



Case Study: Finch Engineering

"When I built my first shed, I did a handshake deal with a Tipton farmer, he did my shed floor and I built him a Chaser Bin."

- Business Founder, Des Finch



BACKGROUND:

The Western Downs has been the home of grain handling specialists Finch Engineering for thirty-five years.

Finch Engineering was the brainchild of a grain farmer's son gifted with a creative mind and can-do ingenuity. At the age of 13, Des Finch and his brother built a 15 tonne capacity field bin for their father's grain harvest on the family farm located in picturesque Kaimkillenbun in the Western Downs region in Queensland.

Des and wife Keran established the manufacturing business in 1983.

Through ingenuity and a drive for quality and functionality, partnered with an inherent understanding of the grain industry and the niche needs within it, the Finch family have grown the manufacturing business over a 35+ year period into one with a nationwide reputation for quality and service.

"I started Finch Engineering with the intention to simply cater for the local needs of the Kaimkillenbun district and surrounding area."

It wasn't long before the demand for bins grew and it became clear to me that I needed to change the direction of my original plans, and become a manufacturer rather than a repair man."

My focus has always been to provide farmers with equipment built for quality, efficiency and value for money."

Seasonal conditions and the requirements of farmers has driven our range of products."

Cattle Feeders were in high demand during the droughts, Cotton Boll Buggies were in high demand as the cotton industry grew in the local area, and then there was the need for Field Bins to complement the Chaser Bin in the grain industry."

- Des Finch

Finch Engineering is housed on the property within seven industrial sheds including the original shed built in 1981. The business is located on six acres only three kilometres down the road from the original family farm (1,500 acres), which is still under sorghum, wheat and barley crops, with a herd of beef cattle.

Parts Director and Production Manager, Leroy Finch encourages other manufacturing businesses to consider the Western Downs region.

"The quality of staff is high, and locals are honest in their feedback."

The business is located within a 20-kilometre drive from the manufacturing hub of Dalby and sits at the base of the beautiful Bunya Mountains.

Raised on the family farm in Kaimkillenbun and taught to value agriculture and manufacturing from a young age, Des and Keran's son Leroy stepped into the role as Parts Director and Production Manager in 2007.

Leroy continues to honour the family business tradition of quality, innovative agricultural machinery and products in a business with an Australia-wide reputation as the go-to grain handling specialists.

ESTABLISHING A MANUFACTURING BUSINESS IN THE WESTERN DOWNS REGION:

Industrial land acquisition in the Western Downs region is 43% less per m² to purchase when compared to the neighbouring regions and 87% less per m² than industrial land in the Brisbane City area.¹

This means lower start-up costs when starting a business in the region and opens opportunities for expansion due to land availability.



LOCATION:

The strength of industries such as agriculture, energy, mining and construction within the Western Downs region, known as the Energy Capital of Queensland, provides a myriad of potential developments in the broader manufacturing industry to innovate and value add.

Throughout the Western Downs, manufacturing is experiencing demonstrated innovation and providing opportunities for ongoing success in advanced manufacturing. This is evident around the Dalby area with a strong hub of manufacturing businesses in operation.

To date, there are 124 manufacturing businesses in the region producing niche products for international export.²

The Western Downs manufacturing industry increased the value of inputs (value-add) by 8.36% compared to -4.35% in value-add productivity across the Darling Downs and South West over a 5-year period ending 2018.³

Access to quality innovative manufacturing in the region contributes to business profit margins as businesses like Finch Engineering can outsource production of small consumable parts locally.

“We are located only twenty minutes drive from Dalby, and the culture within the industry here is one of comradery and sharing of information regardless of competition. It’s a culture you’ll struggle to find outside of the rural landscape.”

- Leroy Finch

Businesses throughout the region have access to information, networking and relevant industry connectivity at a regional and/or a business level, through organisations such as Western Downs Regional Council’s (WDRC) Economic Development Team, the Chambers of Commerce, the Department of State Development, Manufacturing, Infrastructure and Planning, Toowoomba and Surat Basin Enterprise (TSBE), and various other industry groups.

DIGITAL CONNECTIVITY:

Finch Engineering have access to the internet for research and development (R&D) and communication with clients and industry Australia wide. The NBN is scheduled to go live in the area within the next 12 months, with access available through leading telecommunication providers.

The region also has mobile telecommunication access.



CONNECTIVITY:

One of the benefits of the Western Downs location is connectivity and proximity to supply chain and relevant markets.

Once the Toowoomba Second Range Crossing is opened it is an easy two to three hour drive north-west of Brisbane and approximately one hour from Toowoomba, depending on your business location

Ease of highway access including the Leichhardt, Moonie and Warrego Highways, the construction of the Toowoomba Second Range Crossing and rail networks such as the Western Rail Line increase connectivity and provide direct access to the Toowoomba Wellcamp Airport and the Port of Brisbane.

The Toowoomba Wellcamp Airport opens export opportunities through Queensland’s only dedicated 747-8 International Freight Service.

Finch Engineering accesses raw materials from Brisbane, Melbourne, Toowoomba and Mildura, and deliver products Australia-wide. All transport is road based and the business runs their own fleet of trucks for transport of whole-products, using a South-West Queensland based freight company for spare parts, out-goings and raw materials in.

“The new Toowoomba Range Crossing will speed the trucking business up between the region and Brisbane.”

- Leroy Finch

When asked about timeframes around access to raw materials, Leroy Finch said it is something that simply has to be factored into production planning with a two to three week lead time; parking raw materials to ensure they are available when required.

THE BUSINESS TEAM/SKILLED WORKERS:

The business began with Des Finch and his wife Keran in 1983 and now operates with a minimum of 35 team members on site, which can grow up to 50 depending on business output demands.

- 95% of the team are trades people such as boilermakers, mechanics, painters, warehouse specialists and fitters and turners,
- And 5% are laborers/offsidiers.

The commonality between the majority of the team is a rural background that grounds them with an understanding of agriculture; not only how the machinery being manufactured will be used but also the vital importance of quality products to best equip the unique needs of agricultural clients.

“The quality of workers we can get in the Western Downs helps make it an ideal location for manufacturing businesses.”

- Leroy Finch

Staff retention rates at Finch Engineering are high, due to the positive work culture that the family business actively generates. This is also due to the rural culture which leads to higher social interaction outside of work hours and a stronger team during the day. The business rewards employees with a wage that reflects knowledge, skills, experience and any additional travel costs, to both attract and retain a strong team.

CLIENT BASE:

Finch Engineering manufactures machinery for the agricultural industry Australia wide.

The Western Downs, known for the strength of its' agricultural industry region-wide, is an ideal location for the manufacturing business that has a 100% agricultural client base. The business services and provides products to corporate clientele, with most clients hailing from privately owned farms of on average 3,000 – 4,000 acres.

The introduction of **Nandor Horse Floats** to Finch Engineering's product range broadens the business market scope to leverage the equestrian market across Australia. This provides the potential to expand market awareness of other products in the range, through target market parallels and industry overlaps.

INNOVATION AND DIVERSIFICATION:

Finch Engineering Production Manager, Leroy Finch directs the business with a culture of innovation and quality manufacturing. He does this through intelligent updates to existing products to improve efficiencies, and to leverage advanced manufacturing techniques.

"Manufacturing innovations at Finch are informed by 35 years of intensive qualitative market research and feedback online and directly from our clients who are actively using the products."

- Leroy Finch

Broad industry research is also conducted at Field Days and events around Australia. The business hosts various events specifically within the business product user groups to celebrate end-of-harvest and other achievements, while building relationships and engagement with clients. This allows for a more informal setting for feedback, ideas and engagement within the community.

Data is also sourced from business distributors and dealers who are ideally situated to provide vital insight around customer satisfaction levels and specific niches and needs that are identified.

The business research and development (R&D) functions with a whole-team approach. This utilises the specialised skillset and approach of each experienced manufacturer in the team to ensure best outcomes. Innovations are driven by the unique requirements of clients around technological advancements, time efficiencies, load capacity, integration with machinery, user experience and durability across various agricultural conditions. Having a team headed by and including predominantly agricultural backgrounds, adds additional inherent insight and experience. This is invaluable to quality lean manufacturing and product innovation.

Prototypes are designed on SolidWorks, a 3D CAD solid modelling computer-aided design and engineering program. This generates images and animations, interactive web content, and immersive Virtual Reality. This enables the R&D team to see the design in action before even one piece of metal is cut. Once manufactured they are rigorously field tested by external agricultural professionals prior to being released in the market.

In early 2019 Finch Engineering designed an innovative Tram Track Conveyor that sits over the top of the chaser bin. This is the first of its kind, reducing width and requiring only one escort vehicle instead of two, farm to farm and throughout the stages of delivery.

A benefit of the conveyor's width reduction, is reduced cost for the initial freight purposes.

Finch Engineering manufacture 60% of products on site; outsourcing around 10% within the Western Downs, with the balance sourced elsewhere.

In 2009 through the acquisition of Miltze Industries the business was positioned as **grain handling specialists** offering the full range of grain handling products, from storage through to planting and harvesting. This complemented existing products.

Products include:

- Chaser bins and field bins
- A wide range of augers, from the pencil auger to a sophisticated fully hydraulic, self-propelled system
- Silo storage
- Cattle feeding equipment

With a focus on quality, most raw materials used by Finch Engineering are Australian made. All steel is Australian made, sheet metal is a New Zealand laser plate and the bigger laser sheet with a brake press is sourced out of Brisbane.

In 2015 the team produced a major development in the chaser bin range with the release of the Next Generation Chaser Bin. The bin was built to be adaptable, versatile and robust enough to meet the ever-changing needs of the modern Australian farmer.

Some of the Next Generation Chaser Bin features include:

- On the fly customisation
- An unload auger that can be left or right-hand discharge
- A fully fabricated, superior strength Walking Beam from laser cut and folded plate
- A 4mm and 5mm plate bin top, with internal ribbing replaced by support plates, gaining strength and extra bin capacity, along with a smooth curved exterior
- It also allows the operator to simply bolt-in the additional Seed and Fertiliser Kit and truck bulk bins

LOOKING AHEAD:

"There is already a strong base of manufacturing businesses in the Western Downs, specifically around Dalby, with room for the manufacture of complimentary and niche products."

The manufacturing culture here is one in which you can be competitors in the same industry but still support each other.

Agriculture has been a strong industry, here for as long as I can remember, and it makes the region a strong base for manufacturing.

Looking forward for Finch Engineering the goal is to maintain steady constant work year-round with inbuilt sustainability going forward. After 35 years under the same owners, we plan to keep doing what we're doing and do it really well. Quality is really important to us."

- Finch Engineering

References

¹ - Fraser Valuers

³ - economy.id

² - Western Downs Regional Council (WDRC)



"We are part of the community we serve, working together to provide valued leadership and services to our diverse region. We're open for business and offer investment opportunities that are right for our region."

Western Downs Regional Council

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