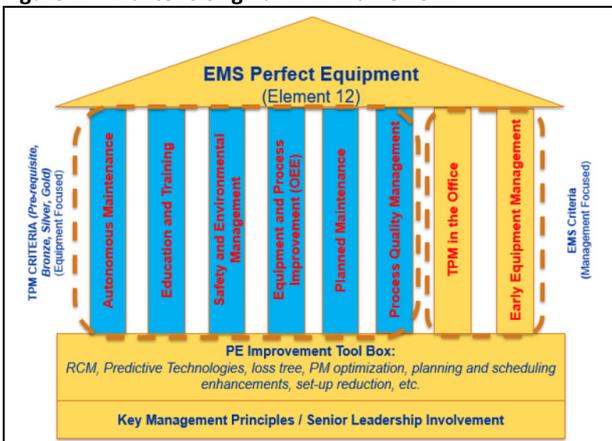


## A new beginning for TPM at Baxter Healthcare

Baxter Healthcare’s Toongabbie plant, Sydney NSW, commenced their TPM efforts in 2010 with an internal in-house TPM kick-off. Some 2 years later this was followed by the introduction of a corporate EMS Perfect Equipment Program (2012-2017) driven by the Maintenance Department. Although these programs had the best of intentions, the many Production pressures ensured their efforts failed to sustain.

Figure 1: Baxter’s original TPM Framework



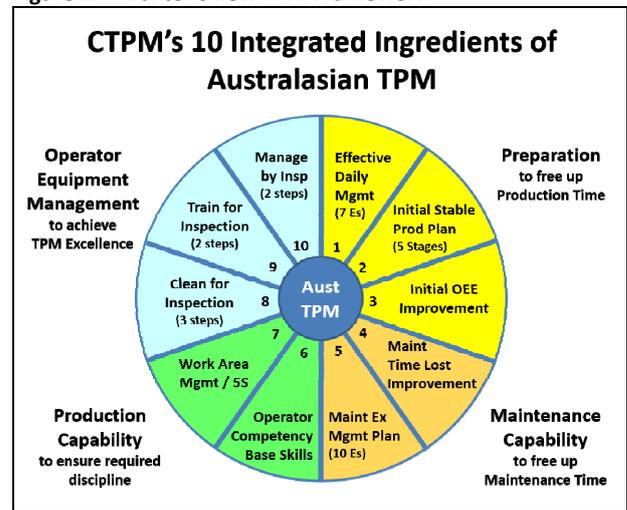
As a 24 hour, 7 day operation that manufactures a range of Intravenous and Renal Therapy solutions that are critical for hospitals to operate, the key impetus for 2020 TPM re-invigoration was the upturn in market demand due to the current health crisis.

With the need to unlock capacity from existing assets without jeopardising quality losses and a need to develop their frontline talent, they realised that CTPM’s people development and engagement approach to improvement would be the best fit.

In February 2020, CTPM were invited to run their two-day Introduction to Australasian TPM workshop to educate their decision makers and key employees on site. That was followed by a one-day Australasian TPM Introduction Strategy workshop for senior management.

From these sessions, it was decided to kick-off their first cycle of Australasian TPM focused on two bottleneck Production Lines, along with a Maintenance team focused on Spare Parts Management which was causing some heartache across the site.

Figure 2: Baxter’s new TPM Framework



The first bottleneck selected was Filling Line C, which fills and seals 1 litre and 0.5 litre bags at a rate of over 4,000 bags per hour. Over a 14 week improvement cycle, meeting for 1.5 hours per week, the Cross-functional improvement team established was mandated to:

- Identify all equipment & process losses and wastes on the line;
- Create a 3-year Vision of Ideal Performance based on documented assumptions using the OEE Improvement Analysis Spreadsheets; and
- Recommend further improvement initiatives involving Cross-functional Teams.

To help the team achieve their mandate they used a number of tools that included an Equipment Analysis, Operator & Maintainer Knowledge Base Analysis, and an OEE Loss Analysis that included three workplace observations to pick up on all the Minor Unrecorded Stoppages.

Through these tools and taking the time to obtain a thorough understanding of the line’s current

situation, the team was able to undertake improvements, that brought about some key outcomes. They **increased the Line OEE performance from 69% to 75%**, and established an Operator Training Matrix to help identify and rectify any skill gaps.

**Figure 3: Filling Line C Improvement Team**



The first improvement cycle also gave the team some key learnings. They were able to gain a greater understanding of where the Minor Unrecorded Stoppages were coming from, and recognise the importance of frontline team training and development.

The second bottleneck selected was the Bag Making Kiefel 1 Line, which produces 1 litre and 0.5 litre empty bags at a rate of over 4,500 bags per hour. Following the same approach and mandate as the Filling C Line, as well as using the same tools, this Cross-functional team also achieved key outcomes that included an **increase of the line OEE performance from 70% to 72%**, and like the C Line team established an Operator Training Matrix to help identify and rectify any skill gaps.

The team also reported at their Final Presentation that they had learnt a significant amount about the line and the improvement approach. They found that the Minor Unrecorded Stoppages to be higher than expected, they gained great value from the Cost-Benefit Analysis, and gained a greater understanding of how effective the sharing of information between the C-Line and Kiefel 1 Line could be.

**Figure 4: Kiefel 1 Line Improvement Team**



The third improvement team for the first cycle was a Maintenance Materials Management team, who were established to:

- Identify all losses and wastes relating to Maintenance Materials Management;
- Improve the Materials Management and Time Lost survey scores by 25%; and
- Recommend further improvement initiatives.

Throughout the cycle the team called upon a number of tools such as a Workplace Survey, Equipment Structure Analysis, Criticality Analysis of Equipment Structure, and Materials Control Analysis, to help identify all the current losses and wastes relating to Materials Management.

From these analyses the team were able to make improvements and achieve many key outcomes. They established a **new standard** for booking parts to work orders, and **updated Store Policies** to support their Main and 6 Satellite stores.

On conclusion of the improvement activity the team recognised the importance of effective Maintenance Planning and of mandating the recording of all work and parts consumption.

**Figure 5: Maintenance Materials Management Team**



As a RTO and an approved provider under the **Smart and Skilled Program**, CTPM was able to gain funding for part-qualifications from the NSW Department of Industry, with the training subsidised by the NSW Government.

In total 21 employees from the 3 teams who meet the funding eligibility criteria were enrolled and completed 2 units of competency from the Certificate III & IV in Competitive Systems and Practices qualification.

If you would like to find out more about CTPM's Australasian TPM or how the Smart and Skilled Program could assist your NSW site in linking its improvement activities to a part-qualification, please contact Ross Kennedy on 0418 206 108 or via email [ross.kennedy@ctpm.org.au](mailto:ross.kennedy@ctpm.org.au).