

# Ready For Purpose – Bottling Line

Maintaining OEE while reducing run size

**Wine Industry, 2012**  
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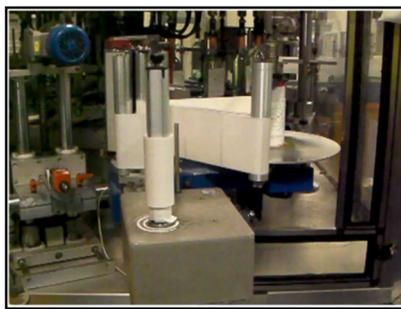
## Brief

*So often production line operators say “we would be more efficient if we did longer runs, simple”. But ... the customer wants variety quickly, and full warehouses of unsold finished goods are a huge risk and cost money. Longer runs are not an option in any improvement program. In order to sustain efficiency in ever shortening runs, changeover (or “Ready For Purpose”) time must be reduced, no option.*

*Production Managers and Supervisors are accountable for maintaining efficiency or reaching new efficiency targets. Having people competent in reducing Ready For Purpose time is an essential and unavoidable part of such goals.*

*This case study describes how a labeller roll change time was reduced by over 50% with minimal expense.*

*The reduction occurred in several stages. The initial reaction by operators of “there’s nothing more we can do” can be overcome by a series of Target Conditions ... incremental reduction.*



Source for information: *Large wine producer with 10,000 units/hr bottling line.*

## INTRODUCTION

The current environment for the wine industry is “tough” with suppliers producing a commodity (price takers, not price makers). This winery was no exception to this. The majority of their product is sold on the domestic market, their largest customer is Woolworths. Lead times and order size are being heavily reduced, whilst order frequency is increasing. The company is running 24 hours a day, 5 days a week and does not have the capital to purchase new bottling lines, or increase finished goods storage. They need to produce smaller quantities more often whilst maintaining current throughput.

## CONTENT

Downtime data identified an area to target during the “training” phase. The area identified was the label roll change as it was the highest contributor to downtime. Training in the “Ready For Purpose” method commenced in February 2012. Broadly the training included:

- Background theory in quick changeover thinking and principles.
- Studying the current process for a label roll change.
- Applying a strict process of examination and questioning to identify actions to carry out that would reduce time.

With regard to the changeover at the time, the current condition was found to be:

- Label roll changes took about 60 seconds.
- For any label roll change time greater than 14 seconds the whole line stopped (as this impacted directly on the filler).
- Line OEE ~ 65%.
- Label roll change standard work was very basic.

The first Target Condition was set :

- Changeover to take <30 sec.
- 100% label position specification post change.
- By May 15 2012.

The following results were achieved by May 30 2012 at a materials cost of about \$1,100:

- Label roll change was down to 25 seconds.
- Line OEE ~ 68%.
- Label roll change standard work much more focussed.

A new target condition was set for 14 seconds by December 31 2012.

## CONCLUSION

The principles of Ready For Purpose (quick changeover) were used to gain improvements on the production floor. This was done by increasing the capability of the operations people. Focusing on the label change was due to the team responding to down time data showing label roll change as the highest down time contributor. The same principles can now be applied elsewhere within the facility by the staff themselves.