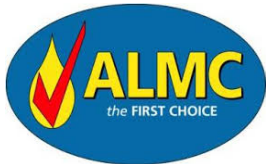


Cycle 3 Improvement at ALMC Spotswood!



Australasian Lubricants Manufacturing Company Pty Ltd (ALMC) is the largest manufacturer of Lubricants in Australia.

One of their sites located in Spotswood VIC commenced their TPM³ (TPM & Lean) improvement journey back in January 2013.

Since then, the site has successfully completed three 12-week cycles of improvement activity, with their third and most recent cycle coming to an end in December 2013. Cycle 3 saw the formation of three Improvement Teams let's take a look at how they went!

"Howard's Heroes"

Made up of Team Leader Troy Dumbleton and team members Charlie Grixti, Jeff Ind, Darren Gauci, Dennis Paul and Howard Vella, this was the third successive improvement team on the Small Pack Rotary Packing Line which predominately fills and packs 4 and 5 Litre bottles of engine and other oils for the retail market.

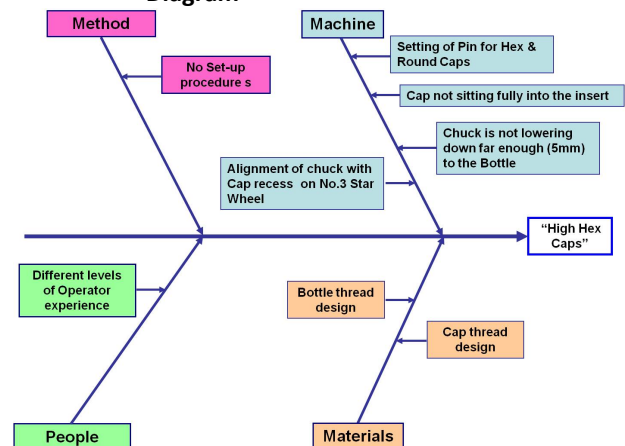
Previous teams had identified that a Micro Focused Equipment & Process Improvement (FE&PI) Team was required to concentrate on Bottle Filling machine problems and losses. Therefore the Leadership Team set "Howard's Heroes" with the mandate to:

- Identify all equipment and process losses and wastes (including all unplanned interventions) for the Rotary Line Filler; and
- Reduce High / Missing Caps by at least 50% while also improving or maintaining the Goal Aligned Performance Measures.

The team analysed the situation by conducting line observations and excellent video footage thanks to Dean Menhennet (Production Manager). This was taken to capture problem areas causing High and Missing caps on the bottles and also other problems / losses with the Bottle Filler. From this the team was able to develop a Causes & Effect

Diagram on High and Missing bottle caps as seen in Figure 1.

Figure 1 – "High Hexagonal Caps" Cause & Effect Diagram



The team identified 6 key improvement projects to reduce the High / Missing Caps by 50% and other losses. An example of one of these improvements can be seen below in Figure 2.

Figure 2: Cap Race TPM³ Improvement Sheet

Team Name: Howards Heros	Line: Rotary Line	Initiated Date: 18/11/13
Team Type: Macro Filler	Item: Cap Race	Completed Date:
Initiator: Troy Dumbleton		
1. Problem: Caps Jamming in Cap Race (Plan)		
2. Current Situation (Plan) Due To the current Design of the universal Cap race the cap drop allows hex caps to become stuck, then causing Missing caps.		3. Proposed Change / Approved Improvement (Do) Modify Current race to minimize jam ups
Improvement Target: No Jam up causing missing Caps		Cost: T.B.C Expected Saving: T.B.C
4. Results: (Check) TBA		5. Future Actions: (Act)
Approved by: Sign off acceptance of Proposed Change		Production Coordinator Production Manager Site Manager

At the Team's Final Presentation to the Site Leadership Team they outlined an Implementation Plan to ensure that all the improvements would be completed and sustained.

"Where's Jim?" and "Just Replace It!"

As a result of the "Deal or No Deal" and "Just Fix It!" Micro New Equipment Management (NEM) Team Final Presentations in Cycle 2, the Site Leadership Team concluded that both team should

advance into Macro NEM Teams to investigate new equipment to replace the existing IBC / 205 / 60 Litre and 20 Litre Production Lines.

Figure 3 – 205 Line Macro NEM “Where’s Jim?” Team



L to R: Kevin Yuan (Team Leader), Richard Tite, Michael Barthelot, Jim Michals, Bernadette Campbell and Paul Green

Although meeting separately the teams collaborated closely and followed the same methodology including the following activities, but not limited to:

- Production Performance Requirement (inc. Production Rates and Volume Mix analysis);
- Production Line Functional Specification;
- Plant, Equipment and Work Area Layout;
- Review of Equipment Supplier Options (inc. Initial quotations);
- Cost Benefit Analysis;
- Life Cycle Costing;
- Services & Auxiliary plant and equipment Requirements;
- Draft Procurement Plan;
- Draft Install Plan;
- Draft Commission Plan;
- Draft Training Plan; and
- Raw Materials and Finished Goods Management.

For a majority of the team members in both teams (operators, maintainers, production planning and logistics staff), this was the first time they had been involved from the ground up in the initial design, specification and supplier evaluation of a new equipment project.

Although the teams found it a bit daunting to begin with, the quality of information and analysis presented by both teams at their Final Presentation was of high standard and suitably impressed the Site Leadership Team and Senior Corporate Management representatives.

Both teams have drawn together enough initial information, data and analysis to commence the capital expenditure process. Once the capital expenditure projects have been approved, the team members will continue to be involved right through to the installation and commission stages.

Figure 4 – 20 Litre Macro NEM “Just Replace It!” Team



L to R: Nik Mastilovich, Brendan Sheppard, Dean Menhennet, Adrian Farrugia (Team Leader), Paul Green, Katherine Marshall and John Diaz

CTPM would like to congratulate all of the Cycle 3 Improvement Teams at ALMC – Spotswood on an excellent effort and great result. We look forward to supporting all the new teams in Cycle 4 starting February 2014.

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