

# MONASH INDUSTRY TEAM INITIATIVE (MITI)

## Yield Loss Reduction In Factory Processing – Fonterra

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### OBJECTIVE

A loss analysis was carried out in early 2018 to quantify and propose methods of improving dairy yield loss during factory processing.

### PROJECT SCOPE

The 12-week project focused on five Fonterra sites in Victoria and Tasmania: Cobden, Dennington, Darnum, Spreyton and Wynyard.

The analysis focused on identifying key “yield loss to drain” events and quantifying the monetary value of these losses on a per annum basis.

### PROJECT TIMELINE

The project comprised of three main periods:

- **Weeks 1-3:** Literature review and data mining to gain understanding of Fonterra’s dairy production process and possible opportunities to improve yield loss
- **Weeks 4-9:** Visited Fonterra’s five production sites to carry out yield loss sampling. Samples were sent to Spreyton site for lab analysis
- **Weeks 10-12:** Further datamining and result analysis were carried out to provide stakeholders with loss quantities and recommendations on improving yield performance



### PROJECT OUTCOMES

#### LOSS QUANTIFICATION

Using dairy composition loss data (obtained during site sampling) and data obtained from Fonterra’s performance-monitoring records, the team successfully quantified the dollar amount of product lost to drain. This loss was broken down to a per event, per annum, and per site basis.

#### BENCHMARKED SITE PERFORMANCE

Each site’s performance was benchmarked on three levels: intra-site, intra-state and interstate to provide objective performance evaluation.

#### RECOMMENDATIONS

Tailored recommendations were made to each site regarding improvement opportunities in plant operations, equipment design and training to achieve targeted savings from yield loss reduction.



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