Providing production automation solutions and quality components to Australia's largest cream cheese maker.

Cheesemaking is a craft long associated with care and diligence, requiring the perfect temperature and the perfect handling. When Australia's largest cream cheese maker looked to grow with production automation, they contacted us for our experience and innovation with dairy products.

THE CUSTOMER

Moondara Cheese

Moondara Cheese was established in 2004 and is now the largest manufacturer of flavoured cream cheese in Australia. Moondara also contract manufactures for the major chains, recognised as the leader in quality, taste, reliability and value in this cheese segment.

The Moondara brand is available in all Coles and independent supermarkets across Australia, and all supermarkets in New Zealand.

Matt Freeman

THE CHALLENGE

New packages, products and sizes, all streamlined through automation

When Matt Freeman of Moondarra had three crucial goals: to create a better looking, shelf-ready product, to reduce processing cost, and to reduce reliance on human labour in the factory. Over four stages, we made four lines more efficient to increase production, improve quality, and to bring savings of over $1 million per annum.

Solid brief and automation pathway

Matt had some very clear and ambitious business goals, and it was our role to analyse his environment, understand the idiosyncrasies of his product, and then to formulate a solid brief and automation pathway.

We provided an objective pair of eyes around the factory, seeing areas where efficiencies could be made. Our experience supplying leading FMCG brands with production line automation, packaging and materials handling equipment meant we could bring both proven and innovative approaches to the table.

We looked at his plant parameters – labour rates, units per day, the lifespan of the machine, warranties, consumables and machine servicing. We gave him all the running cost projections and therefore running cost projections, allowing Matt to analyse Matt to analyse profitability of the line, so he could move ahead with solid facts.

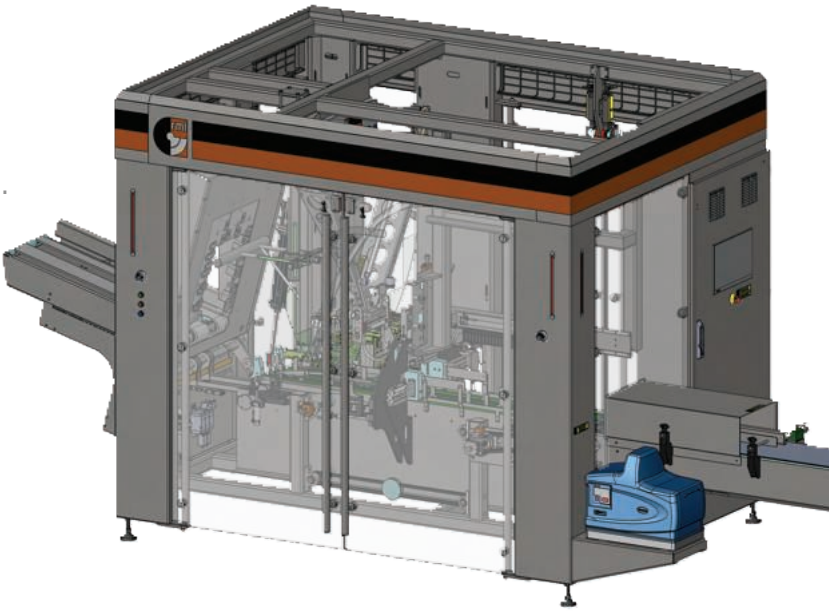
A gourmet product where presentation is everything

Moondarra specialises in flavoured cream cheese, a gourmet product where presentation is everything. The existing automated case packer was heavy on human labour and simply not making good boxes, nor handling the product gently enough. The result was a medium quality cardboard outer that was easily dented.

Our engineers helped Moondarra redesign their boxes with new perforation lines and the artwork designed around it. We had the foundation machinery and automation technology, and then customised it to meet the specific requirements of the cream cheese products.

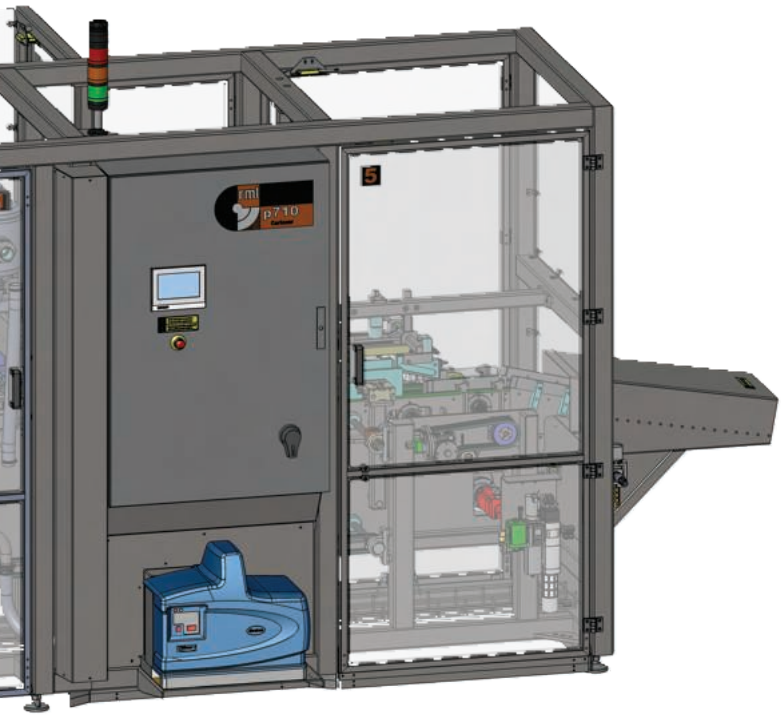
Sales growth calls for a second line

With sales going well, a second cream cheese machine will soon be installed to double production, with this line producing a different range of products. This was three years after we installed the first line, and Matt asked us to modify line one to handle some of the new product types he'd developed. Each machine can now handle five different products.



The new machine delivered a much higher quality cardboard outer case, designed for an optimal speed of 120 units a minute, in a food-safe environment, with best before and batch coding all integrated.

Being able to adapt machinery like this is all part of the innovation and value-add our engineering team is passionate about. We're partners for the long haul, and we put our all into every machine to get it humming and performing at its best. Equally important is the long-term service and parts supply to give our customers maximum machine life and plant ROI – we guide this process with support on the ground in most major Australian cities.



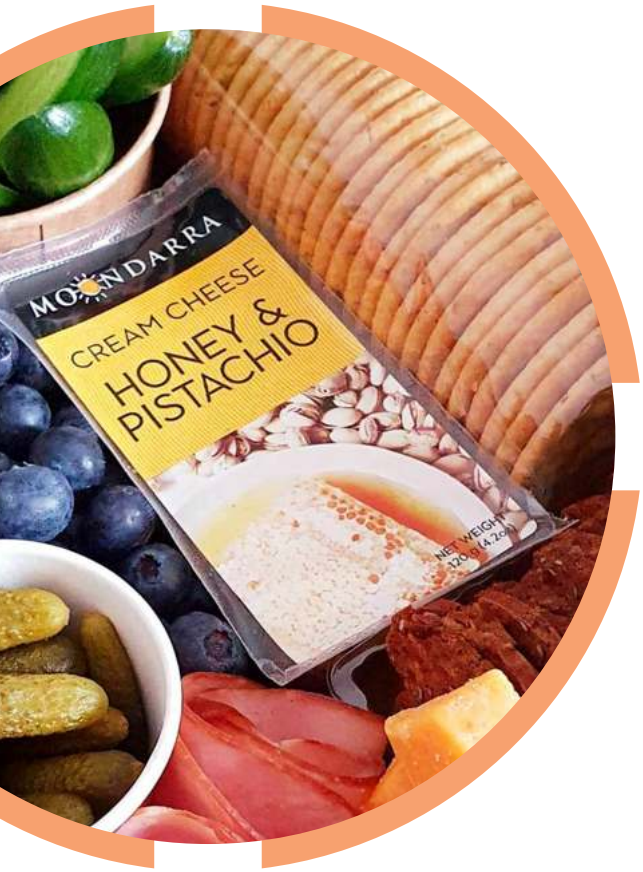
The solution

The solution design drew on methods proven over the 40 years we have in the industry and Moondarra's factory conditions and environment. Jon Marden described the engineering used to overcome the problem.

"The Infeed involves a flighted conveyor that works off two different servo motors and a two-axis Delta robot, allowing a continuous flow of infeed product, with manageable intermittent handling, to allow time to package the product."

1kg packs of liquid cream cheese into a carton

It's very tricky to put liquid into a box. So, when Moondarra tasked us to automate the 1kg cream cheese production line, we drew on our experience at the high-end of the dairy industry – supplying Fonterra and Saputo.



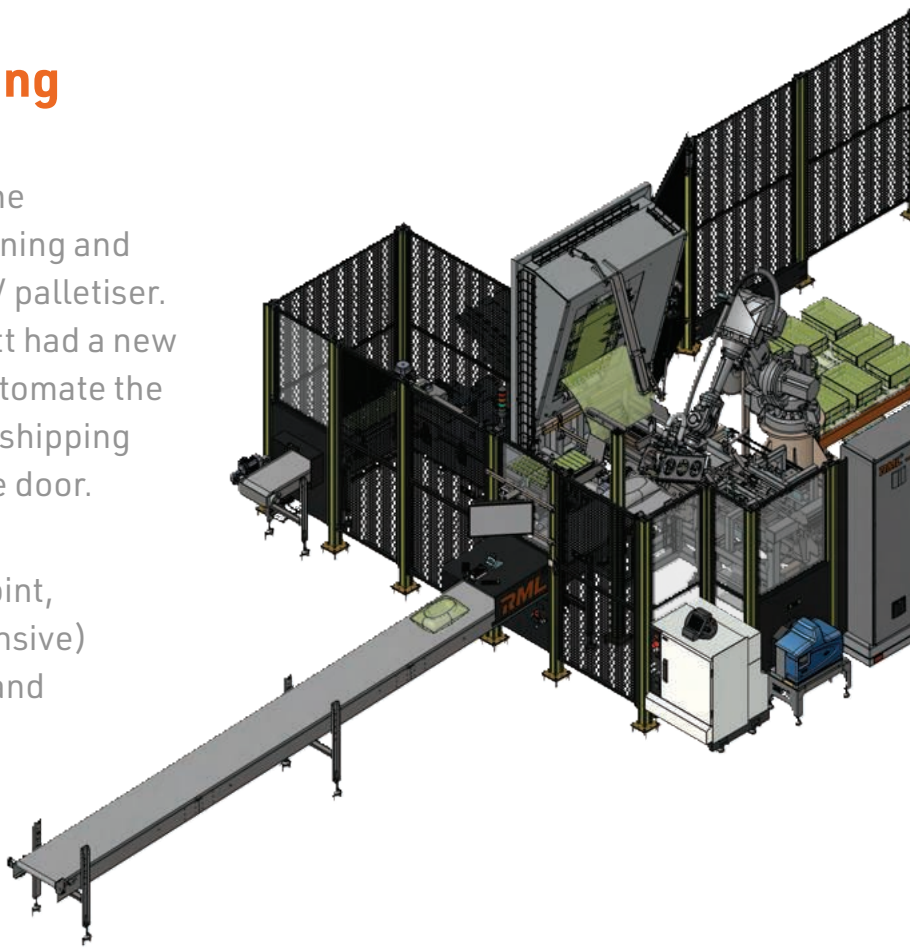
We knew the parameters, and we had the technology, also how to design for a high-hygiene dairy environment. Moondarra's product is designed especially for an extremely quality focused market and cartoning this product is not an off-the-shelf solution – it requires customisation.

We have developed the perfect process to get a viscous product into the carton with no damage to the product and carton. The line runs at 25 cartons per minute, with the boxes gently handled by the machine. Moondarra can ship a shop-ready product – and it can all be overseen by minimal staff.

Case packer and palletising

The latest step in the automation of the Moondarra Cheese factory was designing and installing a combination case packer / palletiser. We had the cartoner in place, and Matt had a new product to pack. And it was time to automate the end of the line to get the product into shipping cases and onto the pallets and out the door.

It had been done by hand up to this point, which was labour intensive (i.e. expensive) and lifting heavy boxes was a health and safety issue for the Moondarra team. Automation meant staff could be redeployed to higher-value tasks.



Our solution was a single machine

One robot doing the packing and palletising within a small footprint. It's not a common solution, but we had used it at Hubbards in Auckland NZ. So we customised a machine for cheese products and Moondarra jumped on it. It was cost-saving, space-saving and labour-saving.

With our automation engineering design, build and maintenance, we've helped Moondarra Cheese grow, with the ability to produce more products daily, and a greater variety of products, all at a lower cost per unit. This helps them stay price competitive, increase their quality, and reduce the factory's reliance on labour.

Automation not only makes a business more profitable, but it simplifies a business by reducing the headaches of managing a big team and dealing with talent shortages.

By removing the laborious hand-packing of goods, these solutions have saved around $1 million a year, and there will be ongoing benefits in health and safety and as the team moves to perform higher value tasks. The benefits are tangible and we've delivered our client customer the dream – to do more for less.

If you have a production challenge, we'd love to solve it.

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