



**MANUFACTURING IN THE** 

# FURNITURE AND OTHER PRODUCT INDUSTRIES





## A guide on how to use this Industry Pack Resource for teachers and students

This industry pack is a resource designed to support the Manufacturing Careers Short Course. It connects classroom lesson plans, assessment tasks and the Manufacturing Matters website: manufacturingmatters.com.au.

#### **COVER PAGE**

Identifies the main manufacturing industry explored in this pack. Each industry pack is assigned an alphanumeric code, such as M4, to assist in identifying the industry pathway pack in various printed and digital outputs. There are 14 pathways in total.

» Use to identify workplaces or industries of interest for Assessment 1.

#### PAGE '

Provides an overview of the specific manufacturing industry. It briefly explains where the industry operates and provides a basic understanding of relevant industry subject matter. **Supports Lesson 1 & 3**.

» Use to identify key interests or targeted questions for Assessment 1.

#### PAGE 2

Features images and descriptions of the manufacturing industry. These examples support further independent research by providing clear visual references for inspiration. **Supports Lesson 1 & 3**.

» Use to direct independent research to prepare targeted questions for Assessment 1.

#### PAGE 3

A career story offers real-life insight into an individual working in the manufacturing industry. It highlights variability in career pathways and offers real-world context of roles and progression within the sector. **Supports Lesson 3**.

» Use for Assessment 1 & Assessment 2 to understand pathways and core skills, attributes and knowledge.

#### PAGE 4

Includes:

- A map of Queensland to prompt a guided Google Maps research activity into where manufacturing industries are located.
- Industry specific search strings to assist further independent research into the industry.
- Links to job search platforms to research employment opportunities in the industry in Queensland.

#### Supports Lessons 8 to 13 & 16.

» Use for Assessment 1 & Assessment 2 to identify local industries and support independent research into job skills, attributes and knowledge gathering search terms.

#### PAGE 5

Provides an overview of educational training pathways and connects to the Career Bullseye highlighting roles at various Levels on the following page. Supports Lessons 16 & 17.

» Use for Assessment 2 to understand pathways into specific roles.

#### PAGE 6

An interactive Career Bullseye indicates roles within the industry at various Level (1-4) and allows for quick cross-industry comparisons on flexible career pathways. **Supports Lessons 1 & 3**.

» Use for Assessment 2 to understand pathways into specific roles and cross-industry relevance.

#### PAGE 7

Focuses on the first career pathway theme: "Leading Teams".

Highlights the skills, qualities and attributes required for leadership roles and provides a list of examples to support further independent research. **Support Lessons 11**, **18 & 19**.

Note: More detailed job descriptions are available on the Manufacturing Matters website. These may be made available as printed copies also.

Note: Additional videos are available to support this section exploring select "Leadership" and "On the Tools" occupations.

» Use for Assessment 2 to identify skills, attribute, knowledge and/or experience as pathways into specific roles in interested manufacturing industries.

#### PAGE 8

Focuses on the second career pathway theme: "On the Tools".

Highlights the skills, qualities and attributes required for handson roles and provides a list of examples to support further independent research. **Support Lessons 2, 6, 11**.

Note: More detailed job descriptions are available on the Manufacturing Matters website. These may be made available as printed copies also.

Note: Additional videos are available to support this section exploring select "Leadership" and "On the Tools" occupations.

» Use for Assessment 2 to identify skills, attribute, knowledge and/or experience as pathways into specific roles in interested manufacturing industries.

#### PAGE 9

Provides an overview of the Future of the Industry and how technology is changing it. The section highlights skills needed for the future and growing trends in the industry. **Supports Lessons** 12.8.13

» Use to identify targeted questions for Assessment 1 and for Assessment 2 for planning careers pathways and future skills, attributes and knowledge.

#### PAGE 10

Includes helpful online resources for further exploration of manufacturing industries. A matrix is provided that identifies all 14 core manufacturing industry pathways to discover!

» Use for Assessment 1 & Assessment 2 to expand independent research into pathways, core skills, attributes, and knowledge.





## Understanding the Furniture and Other Products Industry in Queensland

The Furniture and Other Products manufacturing industry in Queensland represents a significant component of Australia's manufacturing sector and domestic production capabilities. This sector combines traditional craftsmanship with advanced manufacturing technologies to serve both residential and commercial markets.

#### **FURNITURE MANUFACTURING IN QUEENSLAND**

Queensland's furniture manufacturing sector integrates traditional woodworking with modern production technologies. In the residential sector, manufacturers produce a comprehensive range of products including bedroom furniture, mattresses, living room and dining furniture. Many manufacturers specialise in custombuilt cabinetry, with particular emphasis on kitchen and bathroom installations. Outdoor furniture production has grown significantly, reflecting Queensland's climate and lifestyle.

The commercial furniture sector serves diverse market segments including office fit-outs, educational institutions, and healthcare facilities. Queensland manufacturers have developed particular expertise in producing furniture that meets the specific requirements of Australia's tropical and subtropical environments. This includes considerations for humidity resistance and durability in coastal areas.

## OTHER PRODUCTS MANUFACTURING IN QUEENSLAND

The other products manufacturing sector encompasses a broad range of specialised production activities. Recreational products form a substantial segment, with manufacturers producing sporting equipment, musical instruments, and leisure equipment suited to Queensland's outdoor lifestyle. Many of these manufacturers have developed niche markets by focusing on products adapted to local conditions and requirements.

Specialised product manufacturing includes sign making, blind and awning production, and medical device assembly. These subsectors often combine traditional manufacturing techniques with advanced technology, particularly in areas such as custom displays and promotional products. Queensland's sign manufacturing industry has evolved to incorporate digital technology while maintaining capabilities in traditional signage production.

#### **Manufacturing Support Industries**

The industry is supported by a network of specialised facilities including timber processing operations, metal fabrication workshops, and surface finishing units. These support industries are crucial to the sector's success, providing essential services and materials. Upholstery suppliers and hardware manufacturers form an integral part of the supply chain, often developing custom solutions for specific manufacturing requirements.

#### **Advanced Manufacturing Technologies**

Contemporary furniture and product manufacturing in Queensland relies heavily on advanced technologies. Computer-Numerical Control machinery and Computer-Aided Design systems are now standard in most facilities. These technologies enable precise production methods while maintaining cost-effectiveness. Quality control systems and inventory management procedures have been developed to meet international standards while addressing local market needs.

#### **Skills and Workforce**

The industry depends on a highly skilled workforce including industrial designers, cabinet makers, joiners, and CNC programmers. Production supervisors and material specialists play crucial roles in maintaining quality and efficiency. The sector actively collaborates with training institutions to develop and maintain these essential skills.

#### Manufacturing Locations

Manufacturing facilities are strategically positioned throughout Queensland, with significant concentrations in Brisbane's industrial precincts and the Gold Coast's manufacturing zones. The Sunshine Coast and Ipswich regions have developed specialised manufacturing capabilities, often focused on particular market segments or production techniques.

#### **Sustainable Practices**

Sustainability has become increasingly important in the sector. Manufacturers are implementing sustainable timber sourcing practices, energy-efficient processes, and waste reduction programs. Water-based finishing systems are becoming standard, reflecting both environmental concerns and workplace safety requirements.

The industry provides significant employment opportunities and contributes to Queensland's domestic production while supporting related sectors such as construction, retail, and commercial fit-out industries.





Furniture Restorer repairing an old chair.



Factory Worker assembling a custom-made advertising sign.



Powder Coating Technician sprays powder paint from a gun on metal products.



Cabinet Maker installing custom kitchen cabinets in a new apartment.



Kitchen and Bathroom Designer, reviewing renderings and 3D visualisations.



Industrial Designer and their Team Leader reviewing computer-aided design (CAD) prototypes.

Images in this document have been supplied by Manufacturing Skills Queensland and industry partners. Additional images have been sourced through Adobe Stock or generated using Adobe and Google AI software. Design layout by Liveworm, Queensland College of Art and Design, Griffith University.



## Career Stories Apprentice and Training Manager

I work as an Apprentice & Training Manager at a luxury motor yacht manufacturer in the Marine Precinct of Coomera. Our company primarily works with polymers, plastic and rubber, alongside timber and wood manufacturing. We build multi-million-dollar luxury motor yachts, with 65% of our products being exported worldwide. Young people might encounter our work through the boating industry - they may have friends or family who own one of our vessels, or perhaps they've seen them on their local waterways. Our industry is evolving, particularly with composite infusion practices increasing across our site. We're proud of our strong commitment to workforce diversity across gender, ethnic and social backgrounds, while also maintaining dedicated commitments to Net Zero emissions targets and Sustainable Development Goals.

In my role, I work with students recruiting and helping them through their apprenticeship journey to become qualified tradespeople. I come from a family deeply rooted in this industry - my dad is a Boat Builder by trade who later became a teacher, and my brother is also a qualified boat builder. I started with the company as an Admin Assistant and worked my way into management, where I now oversee all apprentices and training, including our Academy of Excellence. We partner with different RTOs to teach our apprentices real-world skills and techniques, creating products that will be used in our production facility for boats currently being built.

Before joining manufacturing, I spent ten years in the medical industry. This role represented a new challenge - going into an industry area where I had no background knowledge or information. While I brought transferable skills like effective communication, good work ethic, and willingness to help others, I've gained extensive industry-specific knowledge. I've learned the entire build process, from initial paper designs to the finished yacht waiting on the waterfront for its new owner. It's fascinating to understand the different trades it takes to build what is essentially a three-storey apartment that floats on water and becomes someone's holiday home.

In this position, I've developed particular strengths in leadership, collaboration, and community connection. The most challenging aspect of my role is finding the right fit for young people for the apprenticeships. However, nothing is more rewarding than seeing an apprentice be signed off at the end of their four years as a

qualified tradesperson, securing themselves that full-time position.

For students interested in this industry, I recommend focusing on certain subjects. General subjects like Engineering and Mathematics (whether General, Specialist or Methods) are particularly valuable. For Applied subjects, I suggest Building & Construction Skills, Engineering Skills, Furnishing Skills, Industrial Graphics Skills, and Industrial Technology Skills.

My advice to any Year 10 student considering manufacturing is this: Use the opportunity to get in and try your hand at as much work experience as you can. This will give you an insight into the career pathway that you maybe thinking and it is a great chance for you to speak and work alongside those that have been working in the industry for a long period of time.







## **Industry Map**



#### FINDING INDUSTRY NEAR YOU

Want to see what Industry is around you? Here's how to do it on Google Maps!

#### Start by going to:

#### maps.google.com

**Quick tip:** Sign in if you want to save places for later!

Begin finding Pathways to Industry by typing what you're looking for using the knowledge you have, and include where you want to find it, for example:

"street furniture manufacturer QLD"

#### For this specific industry here are some terms to try:

- · Furniture manufacturer
- Upholstery manufacturer
- Commercial joiner
- · Commercial cabinet manufacturer
- · Lighting manufacturer
- Custom product manufacturer
- · Commercial furniture manufacturer

Add "industrial" or "commercial" to filter out retail stores Include terms like "factory" or "facility" to find actual production sites Use "manufacturer" rather than "maker" for industrial results

Try "fabricator" to find custom manufacturers

#### Some general search tips:

- Always include both "QLD" and "Queensland" in separate searches
- Add your postcode or "near me" to find stuff nearby
- Moving around the map? Click "search this area" to find new places
- Want to see how big a place is? Switch to Satellite View!
- · Use Street View to get a closer look
- · Found something interesting? Save it to your lists

Don't forget to check regular Google Search too! Sometimes you'll find different results there.

#### **EXTENDING YOUR INDUSTRY KNOWLEDGE ONLINE**

Here are some useful web search queries to find out more about this industry:

- advanced furniture manufacturing systems
- · computer-aided furniture design
- automated assembly technology
- · materials engineering innovations
- · smart furniture technology
- · precision cutting systems
- · sustainable production methods
- robotic furniture manufacturing
- composite material applications
- · advanced surface treatments

#### **EXPLORING INDUSTRY PATHWAYS ONLINE**

Search for manufacturing jobs in Queensland using platforms like Seek, Indeed, and LinkedIn. Filter results by location and experience level to find opportunities ranging from production line work to engineering roles. Use specific keywords like "advanced manufacturing careers" to discover industry trends and requirements.

au.indeed.com
linkedin.com





## **Industry Pathways**

In Queensland, an industry training pathway blends secondary school education with hands-on vocational training, allowing students to gain practical skills and qualifications while completing their high school certificate

These pathways often involve partnerships between schools, TAFEs (Technical and Further Education), and industry, providing students with apprenticeships, traineeships, or work experience in their chosen field. This combination of classroom learning, and real-world experience gives students a head start in their careers and helps them transition smoothly into the workforce or further tertiary education.

#### What does an industry training pathway look like?

The four education and training levels serve as a general guide and represent the most common educational and/ or entry-level requirements for these roles.



#### LEVEL 1

Typically requires skills equivalent to the completion of Year 10, a Senior Secondary Certificate of Education, or a Certificate I or II. Australian Apprenticeships may be available at this level.



#### LEVEL 2

Typically requires skills equivalent to a Certificate III or IV, or at least three years of relevant experience. Australian Apprenticeships may also be available at this level.



#### LEVEL 3

Typically demands a level of expertise equivalent to a Diploma or Advanced Diploma, often gained through TAFEs or Registered Training Organisations. Some universities also offer programs at this level.

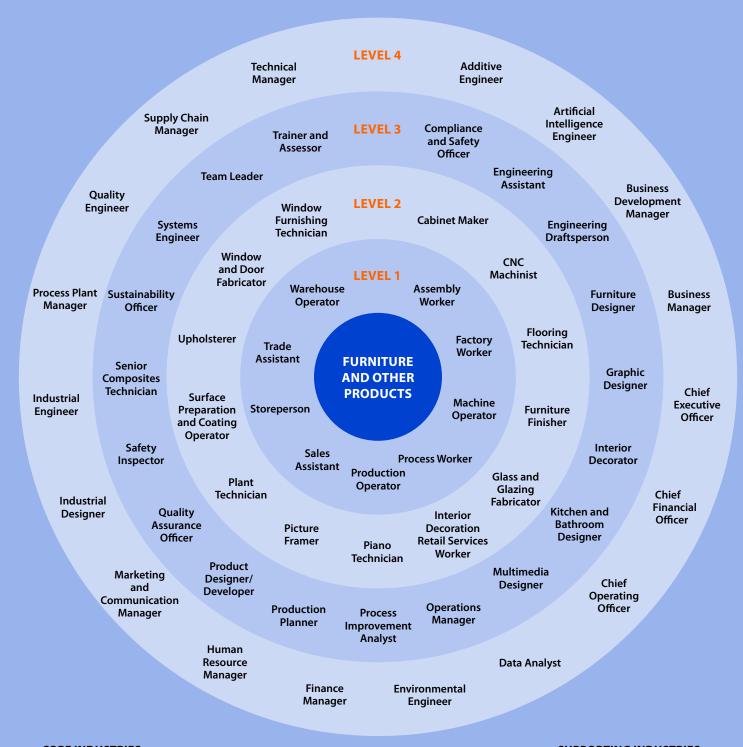


#### I FVFI 4

Typically requires qualifications equivalent to a Bachelor's Degree or higher. This level of education is usually pursued at a university.







#### CORE INDUSTRIES

Aerospace and Defence

Chemicals, Hydrocarbons and Refining

**Food and Beverage** 

Furniture and Other Products

Meat and Seafood Processing General Manufacturing and Engineering

Pharmaceutical and Medical Technology

Polymers, Plastic and Rubber

**Printing and Graphic Arts** 

**Pulp, Paper and Packaging** 

Renewables

Textiles, Clothing and Footwear

Timber and Wood

Transport Equipment and Machinery

#### SUPPORTING INDUSTRIES

**Laboratory Operations** 

**Process Plant Operations** 

**Sustainable Operations** 

For further information, visit:

manufacturingmatters. com.au/careers





## **Industry Pathways - Leading Teams**



Leading a team is about more than just managing tasks; it's about inspiring, motivating, and guiding a group of individuals towards a shared goal. A good team leader fosters a collaborative and supportive environment where everyone feels valued and empowered to contribute their best.

#### **ROLE OF A TEAM LEADER**

- Setting a Vision: Clearly define goals and objectives, and communicate them effectively to the team.
- Providing Direction: Guide the team's efforts, ensuring everyone understands their roles and responsibilities.
- Motivating and Inspiring: Encourage and support team members, recognising their achievements and fostering a positive work environment.
- Facilitating Collaboration: Promote teamwork, open communication, and constructive conflict resolution.
- Delegating Effectively: Assign tasks based on individual strengths and skills, empowering team members to take ownership.
- Monitoring Progress: Track the team's performance, providing feedback and making adjustments as needed.
- Developing Individuals: Support the growth and development of team members through mentoring, coaching, and training opportunities.

## QUALITIES AND ATTRIBUTES OF A GOOD TEAM LEADER

- Strong Communication Skills: Clearly and effectively convey information, actively listen to team members, and provide constructive feedback.
- Integrity and Trustworthiness: Act with honesty and ethical principles, building trust and respect among team members.

- Emotional Intelligence: Understand and manage their own emotions and those of others, fostering empathy and positive relationships.
- Decisiveness: Make informed and timely decisions, even in challenging situations.
- Accountability: Take responsibility for the team's performance, both successes and failures.
- Problem-Solving Skills: Identify and analyse challenges, develop creative solutions, and guide the team through obstacles.
- Adaptability: Adjust to changing circumstances, embrace new ideas, and remain flexible in their approach.

#### **JOB TITLE**

Industry roles where qualities of leadership, effective communication and specialist knowledge are valued.

- · Chief Executive Officer
- · Chief Operating Officer
- · Chief Financial Officer
- · Process Plant Manager
- · Technical Manager
- Supply Chain Manager
- Human Resource Manager
- · Finance Manager
- Marketing and Communication Manager
- · Business Manager
- Business Development Manager
- · Operations Manager
- · Team Leader
- · Production Planner
- · Safety Inspector

For further information, visit:

manufacturingmatters.com.au/careers/



## **Industry Pathways - On the Tools**



Jobs involving hands-on work with technology are increasingly common, blending technical expertise with manual dexterity and problem-solving skills. These roles often involve building, repairing, installing, or maintaining technological equipment and systems.

#### **QUALITIES NEEDED FOR THESE ROLES:**

- Manual Dexterity: Skilled and precise use of hands and tools to manipulate small components and perform intricate tasks.
- Technical Knowledge: Understanding of the technology they work with, including its principles, operation, and maintenance.
- Problem-Solving Skills: Ability to diagnose issues, identify solutions, and apply critical thinking to resolve technical challenges.
- Attention to Detail: Accuracy and precision in their work, ensuring that equipment is assembled and functioning correctly.
- Patience and Persistence: Ability to work through complex tasks methodically and remain focused, even when facing setbacks.
- Communication Skills: Clearly explain technical issues to colleagues or clients and work effectively in a team.
- Physical Stamina: May involve lifting, bending, and standing for extended periods.
- Up-to-date Knowledge: A willingness to learn and stay current with rapidly evolving technologies.
- Adaptability: Adjust to changing circumstances, embrace new ideas, and remain flexible in their approach.

#### **JOB TITLE**

Industry roles that can be considered 'on the tools' which requires different levels of training and specialist knowledge.

- Industrial Engineer
- · Industrial Designer
- · Artificial Intelligence Engineer
- · Additive Engineer
- Interior Decorator
- · Furniture Designer
- · Kitchen and Bathroom Designer
- Senior Composites Technician
- · Sustainability Officer
- · Quality Assurance Officer
- · Product Designer/Developer
- Engineering Draftsperson
- · Systems Engineer
- Compliance and Safety Officer
- · Trainer and Assessor
- Cabinet Maker
- Glass and Glazing Fabricator
- · Window and Door Fabricator
- · Window Furnishing Technician
- · Furniture Finisher
- Upholsterer
- Piano Technician
- Plant Technician
- Picture Framer
- · Flooring Technician
- Process Worker
- Factory Worker
- Storeperson
- Trade Assistant
- · Sales Assistant
- · Machine Operator
- · Assembly Worker
- Production Operator
- CNC Machinist
- · Surface Preparation and Coating Operator
- Interior Decoration Retail Services Worker

For further information, visit:

manufacturingmatters.com.au/careers/





## **Future Industry**



#### **FUTURE TRENDS AND INNOVATION**

The future of Queensland's Furniture and Other Products manufacturing industry aligns with Australia's national economic priorities, particularly in customised manufacturing, digital transformation, and sustainable production methods. These changes support the Future Made in Australia plan's goals of strengthening sovereign manufacturing capabilities and developing advanced manufacturing skills.

#### **KEY TRENDS INCLUDE:**

Advanced Manufacturing Systems: Integration of artificial intelligence and robotic systems in furniture production, enabling mass customisation and automated assembly. This includes advanced CNC systems that optimise material usage and improve production efficiency.

**Smart Furniture Integration:** Development of furniture products incorporating IoT capabilities and modular design principles, aligned with the growing demand for adaptive living and working spaces. This includes integrated technology solutions for both residential and commercial applications.

**Sustainable Materials Innovation:** Implementation of bio-based materials and circular design principles in furniture manufacturing, including recycled materials and cradle-to-cradle manufacturing approaches.

**Digital Design and Production:** Adoption of augmented reality for custom design visualization and 3D printing for prototyping and component manufacturing, supported by advanced CAD/CAM systems.

#### **FUTURE ROLES IN THE INDUSTRY**

#### **Leadership Roles:**

Digital Manufacturing Manager: Oversees smart factory operations

- Circular Economy Director: Leads sustainable manufacturing initiatives
- Innovation Systems Manager: Coordinates advanced technology integration
- Design Technology Leader: Implements digital design and visualisation systems

#### **Technical Roles:**

- Advanced Manufacturing Specialist: Programs and maintains robotic systems
- Digital Design Technician: Operates 3D modelling and AR systems
- Materials Innovation Specialist: Develops sustainable material applications
- Smart Furniture Systems Engineer: Integrates IoT components
- Industry 4.0 Implementation Specialist: Supports digital transformation

#### **FUTURE SKILLS FOCUS**

Emerging skills requirements across all levels include:

- Advanced digital design and manufacturing
- · Robotics and automation systems
- Sustainable materials knowledge
- IoT integration capabilities
- · Cross-disciplinary project management

These emerging roles emphasise the integration of digital technologies and sustainable manufacturing processes. The industry offers new career pathways through technical training programs and micro-credentials, with particular focus on developing digital skills in traditional furniture manufacturing roles.





### **Other Resources**

For further information, visit:

#### MANUFACTURING MATTERS

manufacturing matters.com.au

#### **MANUFACTURING SKILLS QUEENSLAND**

msq.org.au

#### **QUEENSLAND STATE GOVERNMENT**

Department of State Development, Infrastructure and **Planning** 

statedevelopment.qld.gov.au/industry/criticalindustry-support/industry-roadmaps

Department of Natural Resources and Mines, Manufacturing, and Regional and Rural Development

nrmmrrd.qld.gov.au/manufacturing

#### **BUSINESS QUEENSLAND**

business.qld.gov.au/industries

#### **REGIONAL DEVELOPMENT AUSTRALIA**

rdabrisbane.org.au

#### INDUSTRY ASSOCIATIONS

The Australian Cabinet and Furniture Association (ACFA)

acfa.net.au

Australian Furniture Association

australianfurniture.org.au

### Other Core Industries to Discover

Check out these other core manufacturing industries to understand the similarities and differences between them!







M2 Chemicals, Hydrocarbons and Refining

M3 Food and Beverage

Μ4





Aerospace and Defence

M4 Furniture and Other Products

M5 Meat and Seafood Processing

M6 General Manufacturing and Engineering

M7 Pharmaceutical and Medical Technology

M8 Polymers, Plastic and Rubber

M9 Printing and Graphic Arts

M10 Pulp, Paper and Packaging

M11 Renewables

M12 Textiles, Clothing and Footwear

M13 Timber and Wood

M14 Transport Equipment and Machinery