



COOPERS BREWERY

9 years on and continually improving!!!

As a long serving client of CTPM, **Coopers Brewery** has highlighted the value in dedication and persistence throughout their improvement journey to **Operations Excellence**.

Over the years, teams (typically 4-8 members) were formed to focus on improvement opportunities generating a number of great results. The three teams formed in early 2011 for improvement cycle 24 were no different. Let's take a look...

Bottling Line Labeller Team

Resulting from the previous improvement activity identifying that the Labeller was the biggest OEE (Overall Equipment Effectiveness) loss, a Cross-functional Team was formed to identify the root causes with the aim to reduce the loss by 50% from 7.8% to 3.9%.

By analysing production downtime data and conducting line observations, the team identified that the majority of the labeller losses were due to gluing related problems, which included, frequent adjustments of glue

station and brushes and a 20% speed (rate) loss when running Coopers Clear.

Armed with this information the team sourced alternative glue from overseas and conducted a head to head trial with the existing label glue. From this trial the team learned that the following key factors affected the ability to apply labels at high speed:

- Having the right bottle finish;
- The need for high label water absorbency over 60 seconds;
- The amount of label memory (or stiffness); and
- The glue's "Wet Tack" – stickiness of the glue to hold the label at the desired run speed (60,000 BPM).

A Mini Micro Problem Solving Team has been established in Cycle 25 to further investigate the gluing losses based on the findings of this team.

Coopers Brewery, the Coopers story began in a newly established colony, with a brilliant accident. After turning his hand to a number of trades, Thomas Cooper discovered his talent as a brewer by accident; when he created his first batch of beer as a tonic for his ailing wife Ann. That day in 1862, was the start of an amazing journey...



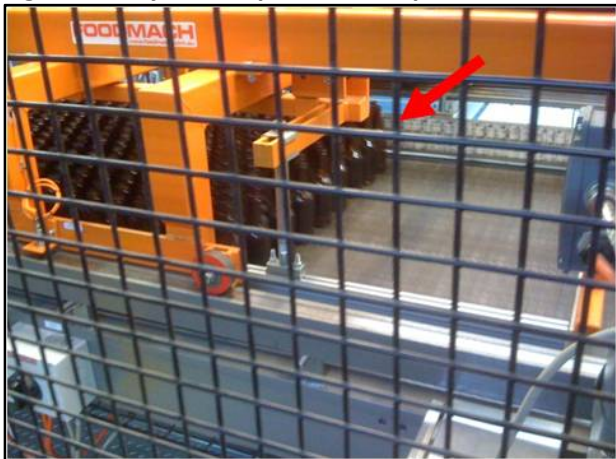
Today, Coopers Brewery is Australia's sole remaining family-owned brewery of stature. Based in **Regency Park SA**, their products are now marketed nationally and internationally in a concerted way, ensuring the Coopers brand is well known beyond its South Australian home.

Bottle Line De-palletiser to Bottle Filler Team

Again the previous improvement team also identified that the De-palletiser to Bottle Filler was the second highest OEE Loss on the line. Another Cross-functional Team was formed with the mandate to reduce the De-palletiser loss from 2.7% to 1.3% and the Filler Singuliser loss from 3.2% to 1.6%.

The team conducted initial observation and identified that falling bottles was the main cause of downtime and waste. Further observations revealed that the fallen bottles were predominately being generated at the De-palletiser. The main cause of bottles falling was due to the layer sweeps, where one bottle at the back of the layer would often fall during the sweep process as seen in Figure 1.

Figure 1 - Layer sweeps at the De-palletiser



In the end, the team identified a total of 12 improvements and also recommended to install the Sage Line Control system to further improve the Filler Singuliser performance.

The "LubriCans" Team

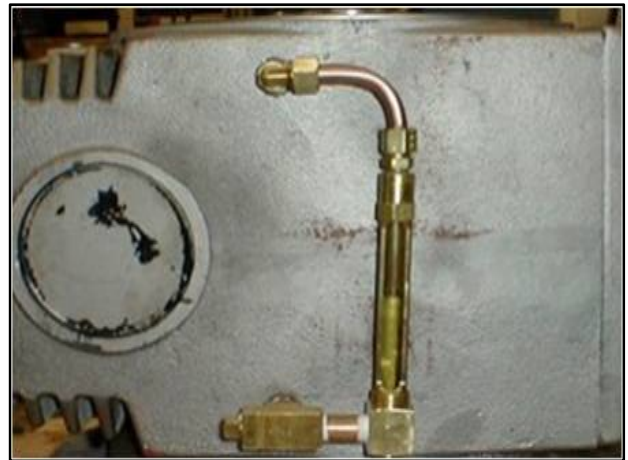
This team was formed to investigate if the lubrication tasks could be automated or simplified (to reduce time) on the Bottling Plant due to the decreasing access to the Packaging Line with the double shift operation.

The team developed an 8 step process to review each machine and to identify improvements to automate or improve the time required to conduct lubrication tasks.

With the assistance of Rob Thomas from LubeMate (lubrication specialists) the team identified 11 Improvements on the Bottle Filler and a further 7 Improvements on the Innoket Labeller & Packer.

Some of the improvements involved the installation of Sight Glasses (good application of Visual Controls) to eliminate the need to open inspection ports to check gear box oil levels, thus saving considerable amounts of time as seen in Figure 2 example.

Figure 2 – Example of Inspection Port

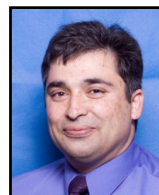


The team will continue on in cycle 25 to complete the review on the remaining machines on the Bottling Line and implement the remaining improvements identified by the team.

CTPM would like to congratulate the sites improvement teams for their hard work and performance. Their findings continue to improve the processes at Coopers which help to keep the business ahead of its competitors.

We look forward to supporting Coopers Brewery in the years to come, and thank them for their continual support of our events and methodology.

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