each shift in front of the boards to allow feedback on the formal improvement activities (eg Micro FE&PI teams) and most importantly the business performance measures for the Defined TPM<sup>3</sup> Area (eg OEE, Safety, Quality to Customer, Delivery, Productivity, Costs, Morale).

**Relationships:** the Area Based Team needs to have designated support personnel allocated to them. In Rule 2 of the Four Rules from Toyota as outlined in the paper: Decoding the DNA of the Toyota Production System published in the Harvard Business Review Sep-Oct 99, they highlight the need for every Area Based Team to have designated support ie allocated mechanical maintenance (fitter), electrical maintenance (electrician), quality support person etc.

### The Four Rules of Toyota

Rule 1: All work shall be highly specified as to content, sequence, timing, and outcome

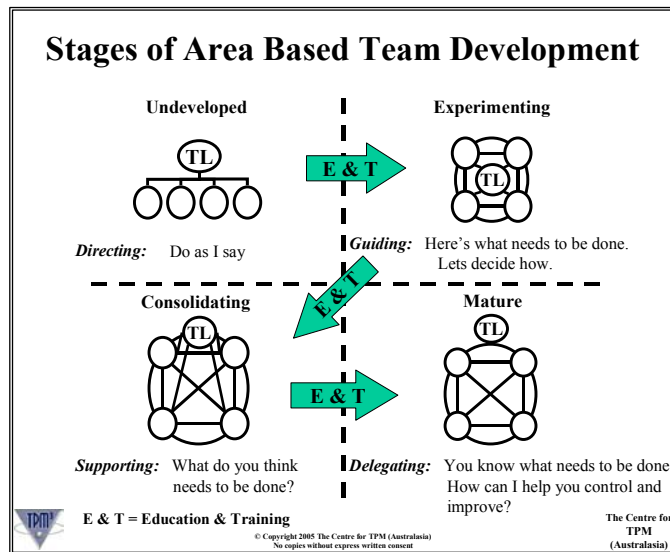
**Rule 2: Every customer-supplier connection must be direct, and there must be an unambiguous yes-or-no way to send requests and receive responses**

Rule 3: The pathway for every product and service must be simple and direct

Rule 4: Any improvement must be made in accordance with the scientific method (eg 9 step process of FE&PI), under the guidance of a teacher (initially TPM<sup>3</sup> Co-ordinator then the Team Leader and Group Leader), at the lowest possible level in the organization

**Source: Decoding the DNA of the Toyota Production System; Harvard Business Review Sep-Oct 99**

## The Development of Area Based Teams



Synergistic Area Based Teams do not happen naturally. They need to be developed over a period of time (2-3 years) supported with clear boundaries that are gradually expanded along with ongoing education & training with time for learning by doing (weekly formal improvement time) supported by reflection (mid and final presentations each 12 week cycle).

It is critical for the ultimate success of an Area Based Team that we recognise and manage the 4 stages of Area Based Team development:

- **Undeveloped** – Directing: Do as I say
- **Experimenting** – Guiding: Here's what needs to be done, lets decide how
- **Consolidating** – Supporting: What do you think needs to be done?
- **Mature** – Delegating: You know what needs to be done. How can I help you control and improve?

Experience has shown that each stage can take on an average, about 9 months for a team to progress.

Toyota describes their 4 stages of Area Based Team development they used in their USA plants as:

### Stage 1: *Orientation*

The team needs strong direction from the leader and must understand the basic mission, rules of engagement, and tools the members will use.

### Stage 2: *Dissatisfaction*

The team goes to work, which is a lot less fun than talking about great visions of success, and the members discover it is harder than they thought to work as a team. In this stage, they continue to need strong direction (structure) from the leader but also need a lot of social support to get through the tough social dynamics they do not understand.

### Stage 3: *Integration*

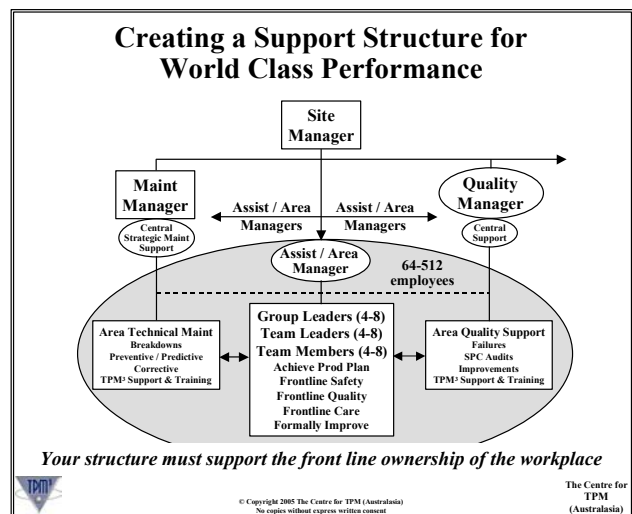
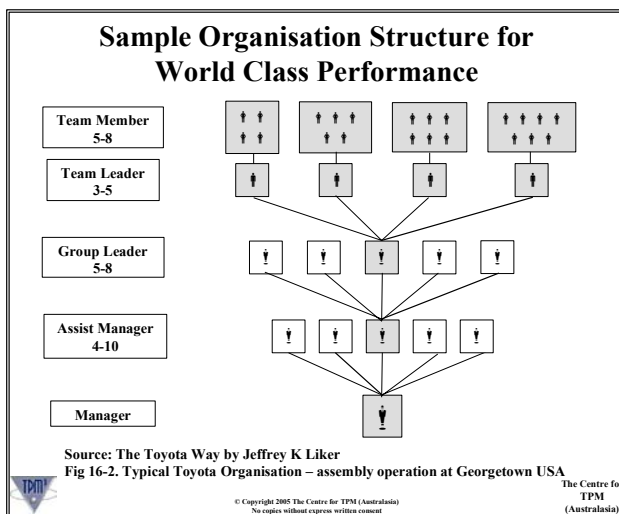
The team starts to develop a clearer picture of the roles of various team members and begins to exert control over team processes. The challenge is for the team to learn about roles, goals, norms and team structure. The leader does not have to provide much task direction, but the team still needs a lot of social support.

### Stage 4: *Production*

The team puts it all together and is functioning as a high-performing team with little task support or social support from the leader.

## Defining the Roles & Responsibilities to Support Area Based Teams

In the book 'The Toyota Way' by Jeffrey K. Liker, there is a chapter on the organisation structure created to support Toyota's world class performance which initially appears quite hierarchical, however when viewed in more detail it highlights the need to support their employees as they focus on having problems continuously identified and addressed at the frontline where the value is added. As shown in the diagram their structure of Team Leaders, Group Leaders and Assistant Managers allows for a workforce of up to 512 employees or as few as 64 employees based on the notion that 4-8 Team Members make up a team, and 4-8 Team Leaders report to a Group Leader and 4-8 Group Leaders report to an Assistant Manager.



As a guide, we have listed our interpretation of the possible roles and responsibilities for the Team Members, Team Leaders and Group Leaders:

| Key Roles |   |  |  |
|-----------|---|--|--|
|           | Team Member   | Team Leader *  | Group Leader   |
|           | To perform required tasks to standard so as to support the achievement of the production plan in a safe, quality, cost effective and environmentally sound way and support formal continuous improvement so as to improve both the workplace and the way the production plan is achieved. | To keep the Area of Responsibility (Plant, Line, Equipment) running smoothly and producing quality output by achieving the production plan in a safe, quality, cost effective and environmentally sound way, and lead formal continuous improvement so as to improve both the workplace and the way the production plan is achieved. | To do many things that otherwise would be handled by specialty support functions in human resources, engineering, and quality. They are integral to major improvements of the process, even introducing new products and processes. They regularly teach short topics. If needed they are also capable of getting on the line and performing the jobs. |

**Note:** The Team Leader is a working role and as such is still a wages employee who takes on a number of the responsibilities traditionally done by staff or salary supervisors, although as Team Leaders are not formally staff or salary employees they normally do not have the authority to discipline other team members.

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| Key Responsibilities |   |  |  |
|----------------------|---|--|--|
|                      | Team Member   | Team Leader  | Group Leader   |
| <b>1</b>             | <b>Achieve the Production Plan (in a safe, quality, cost effective and environmentally sound way)</b>   |  |  |
|                      | <ul style="list-style-type: none"> <li>Operate equipment and machinery to ensure that the production plan is achieved in a safe, quality, cost effective, and environmentally sound manner.</li> <li>Manage own workplace (work area and equipment) within the boundaries set by the company</li> <li>Operate / perform tasks in accordance with agreed standards and procedures.</li> <li>Assist fellow team members with the above</li> <li>Identify and notify fellow team members and Team Leader of production problems</li> <li>Stop production when necessary</li> <li>Participate in root cause analysis</li> <li>Complete on the job training and delivery of OPLs, where appropriate</li> <li>Assist in On-the-Job training of fellow team members</li> </ul> | <ul style="list-style-type: none"> <li>Process start-up and control</li> <li>Meet production goals</li> <li>Respond to production problem (Andon) calls by Team Members</li> <li>Cover absenteeism</li> <li>Insure parts/materials are supplied to process</li> <li>Report / track daily production results</li> <li>Base skills (flexibility) and mastery skills (expertise) training</li> <li>Plan and deliver a large amount of On-the-Job training</li> <li>Identify training needs</li> <li>Keep training and assessment records</li> <li>Ensure issues and learnings are communicated effectively to the Team Leaders on other shifts</li> </ul> | <ul style="list-style-type: none"> <li>Manpower / vacation scheduling</li> <li>Help cover Team Leader absence</li> <li>Monthly production planning</li> <li>Report or track weekly or monthly area progress</li> </ul> |
| <b>2</b>             | <b>Safety</b>   |  |  |
|                      | Frontline Safety including: <ul style="list-style-type: none"> <li>Adherence to safe operating standards &amp; procedures</li> <li>Risk assessment including identification of workplace hazards</li> <li>Job Safety Assessments / Behaviour Audits</li> <li>Carry out hazard control</li> </ul>  | <ul style="list-style-type: none"> <li>Ensure standardised work is followed</li> <li>Risk assessment</li> <li>Identification and rectification of workplace hazards</li> <li>Initiate incident investigation</li> <li>Initiate hazard control (minimise, isolate, eliminate)</li> </ul>  | <ul style="list-style-type: none"> <li>Group safety performance</li> <li>Development of audits and safety procedures</li> </ul>  |
| <b>3</b>             | <b>Quality</b>  |  |  |
|                      | Frontline Quality including: <ul style="list-style-type: none"> <li>Carry out quality-routine checks</li> <li>Understand the relationship between equipment and quality</li> <li>Predict problems in quality and detect their causes</li> <li>Notify out of control conditions</li> <li>Stop production if out of control conditions cause product defects as per agreed standards</li> </ul>   | <ul style="list-style-type: none"> <li>Confirm quality-routine checks and address issues</li> <li>Ensure standardised work is followed</li> <li>Respond to out of control conditions and / or quality problems</li> </ul>  | <ul style="list-style-type: none"> <li>Confirm routine quality and housekeeping checks</li> <li>Ensure quality checks achieve desired goals</li> </ul>   |

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| Key Responsibilities |  |  |   |
|----------------------|--|--|---|
|                      | Team Member  | Team Leader  | Group Leader  |
| <b>4</b>             | <b>Equipment Care</b>  |  |   |
|                      | <p>Frontline Care of equipment including:</p> <ul style="list-style-type: none"> <li>Identify equipment defects at the earliest stage through regular Cleaning for Inspection and daily equipment care inspections and checks</li> <li>Ensure rectification of equipment defects are promptly carried out</li> <li>Understand equipment functions and mechanisms through Training for Inspection</li> <li>Detect causes of equipment defects</li> <li>Conduct minor servicing of their equipment where appropriate</li> <li>Proper Operation</li> <li>Quick &amp; proper reporting of malfunctions</li> <li>Correct set-up and adjustments</li> <li>Verification of repairs</li> </ul> | <ul style="list-style-type: none"> <li>Work orders for quick maintenance</li> <li>Confirm and support weekly maintenance plan</li> </ul>   | <ul style="list-style-type: none"> <li>Co-ordinate major maintenance and shut down planning</li> <li>Weekly maintenance resource planning including allocating time for defect repairs</li> </ul>   |
| <b>5</b>             | <b>Formal Continuous Improvement</b>   |  |   |
|                      | <ul style="list-style-type: none"> <li>Participate in and contribute to WAM / OEM team activities so as to strive for zero breakdowns, zero quality problems and zero accidents</li> <li>Member of cross-functional improvement team eg Micro FE&amp;PI team so as to address improvement opportunities outside the boundaries of their Area Based Team</li> <li>Identify small improvement initiatives (ie complete an improvement sheet)</li> <li>Lead small improvement initiatives</li> <li>Participate in root cause analysis</li> </ul>  | <ul style="list-style-type: none"> <li>Lead WAM / OEM activities</li> <li>Support all team members being a member of cross-functional improvement teams</li> <li>Prioritise small improvement initiatives and allocate tasks</li> <li>Plan small improvement initiatives</li> <li>Lead team through skill audit each cycle and clarify requirements</li> </ul> | <ul style="list-style-type: none"> <li>Team Development (support WAM / OEM activities) so as to improve safety, OEE (A x R x Q), quality to customer, delivery, productivity, cost, morale including ergonomics</li> <li>Co-ordinate, promote and support cross-functional improvement teams eg Micro FE&amp;PI</li> <li>Cost reduction activities</li> </ul> |



## Further Responsibilities of Group Leaders

Recognising that in Lean Production a Group Leader should be spending about 20% of their time on the above 'Task' activities while the rest of their time should be focused on:

|   |
|---|
| <b>Process Development (~ 40%)</b>  |
| <ul style="list-style-type: none"><li>▪ Administrative: policy, attendance, corrective actions</li><li>▪ Hoshin planning (translate high level / executive level goals into quantitative, achievable actions)</li><li>▪ Shift to Shift co-ordination</li><li>▪ Process trials (changes in process)</li><li>▪ Co-ordinate work with up-stream and down-stream processes</li><li>▪ Co-ordinate support from outside groups</li></ul>  |
| <b>People Development (~ 40%)</b>   |
| <ul style="list-style-type: none"><li>▪ Team Leader performance and development including:<ul style="list-style-type: none"><li>○ Decision Making / Problem Solving</li><li>○ Negotiation / Conflict Resolution</li><li>○ Teamwork / Communication</li><li>○ Presentation Skills</li><li>○ Inductive Mindset</li></ul></li><li>▪ Support Team Member Development in both base skills (flexibility) and mastery skills (expertise)</li><li>▪ Team Morale</li><li>▪ Recognition</li><li>▪ Review and Feedback</li></ul> |
| <b>Product Development (as required)</b>  |
| <ul style="list-style-type: none"><li>▪ Co-ordinate activities around product development and new products</li><li>▪ Advise any impact on production performance</li><li>▪ Ensure all shifts are aware of the product trials and the learnings from such</li></ul>  |

## Planning for Area Based Teams

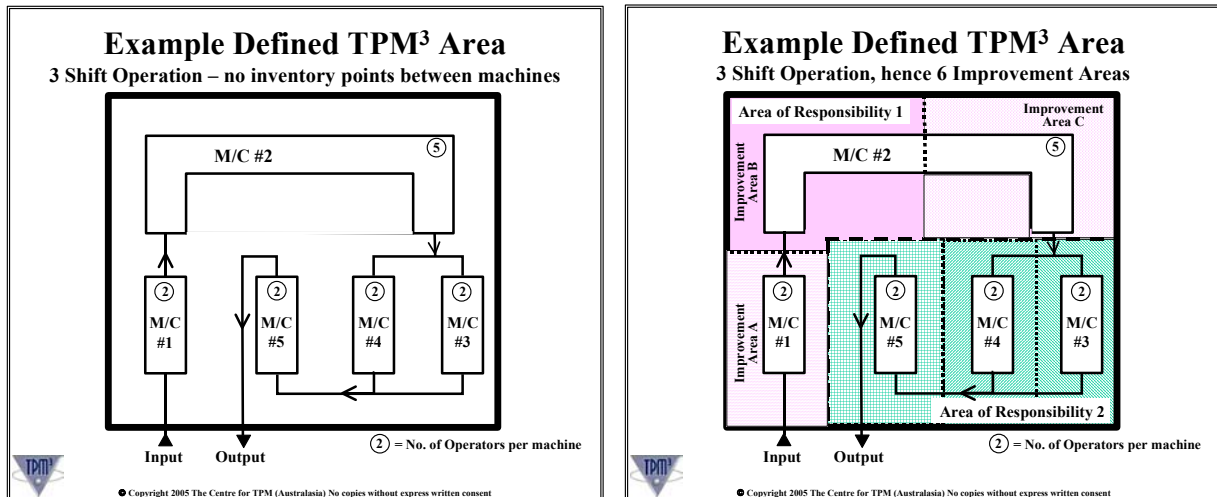
Before establishing Area Based Teams and commencing Work Area Management / Operator Equipment Management improvement activities in a Defined TPM<sup>3</sup> Area, the layout of the Defined TPM<sup>3</sup> Area should be reviewed along with the current skills required (classifications etc) to achieve the production plan to determine whether the Defined TPM<sup>3</sup> Area requires to be split into Areas of Responsibility and if so how the labour force should be divided up. To assist with this process we have prepared an example below along with supporting definitions.

**Defined TPM<sup>3</sup> Area:** able to measure OEE (ie good output and good input) and at least 4 permanent employees per shift

**Area of Responsibility:** the area the team is responsible for achieving the production plan. If the Defined TPM<sup>3</sup> Area has sufficient employees to create more than 1 team of 4-8 per employees per shift then there will be more than 1 Area of Responsibility within the Defined TPM<sup>3</sup> Area eg instead of 13 employees working the whole line, 7 will work on the front end of the line for the majority of the time (Area of Responsibility 1) and 6 will work on the back end of the line for the majority of the time (Area of Responsibility 2).

**Improvement Area:** the area the team is responsible for Area Based Team improvement activities (ie WAM / OEM). If there is more than one shift within the Defined TPM<sup>3</sup> Area then there will be more than one Improvement Area within each Area of Responsibility.

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As there are no inventory points between machines, OEE can only be measured at the output of the manufacturing process (M/C 1 – M/C 5). Hence the Defined TPM<sup>3</sup> Area involves 13 operators working 5 machines over 3 shifts (total 39 operators). To create Area Based Teams of 4-8, the Defined TPM<sup>3</sup> Area needs to be divided into two Areas of Responsibility for the Area Based Teams. In this example we have made Machines 1 and 2 involving 7 operators as Area of Responsibility 1 and Machines 3, 4 and 5 involving 6 operators as Area of Responsibility 2.

As each Area of Responsibility has 3 shifts, each shift is to be allocated an Improvement Area (approx 1/3 of the Area of Responsibility). In the example, for Area of Responsibility 1, Improvement Area A would cover M/C 1 and its associated work area, and Improvement Area B would cover half of M/C 2 and its associated work area, and Improvement Area C would cover the other half of M/C 2 and its associated work area. Area of Responsibility 2 would also be divided into three Improvement Areas as shown.

**Outcome:** Each Area Based Team (6 in total) will be accountable for Achieving the Production Plan in a Safe, Quality, Cost Effective and Environmentally sound way for their Area of Responsibility and be accountable for their WAM / OEM improvement activities in their designated Improvement Area.

### Outline of Area Based Team TPM<sup>3</sup> Improvement Activities (WAM / OEM)

Work Area Management is an ongoing activity for Area Based Teams, which typically commences with a designated 12-week cycle to engage all employees and significantly reduce their frustrations with their work area and to induce a significant improvement in communications between shifts. The key outcomes from Work Area Management are:

- Support the Defined TPM<sup>3</sup> Area in improving OEE along with Safety, Quality to Customer, Delivery, Productivity, Cost and Morale (holistic performance scorecard measures)
- Introduce formal improvement activities involving everyone within the Defined TPM<sup>3</sup> Area by establishing Area Based Teams across all shifts with clear responsibilities and boundaries for agreed Improvement Areas
- Establish a communications Noticeboard along with Improvement Sheets to support sharing of information between shifts to gain agreement and buy-in on improvements

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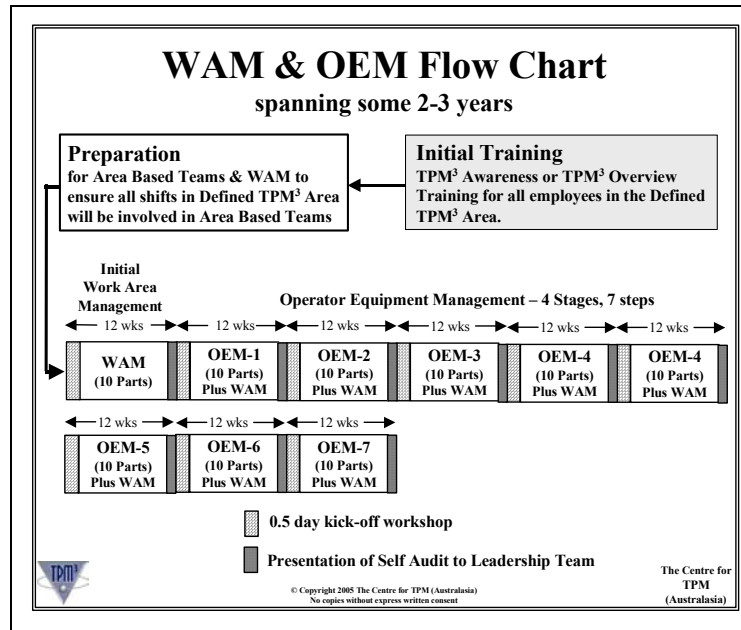
- Establish a Scoreboard for each Area Based Team to provide feedback to the team and everyone else at site on the progress of their improvement activities
- Improve safety, productivity and morale by establishing “a place for everything and everything in it’s place” within the Defined TPM<sup>3</sup> Area
- Standardise practices to support a more consistent approach to achieving the production plan across all shifts within the Defined TPM<sup>3</sup> Area
- Introduce the practice of Area Based Team self-assessments / self-audits
- Support both the team members and the teams in working together to improve their work area (reduce frustrations) and prepare for the introduction of Operator Equipment Management
- Create time and reduce the frustrations of all Area Based Team members so that there will be a desire (pull) to support the introduction of Operator Equipment Management

Operator Equipment Management involves a 4 stage 7 step process of some 8-10 12-week cycles with Work Area Management activities supporting along the way to ensure ultimately we achieve a workplace that is free of accidents, breakdowns and quality problems. The key outcomes from Operator Equipment Management are:

- Support the Defined TPM<sup>3</sup> Area in improving OEE along with Safety, Quality to Customer, Delivery, Productivity, Cost and Morale (holistic performance scorecard measures)
- Restore equipment to its “ideal” state by establishing Basic Equipment Conditions
- Reduce accelerated deterioration through daily checks and proper operation
- Identify and initiate the improvement of Design Weaknesses
- Make use of equipment as a means of teaching employees new ways of thinking and working
- Create a positive environment to allow maintenance and production to gain a greater understanding of each others situation and build relationships
- Provide everyone with the training, systems and opportunities to care for their own equipment & workplace
- Establish the necessary conditions and systems to keep equipment properly maintained
- Develop self-managed world class operators competent in:
  - Achieving the Production Plan
  - Frontline Safety
  - Frontline Quality
  - Frontline Care
  - Formal Continuous Improvement

who can:

- Recognise equipment defects or problems at the earliest possible time
- Initiate and ensure rectifications are promptly carried out
- Understand equipment functions and mechanisms
- Detect causes of defects or abnormalities
- Carry out minor servicing of their equipment where appropriate
- Understand the relationship between equipment and quality (eg yield loss)
- Predict problems in quality (eg yield loss) and detect their causes
- Manage own workplace
- Develop synergistic mature Area Based Teams recognising the 4 stages of Team Development
- Create the environment where Production and Maintenance work in harmony
- Create a failure-free, trouble-free, safe workplace



### Determining Your Improvement Areas for WAM / OEM Activities

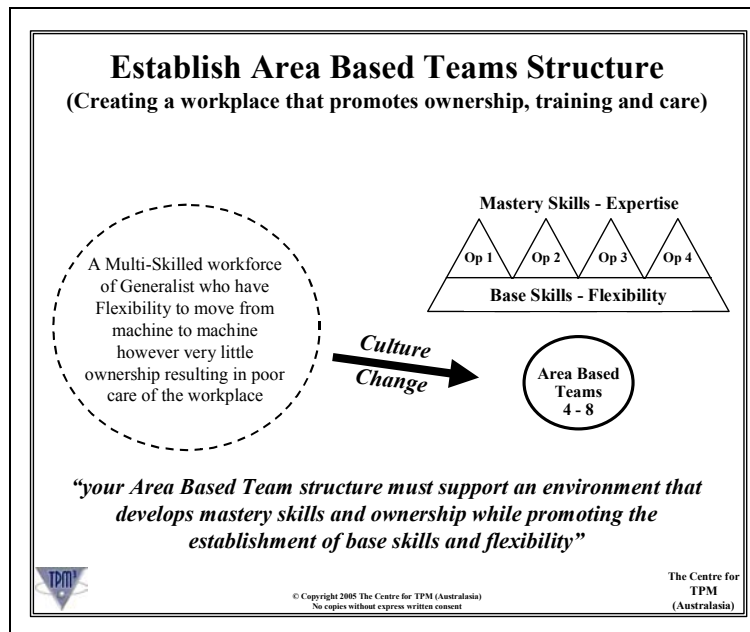
Once Areas of Responsibility have been established and agreed to, Improvement Areas need to be established. To ensure ownership and buy-in from the employees we suggest the following way forward.

If all Area Based Teams will be present at the WAM kick-off workshop then we suggest you provide a simple schematic drawing of the workplace to enable the Area Based Teams to determine and agree on the Improvement Areas during the WAM kick-off workshop. Once the areas are agreed to then we would suggest a simple draw from a hat could be a means to allocate the Improvement Areas if there allocation isn't obvious;

OR

If all the Area Based Teams cannot be present at the WAM kick-off workshop (more than one WAM kick-off workshop conducted) then we suggest you divide the workplace into suggested Improvement Areas (don't allocate) and display the proposed Improvement Areas (simple schematic drawing) for comment and agreement from all shifts, advising the Area Based Teams that Improvement Areas will be allocated by 'drawing from a hat' or other agreed method during the WAM kick-off workshops obviously with the first workshop Area Based Team taking the first draw from the hat.

### Summary of the Way Forward



1. All permanent employees (operators) who work in the Defined TPM<sup>3</sup> Area must be allocated to an Area Based Team. Any employee who may work in the area during peak loads or to cover for absenteeism should be treated as a 'visitor' to the area who will be expected to follow the 'rules' including standards and procedures established by the Area Based Teams.
2. Area Based Team participation (unlike Cross-functional Teams eg Focused Equipment & Process Improvement teams) is not by invitation, all employees working in the Defined TPM<sup>3</sup> Area / Area of Responsibility must be involved.
3. In some cases, Area Based Team structures are obvious and will be accepted by all employees. In other cases, TPM<sup>3</sup> Awareness or TPM<sup>3</sup> Overview training may be required prior to consultation with the employees affected to ensure buy-in to the proposed new Area Based Team structure.
4. A list of each designated Area of Responsibility within the Defined TPM<sup>3</sup> Area and the corresponding Area Based Team members (4-8) should be prepared and agreed to before the WAM kick-off workshop.
5. In determining the Area of Responsibility structures, consideration must be given to the allocation of specific support staff to each Area Based Team. The allocated support staff (eg mechanical maintenance, electrical maintenance, quality / technical, mentor etc) should be determined before the WAM kick-off workshop(s) so they can attend if practical.
6. A diagram of the proposed Improvement Areas for each Area of Responsibility within the Defined TPM<sup>3</sup> Area should be prepared and preferably agreed to before the WAM kick-off workshop(s) especially if not all Area Based Teams will be attending so that the allocation of the Improvement Areas can be carried out during the WAM kick-off workshop(s).

## **About The Centre for TPM (Australasia)**

The Centre for TPM (Australasia) was created as an outcome of the first conference dedicated to TPM in Australasia held in Sydney in 1995. During the conference, which was chaired by Ross Kennedy, there was a call from the delegates to establish a much-needed Institute for TPM to support industry, academia and government similar to those already present in Japan, USA and Europe. Responding to this call, Ross with several colleagues, established The Centre for TPM (Australasia) in January 1996 with its head office located in Wollongong (a major city some 80 kilometres south of Sydney on the NSW South Coast).

The Centre is a membership-based organisation established to develop, promote and advance the knowledge and practice of TPM<sup>3</sup> (an enhanced and expanded Australasian version of 3rd Generation TPM) throughout Australasia.

***Our Quest is to promote and support the journey to World Class Performance by providing the best value and most innovative training, navigation, research and networking in TPM<sup>3</sup>***

The Centre and its membership have grown rapidly. There are now over 35 sites covering some 12 industry groups from Manufacturing, Mining, Utilities and Service companies that are currently progressing their TPM<sup>3</sup> journey to World Class Performance. Over 10,000 employees are covered by CTPM membership and our research group has links with the University of Wollongong and the Australian National University.

The Centre is very mindful of the need for companies to establish their own in-house capabilities to lead, manage and facilitate their TPM<sup>3</sup> journey in order to achieved sustained success. However we also acknowledge that TPM<sup>3</sup> has been developed based on over more than 30 years of practical experience and research, and as such, establishing or developing internal capabilities is not achieved just by attending one or two training courses. Proper training from a recognised authority is critical (such as the CTPM TPM<sup>3</sup> Instructor's / Leadership Program which was developed in Nov 97 and to date, some 19 courses later, has over 200 graduates from some 30 companies), however most of the learning comes from doing. There are very few short cuts to experience.

For this reason, The Centre for TPM (Australasia) has developed a proven flexible methodology covering a range of educational training courses, introduction and pre-cycle planning workshops, team kick-off workshops supported by comprehensive step-by-step Team Member Manuals, a site wide assessment & planning process, the 5 Level milestone TPM<sup>3</sup> Excellence Awards, supported by our Milestone Assessment Process, and most importantly, a full-time team of experienced TPM<sup>3</sup> Navigators to provide facilitation and training support who are located throughout Australasia in Wollongong / Sydney, Adelaide, Melbourne, Launceston, and the Gold Coast in Australia, and Tauranga in New Zealand.