

## Getting to the Root Cause at **M KEMBLA**

*‘You don’t learn a new skill with one lesson’*

Root Cause Analysis problem solving is a skill that takes time and regular practice to develop, a bit like learning to play a musical instrument – weekly lessons and practice can achieve amazing results. This has been the learning at MM Kembla, one of the largest suppliers of Cooper Tube in Australia.

Figure 1: Sample Products manufactured at MM Kembla



Following a number of challenging incidents at the site in Port Kembla NSW, the Asset Manager thought it was time to revisit Root Cause Analysis to establish a more standardised approach. CTPM’s **Frontline Problem Solving Root Cause Analysis Skills Development Program** was seen as a good fit for the site, especially with the strong focus on team learning and development.

As the Christmas break was quickly approaching, it was decided to undertake a shorten 9-week program and focus on getting each team to work on 2 incidents / problems rather than the usual 3. The site identified ten (10) employees covering Production, Maintenance, Reliability, and Technical to allow the formation of two effective Cross-functional Improvement Teams.

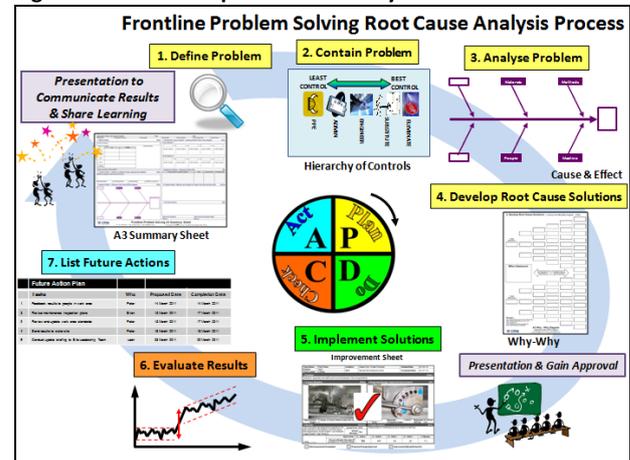
After confirming the plan, CTPM, as an approved training provider under the **Smart and Skilled Program**, was able to seek part-qualification funding through the NSW Department of Industry, with the training subsidised by the NSW Government.

All ten (10) employees met the eligibility criteria and funding was approved for each employee to enrol in two units of competency from the Cert III & IV in Competitive Systems and Practices qualification. These units were:

- MSS402080 Undertake root cause analysis; and
- MSS403085 Ensure process improvements are sustained.

To commence the program with minimal disruption to operations and recognising the COVID-19 spacing rules for the training room, each team participated in a separate 2-hour kick-off workshop, where they were taken through the theory of CTPM’s 7 Step Problem Solving process. For the remainder of the program the teams put into practice that theory with separate 1.5-hour weekly meetings over the next 8 weeks.

Figure 2: The 7 Step Process used by the Teams



Over the course of the program each team progressed through two recent frontline incidents / problems reported at their site’s Daily Review Meetings. By the end, collectively the teams addressed 4 incidents / problems, which when analysed had the potential to cost the company a substantial amount each year if not addressed to the root cause(s).

Team 1 addressed the following 2 incidents / problems:

- **Cold Pilger Mill** – Jammed at Inlet of Mill; and
- **Holding Furnace Die Pack Seal** – Leaked hot metal.

Team 2 addressed the following 2 incidents / problems:

- **Batch Run of 3,600 lengths of PVC coated tube** – Overlength tails; and
- **Tube Washer Cleanliness** – Improving the appearance of washed tube.

Figure 3: Team Members working on their Cause & Effect Diagram



At the end of the program, the two improvement teams were presented with their Statements of Attainment for successfully completing their two units of competency.

Figure 4: Team Members completing their Assessments



## So what did they learn?

During their reflection at the end of the 9-week program, the question was put forward to all team members – What did you learn?

Some of the comments from the teams included:

- Found the 7 Step Process very helpful as it allowed us to **gain a good overview** of all the issues.
- The narrative up front along with the detailed cost analysis **put the problems into perspective**.
- Power of Cross-functional Teams to bring **different perspectives to the problem**.
- Highlighted the importance of addressing all the **7 key elements of Reactive Improvement**, and how without a Supportive Organisation Structure (Element 1) and Effective Frontline Leaders or Production Leading Hands (Element 2), many root causes in the workplace cannot be properly addressed.
- The **importance of having up-to-date Job Instructions** that explain why each step is important.

We at CTPM would like to congratulate the teams on their efforts in identifying and implementing solutions that will go a long way to stopping their incidents / problems from happening again.

If you would like to find out more about CTPM's Frontline Problem Solving Root Cause Analysis Program or how the NSW Government Smart and Skilled Funding could assist your site in linking your improvement activities to a part-qualification for your employees, please contact CTPM Head Office on +61 2 4226 6184 or Ross Kennedy on 0418 206 108 or via email [ross.kennedy@ctpm.org.au](mailto:ross.kennedy@ctpm.org.au).