



a **TNA** case study

140% increased throughput

TNA solutions increases throughput, enhances uptime and mitigates the risk of a volatile labour market, enabling Majans to continue on its ambitious growth path and creating opportunities both today and in the future.



snacks

The Raniga family business started in Fiji in 1960, selling traditional mixed snacks from a humble push-cart in the traditional door-to-door way. Having moved to Australia, Majans was established in 1984, where Bhuja was created - a snack product inspired by family recipes that takes a mix of pulses, grains, vegetables and nuts and delicately infuses them with aromatic, all-natural spices. From smaller trade outlets, over the next 10 years the company would progress to see its products in retail giant Woolworth's, and has not looked back since. Today, Majans produces several million cases of snacks each year across a range of 53 products.

challenge 1.

securing a partner that could support Majans' long-term growth strategy

As Majans flourished in the snacks sector, it became clear that automation was the answer to keeping pace with demand. Owner Kam met with TNA founders Nadia and Alf Taylor and developed a strong relationship, which led to discussions around the possibilities for enhancing productivity at the Sumner Park site in Brisbane. At the time, in 2019, products were bagged by five systems from an alternate supplier within the factory, and Nadia and Alf suggested the tna robag® as a logical first step.



solution 1.

tna robag®

Majans' Manufacturing Manager at the time (and to this day) was Andrew McManus who, upon hearing of the plan to install robag® systems, was reassured. Two of the first TNA baggers ever made in Australia were operational during his time at Mars, and at 40 years old, they were still operating effectively. His experience was that they would run forever.

Two robag® baggers replaced the five older systems in 2020, and the impact was clear from the outset. A multipack product processed by the older systems sold at 1,200 cartons per week at the time, taking 10 hours to produce with 13 people on the line. The Australian dollar cost per kilo for labour was \$2.

Today, with the robag® systems, that number has increased to 14,000 cartons sold per week, which now takes just under 17 hours with 6 people on the line – which is 6.9 times more throughput per hour. The labour cost per kilo has reduced to under a dollar (Australian).

“In my previous company we had two robags that ran for 40 years. Their incredibly consistent performance gave me great confidence that when we select a TNA piece of equipment, you know they’re going to last.”

Andrew McManus, Manufacturing Manager, Majans



challenge 2.

progress from manual to automated case packing

Majans growth continued to present the company with further ‘nice to have’ challenges. The popularity of its ever-expanding range had led to a situation where its case-packing operation had become a target for further automation. An ailing labour market was making casual labour evermore scarce, and Andrew had a vision to retain his existing people and at the same time drive efficiencies on the line. Having had a positive experience with TNA with the automation of its bagging process, and with the relationship ongoing, he knew exactly whom to approach.



solution 2.

tna ropac® 5

With a TNA Flavouring system and robag® baggers already in place, Andrew knew he would benefit from the interchangeable aspects of a TNA solution - particularly from an electronics perspective, and also the consistency of the HMI interface for his technicians. Industry 4.0, he believes, is the key not only to survive, but thrive, so the ability of the bagger to communicate with the new case packing system would be paramount.

The tna ropac® 5 was selected to take control of Majans’ case packing operation – which at a capacity of 200 bags per minute is the fastest case packing system on the market today. Majans currently uses only 70% of this capacity, but with ambitious growth plans ongoing, working with TNA solutions has ensured that future increases have been firmly factored into the equation.

With space at Majans’ existing facility at a premium, at a width of only 1,220mm and a height of 2,120mm, Andrew was delighted with the fact the system would not take up valuable real estate on the factory floor. Since its introduction in February 2023, throughput has increased by 140% and uptime by 15%. Further, the ropac® 5 is also able to accommodate the company’s plans to move to paper-based packaging in 2024, supporting its sustainable development plans without impacting production speeds.

“Introducing tna ropac® 5 systems has enabled us to improve operational efficiency, redistribute manpower and future-proof our operations as we look to continue our growth path.”

Andrew McManus, Manufacturing Manager, Majans





a transformation from manual mixing to automated agility

Just five years ago, Majans regularly had between 28 and 35 people on a single shift, bagging, mixing and case packing. Today, with the help of TNA solutions, that same factory operates with just 10-11 people per shift at outputs up to 6.9 times greater than before the automation process began.

What were casual jobs have been transformed into stable, full-time employment contracts, and those individuals have been trained and developed with help from TNA experts to run more advanced machines on the production floor. Technicians and maintenance crews have also been upskilled to effectively service and support these systems at a higher technology level.

Crucially, by reducing manual labour activity to near zero, these physically demanding roles have been eliminated and the risk of injury from a health and safety perspective has decreased significantly. The benefits of automating with a trusted solutions partner have been significant for Majans, with the positive impact felt from a production, growth and human perspective.

“With the help of TNA solutions, today we are running at outputs up to 6.9 times greater than before the automation process began.”

Andrew McManus, Manufacturing Manager, Majans



[Watch the case study in action here](#)

TNA solutions is a global leader in food processing and packaging solutions, committed to helping people succeed responsibly in a changing world. With over 40 years of experience, TNA's global team of experts have installed more than 14,000 systems in over 120 countries. The company creates and sustains solutions that help customers realise goals and exceed their expectations, with performance, responsibility, and a customer-centric approach at the core of the business. A collaborative, consultative approach ensures measurable results and lasting success, with solutions designed to evolve and perform over time.

As an inclusive partner, TNA supports a growth agenda that goes beyond business, emphasising its commitment to people, prosperity and the planet in harmony. TNA is a powerful advocate of social justice, and aims to support children in disadvantaged communities through education, healthcare, and social enterprise programmes, through the humanitarian initiatives undertaken by the Nadia and Alf Taylor Foundation.