

Handout 6.2 – Queensland Manufacturing Examples

This handout will encourage you to explore your self-identity and how it connects to your professional journey and success within Queensland's diverse manufacturing sectors. Consider your unique capabilities, development opportunities, and how you envision yourself contributing to innovative industries like aerospace, renewable energy, or medical technology manufacturing.

Use this resource to reflect on your personal strengths and values, and how they align with the various manufacturing pathways available throughout Queensland. Take time to consider how your self-perception influences your career aspirations, whether in advanced composites, food production, or the growing electric vehicle technology sector.

AEROSPACE AND DEFENCE: BOEING AUSTRALIA – AIRCRAFT MANUFACTURING

Overview: Boeing Australia, based in Brisbane, is a leader in aerospace manufacturing and defence technology. The company is involved in the production and maintenance of military and commercial aircraft, as well as advanced unmanned systems. Boeing Australia plays a vital role in the local manufacturing economy, employing thousands of skilled workers in areas like engineering, avionics, and robotics.

Key Roles in Queensland:

- Aerospace Engineers: Design and maintain aircraft systems.
- Avionics Technicians: Specialise in electronic systems used in aviation.
- Unmanned Systems Technicians: Work on autonomous vehicles and drones for military use.

Example Impact: Boeing Australia's investment in advanced manufacturing technologies like robotics and automation supports Queensland's growing aerospace industry and positions the state as a hub for defence technology development.

FOOD AND BEVERAGE: BUNDABERG BREWED DRINKS

Overview: Bundaberg Brewed Drinks, based in Bundaberg, Queensland, is a renowned Australian company specialising in the production of non-alcoholic beverages, particularly ginger beer. With a focus on quality ingredients and traditional brewing methods, Bundaberg Brewed Drinks exports its products worldwide.

Key Roles in Queensland:

- Food Technologists: Oversee product development and ensure quality standards.
- Production Operators: Manage the brewing, bottling, and packaging processes.
- Quality Control Analysts: Ensure that each batch of beverages meets the company's high-quality standards.

Example Impact: Bundaberg Brewed Drinks contributes to Queensland's food and beverage manufacturing industry by integrating sustainable practices in sourcing ingredients and utilising innovative packaging solutions.

METAL MANUFACTURING AND ENGINEERING: WAGNERS

Overview: Wagners, based in Toowoomba, Queensland, is an international company that focuses on the production of composite fibre materials for construction and infrastructure projects. Wagners' Composite Fibre Technologies division manufactures lightweight, corrosion-resistant materials used in bridges, walkways, and marine structures, making it a key player in Queensland's advanced manufacturing sector.

Key Roles in Queensland:

- Composite Material Engineers: Design and develop new composite materials.
- Machinists and CNC Operators: Produce precision components from composite materials.
- Project Managers: Oversee the installation of composite structures across infrastructure projects.

Example Impact: Wagners is at the forefront of sustainable manufacturing, with its composite materials offering longer-lasting, eco-friendly alternatives to traditional building materials. This positions Queensland as a leader in green infrastructure solutions.

PHARMACEUTICALS AND MEDICAL TECHNOLOGY: COOK MEDICAL AUSTRALIA

Overview: Located in Brisbane, Cook Medical is a global leader in the development and manufacture of medical devices. The company produces a range of products for minimally invasive surgeries, including stents. Cook Medical plays a critical role in Queensland's medical technology manufacturing sector, supplying both local and international markets.

Key Roles in Queensland:

- Manufacturing Technician: craft medical devices with meticulous attention to detail, ensuring each component meets exact specifications for patient use.
- Engineering Specialist: develop and improve medical devices and manufacturing processes to ensure optimal functionality, safety, and efficiency.
- Research and Development Scientist: conduct extensive research to identify opportunities for new medical device development and perform systematic testing of materials, designs, and prototypes

Example Impact: Cook Medical Australia supports Queensland's reputation as a hub for biomedical manufacturing, contributing to both the state's economy and global healthcare innovations.

RENEWABLES: TRITIUM – ELECTRIC VEHICLE CHARGING SOLUTIONS

Overview: Tritium, headquartered in Brisbane, is a Queensland-based company that manufactures fast-charging solutions for electric vehicles (EVs). Tritium's cutting-edge technology provides high-efficiency charging systems for EVs worldwide, helping to reduce carbon emissions and promote sustainable transportation.

Key Roles in Queensland:

- Electrical Engineers: Design and develop EV charging systems and infrastructure.
- Production Technicians: Assemble and test electric vehicle chargers for both domestic and international markets.
- Software Developers: Create user interfaces and smart charging technologies that improve the efficiency of charging stations.

Example Impact: Tritium is a leader in the renewables sector, helping Queensland transition toward clean energy by supporting the electric vehicle industry and expanding the infrastructure needed for sustainable transportation.