Process Manufacturing, Recreational Vehicle and Laboratory Industry Reference Committee

MSM Manufacturing Training Package –
Recreational Vehicles and Process Manufacturing

Four Year Work Plan

September 2016

Prepared by

Manufacturing Skills Australia

Contents

Manufacturing Skills Australia acknowledges the financial and other support provided by the Department of Education and Training to support the National Training System.

A. Administrative information

Name of Industry Reference Committee (IRC): **Process Manufacturing, Recreational Vehicles and Laboratory**

Four Year Work Plan prepared by: **Manufacturing Skills Australia**

B. Sector overview

Snapshot of the industry - Manufacturing

Process manufacturing

The process manufacturing sector is comprised of businesses from a number of very diverse industries, such as the manufacturing of windows and doors; glass containers; food processing (especially the dairy industry); Australian Disability Enterprises (ADEs). The diversity of the use of the qualifications has implications for engagement and consultation with most engagement being driven by registered training organisations (RTOs).

Over the last five years, through publicly funded training, the uptake of process manufacturing has been limited. The introduction of Total Vet Activity (TVA) reporting in 2014 highlights the strength of enrolments at fee-for-service RTOs. TVA reported 13,151 enrolments, a full 7,814 more enrolments than the 5,377 reported through publicly funded training in 2014[1].

The following eight MSA07 qualifications were transitioned to the MSM Training Package Version 2 to comply with the 2012 Standards for Training Products:

- MSM10116 Certificate I in Process Manufacturing
- MSM10216 Certificate I in Manufacturing (Pathways)
- MSM20116 Certificate II in Process Manufacturing
- MSM20216 Certificate II in Manufacturing Technology
- MSM30116 Certificate III in Process Manufacturing
- MSM30216 Certificate III in Surface Preparation and Coating Application
- MSM40116 Certificate IV in Process Manufacturing
- MSM50316 Diploma of Production Management

It has been proposed that the following manufacturing technology qualifications be transitioned to the MEM Manufacturing and Engineering Training Package:

- MSA30208 Certificate III in Manufacturing Technology
- MSA40108 Certificate IV in Manufacturing Technology
- MSA50108 Diploma of Manufacturing Technology
- MSA60108 Advanced Diploma of Manufacturing Technology

[1] NCVER, VOCSTATS, accessed April 2016

Recreational vehicles

'Recreational vehicles' is the collective term used for caravans, motorhomes and camper trailers. There is a wide variation in recreational vehicles ranging from the simple tent trailer (a box trailer with a tent section that lifts out to make sleeping space) to motor homes (built on a truck chassis).

The manufacturing of recreational vehicles is labour intensive, with delivery times of up to 20 weeks.

Recreational vehicles industry is divided into three subsectors:

- recreational vehicle manufacture
- recreational vehicle service and repair
- recreational vehicle and accessories sales

There are eight qualifications covering recreational vehicles in the MSM Manufacturing Training Package, ranging from Certificate II to Diploma level.

- MSM21115 Certificate II in Recreational Vehicle Manufacturing
- MSM21015 Certificate II in Recreational Vehicle Service and Repair
- MSM31215 Certificate III in Recreational Vehicle and Accessories Retailing
- MSM31115 Certificate III in Recreational Vehicle Manufacturing
- MSM31015 Certificate III in Recreational Vehicle Service and Repair
- MSM41115 Certificate IV in Recreational Vehicle and Accessories Retailing
- MSM41015 Certificate IV in Recreational Vehicles
- MSM51015 Diploma of Recreational Vehicles

Business numbers and size

Recreational vehicles

The 'ANZSIC Class 2312 Motor Vehicle Body and Trailer Manufacturing' also covers the manufacture of boat trailers, horse floats, stock crates, trailers and truck bodies and tipper trays as well as the conversion of ambulances and fire trucks. Recreational vehicle retailing, service and repair is covered in ANZSIC Class 3913 Trailer and Other Motor Vehicle Retailing.[2] Therefore, it is difficult to use Australian Bureau of Statistics (ABS) data to reflect business numbers and size.

According to IBISWorld, recreational vehicle (RV) manufacturing and sales, repair and service accounts for 47% of the activity in Class 2312 and 82% of the activity in Class 3913.[3]

On a monthly basis, the Caravan Industry Association of Australia (CIAA) collate data on the manufacture and sales of caravans and recreational vehicles. The data below has been supplied by them.

- In 2015, there were 22,771 locally manufactured units (21,637 Towable and 1074 Motorised). This is the highest level since 1979 and Jayco accounted for approximately 50% of this production. The remaining balance was made up with approximately 110 further manufacturers.
- Approximately 85% of all manufacturing occurs in Victoria.

[2] Australian Bureau of Statistics, 2006, *Australian and New Zealand System of Industrial Classification 2006* (ANZSIC)
[3] IBISWorld, 2015, *Motor Vehicle Body and Trailer Manufacturing in Australia; Trailer and Caravan Dealers in Australia*

- In 2015, approximately 3400 people were employed in RV manufacturing industry with 95% of these people employed full time.
- A caravan and campervan is manufactured every 5 minutes in the working week in Australia
- There were 586,585 RVs registered as of January 2015, a 5.3% increase in registrations since 2014. Of these registered vehicles 58,375 are motorised while 528,210 are towed products.
- Over the past five years, the caravan and camping sector has been the fastest growing domestic accommodation with an average increase of 5% per annum. [4]

In 2015, the CIAA undertook a comprehensive analysis of the manufacturing sector of the industry. In addition to the information supplied above, the analysis found that the sector invested $18.5 million per annum in research and development over the three year period to 2011-12. This investment was predicted to increase by 212% to $36.5 million per annum to June 2015.[5]

The largest manufacturer is Jayco Corporation which currently has a 10% market share in the Motor vehicle body and trailer manufacturing sector. In the retailing sector, there are no major companies. Many recreational vehicle manufacturers sell through manufacturing networks or through franchise arrangements.[6]

[4] Caravan Industry Association of Australia, 2016, http://www.caravanindustry.com.au/caravans-and-campervans-fastest-growing-vehicle-type-in-australia-2
[5] Caravan, RV & Accommodation Industry of Australia, 2014, *RV Manufacturing Impact Research Report*, NEM Australasia Pty Ltd
[6] IBISWorld, 2015, *Motor Vehicle Body and Trailer Manufacturing in Australia; Trailer and Caravan Dealers in Australia*

Licensing, regulatory or industry standards

There are no specific licences that relate to recreational vehicle qualifications in the MSM Training Package. However, some units of competency may have licensing or regulatory requirements depending on the work context. Local regulations should be checked for details. Local regulations or industry standards that may be relevant to this work could include:

- environmental protection authority regulations and guidelines
- work, health and safety regulations
- vehicle industry regulations
- Australian Design Rules
- manufacturer/component supplier specifications and application procedures for testing equipment and materials
- manufacturer/component supplier specifications, schematics and operational procedures related to systems
- consumer legislation and regulations, including sections of the Trade Practices Act
- industry/workplace codes of practice
- state/industry WHS legislation
- contract law information relevant to automotive business
- industry association code of ethics
- certification requirements
- hazardous materials handling
- contract laws and sale-contracting principles

The Motor Vehicles Standards Act (MVSA) is currently being reviewed and the industry is hopeful that this will provide a regulatory framework which places greater emphasis on enforcement and a streamlined process for instances of non-compliance.

The window and door manufacturing sector is required to comply with a range of standards and codes of practice, such as:

- AS 1100.101:1992 Technical Drawing – General Principles
- AS 1100.201:1992 Technical Drawing – Mechanical Engineering Drawing
- AS 1100.301:2008 Technical Drawing – Architectural Drawing
- AS 1288 Suppl:2006 Glass in Buildings – Selection and Installation (Supplement to AS1288:2006)
- AS 1288:2006 Glass in Buildings – Selection and Installation
- AS 2550.1:2011 Cranes, Hoists and Winches – Safe Use – General Requirements
- AS 4055:2012 Wind Loads for Housing
- AS 5040:2002 Installation of Security Screen Doors and Window Grilles
- AS/NZS 2208:1996 Safety Glazing Materials in Buildings
- AS/NZS 4666:2012 Installing Glass Units
- AS/NZS 4667:2000 Quality Requirements for Cut-to-Size and Processed Glass
- HB 47:1993 Dimensioning and Tolerances to AS 1100.101:1992 and AS 1100.201:1992
- HB 125:2007 The Glass and Glazing Handbook (Including Guide to AS 1288, Glass in Buildings – Selection and Installation)
- AS 2057:2014 Windows and External Glazed Doors in Buildings
- AS/NZS 1170.2:2011 Structural Design Action – Wind Actions

- AS/NZS 1170.2:2011 Amdt 1.2012 Structural Design Action – Wind Actions
- AS/NZS 1170.2:2011 Amdt 2.2012 Structural Design Action – Wind Actions
- AS/NZS 1170.2:2011 Amdt 3.2012 Structural Design Action – Wind Actions
- AS 4055-2012 Amdt 1-2015 Wind loads for housing
- AS 1288-2006 Amdt 3-2016 Glass in building – Selection and Installation (1)
- AS 1288-2006 Amdt 1-2008 Glass in building – Selection and Installation
- AS 1288-2006 Amdt 2-2011 Glass in building – Selection and Installation
- National Construction Code 2016
- Work Health and Safety Act 2011
- Safe Work Australia Model Codes of Practice

The window and glass manufacturing sector is so heavily impacted by standards and regulations that they are seeking the development of specific qualifications, skill sets and units of competency to support training that meets these needs.

Challenges and opportunities in the sector/sub-sector at the international/national/jurisdictional or regional level

A number of potential challenges and opportunities facing the Process Manufacturing and Recreational Vehicle industry have been identified by industry stakeholders.

Challenges

- Trans Pacific Partnership (TPP) and Free Trade Agreements (FTAs)
- ASEAN manufacturing
- The Australian dollar
- Foundation skills/language, literacy and numeracy (LLN)
- VET reform/privatisation/changes to TAFE
- Supply of skills – RTOs/apprenticeship commencements/parental expectations/careers advisors
- Attracting qualified people/growth of industry means that finding skilled workers is hard
- An ageing workforce
- Compliance and quality - refer to licencing and regulation section (page 8)
- Lack of training culture/no understanding of benefit outside of subsidy
- Skills to deal with and take advantage of emerging processes and technologies
- 2017 car industry going offshore
- Supply chain access
- Lack of entrance regulatory enforcement
- Licencing (in particular gas licensing for testing of vehicles)
- Australian standards
- Advent of battery storage

Opportunities

- 3D printing/additive manufacturing
- Advanced manufacturing/nanotechnology/advanced materials
- Robotics and automation
- 2017 car Industry moving overseas
- Battery storage capabilities
- Innovative fuel advances
- Acceptance of lean manufacturing
- Australian standards
- Career pathways and lifetime industry occupations

The TPP and FTAs are considered to be a major challenge as the industry is already contending with cheap imports that don't meet Australian standards. Stakeholders believe that the FTAs will only see more of such vehicles entering the Australian recreational vehicle market. Stakeholders in the glass processing sector are also concerned by the number of sub-standard products entering Australia and the risk to safety that these products pose. Stakeholders cite exploding shower screens and windows falling out of walls as examples of such risks.

The industry sees Australia's world class standards as an opportunity which is presenting high yield possibilities in Middle East markets. However, the possible adoption of the United Nations Economic Commission for Europe (UNECE) will result in a watering down of Australian standards. This would then turn

an opportunity into a challenge. Recreational vehicle manufacturers have also been concerned that the ongoing lack of regulatory enforcement of Australian standards on imports is undermining a highly successful domestic industry.

Another major challenge and potential opportunity for the recreational vehicle industry is the advent of new battery storage capabilities. New battery technology will offer consumers great opportunities and utility savings. However, stakeholders are concerned about the skills required for their installation. The industry is already being challenged by a skills shortage which is predicted to worsen if the trajectory of growth continues. Skills to deal with and take advantage of emerging processes and technology are needed to enable the industry to take advantage of the growth opportunities that exist.

The skills challenge is compounded by the lack of a training culture and a lack of understanding of the benefits of a trained workforce. The promotion of career pathways and lifetime industry occupations is viewed as an opportunity to attract new and skilled labour to the industry. However, this need to be supported by entrance incentives and career learning tools. Concern has been expressed that low foundation skills and ongoing VET reform processes at both national and state and territory level will make accessing upskilling opportunities difficult. Differing funding arrangements between jurisdictions is also inhibiting training uptake within the industry as many employers are reluctant to invest in non-subsidised training.

The industry sees the demise of automotive manufacturing in Australia as both a challenge and an opportunity. Sourcing components from automotive suppliers will be difficult while new developments and thinking through the supply chain will develop and change the thinking of how the products of the caravanning industry are presented in the future, and its ability to keep up with consumer demands.

Consultation with process manufacturing stakeholders has identified a sector that is facing major challenges and opportunities. The volatility of the Australian dollar has impacted the industry over the past five years. The sector has been impacted by cheap imports which have raised questions in consumers' minds around quality and safety. As the dollar returns to a lower level, the industry is seeing a corresponding demand for its products as a result of producing quality products to Australian standards. The window and door manufacturing industry in particular is seeing a growth in demand for its products. There are also growing demand for doors and windows in new materials such as steel and PVC. However, workers in the sector are largely untrained as there is no qualification. The sector sees an opportunity to upskill its current workforce and attract new entrants to meet the growing demand for their products through the development of a specialist qualification. Support will also be required to assist existing workers with low foundation skills to participate in opportunities to gain a qualification once it is developed.

C. Employment

Employment outlook

There is a significant shortage of appropriately skilled workers. However, the industry is predicting ongoing growth over the near to medium turn. Licenced plumbers with a gas testing licence are needed in the recreational vehicle manufacturing sector. In New South Wales, the industry is seeking restricted licencing for gas and electrical work. Electrical skills are also highly prized.

The window and door manufacturing sector is also looking towards growth as the residential building sector continues to improve. The introduction of new materials and technologies will drive employment opportunities and challenges. Other sectors using the process manufacturing qualifications, including the food processing sector, are already facing employment challenges as growth driven by the Free Trade Agreements (FTAs) increase the demand for skilled employees.

Workforce supply-side challenges and opportunities

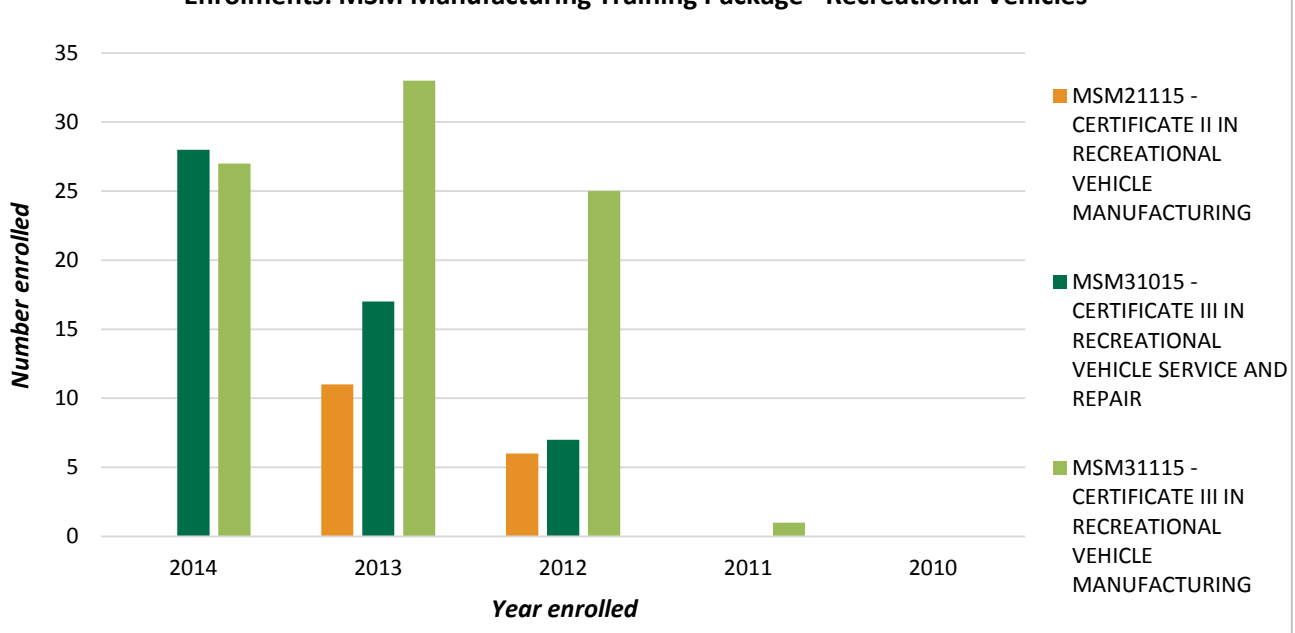
Recreational vehicles

The recreational vehicle industry continues to experience growth, however is playing catch up in terms of workforce capability. With most businesses being small and medium enterprises (SMEs), various and continually evolving skills are required across a number of platforms to ensure they remain competitive, particularly in light of imported products and new and disruptive technology. In the repair sector, most businesses are located in regional and rural areas to meet the needs of the 'grey nomads' who are the major consumers. This means that a mobile, flexible and skilled workforce is needed. However, obtaining people with the 'right' skill mix remains difficult, whereas the majority of manufacturers are located in clusters in the manufacturing sector. Here, retaining good staff in environments where there is "labour shopping" is difficult. Employers are constantly losing productivity through down time for the induction process.

Entry and trade level workers are needed to replace existing workers, many of which are seeking less physical work or retiring. The industry, like all manufacturing industries, is struggling to attract new workers.

There are some synergies between the recreational vehicle industry and other industries. However, these synergies are very loose and mostly through the supply chain. In New South Wales, there have been some reports of recreational vehicle manufacturers hiring from the boating industry. with both the manufacturing and commercial furniture fitout sectors are experiencing skill shortages, it is unlikely that there is potential for significant crossover.

Difficulty attracting workers to the industry is reflected in the number of enrolments. As evident in the chart below, enrolments are low year on year. This figure is improved slightly when considering Total VET Activity (TVA), where there were 60 enrolments in 2014 across all Registered Training Organisations (RTOs).



Source: NCVER VOCSTATS, Program enrolments 2003-2014. Data accessed 26.04.16

Process manufacturing

The table below shows the pattern of enrolments in qualifications from the MSA Training Package (those which are being transitioned to MSM). The majority of enrolments are in the Certificate III in Process Manufacturing, due to its broad application. Most other qualifications have relatively small, albeit steady numbers.

	2014	**2013**	**2012**	**2011**	**2010**
MSA10107	176	176	238	337	385
MSA10207	217	208	0	0	18
MSA20107	310	183	275	326	380
MSA20208	344	35	0	20	17
MSA30107	2,302	5,842	11,441	8,564	3,737
MSA30309	246	224	157	162	101
MSA40311	1,742	661	0	0	0
MSA50311	0	0	1	0	0
Total	**5,337**	**7,329**	**12,112**	**9,409**	**4,638**

There are a total of 79 RTOs with MSA qualifications on scope, many having more than one on scope. Overall, 20 of these are public institutions, 49 private, four enterprise-based, five industry associations and one university. There is a lot of activity outside the public sector in these qualifications, and from the table below we can also see how involved the school sector is.

RTOs with MSA qualifications on scope, by RTO type.

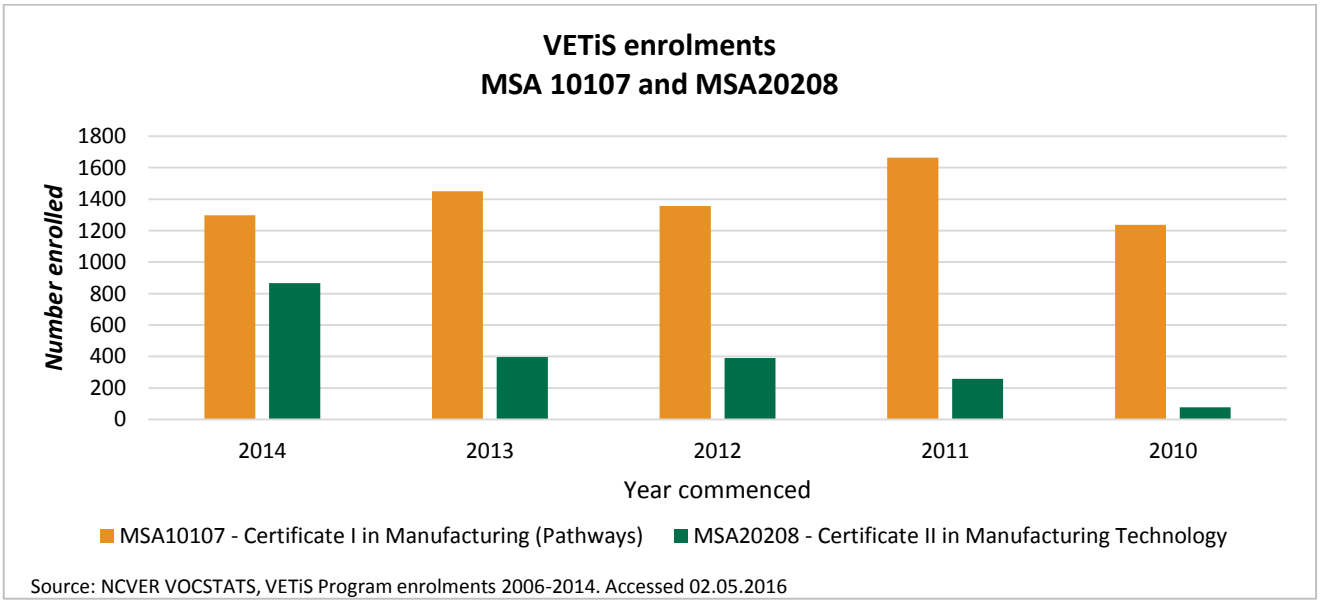
	Public	Private	University	School	Enterprise	Industry Association	Total
MSA10107	10			41*	1		52
MSA10207	2	1			1	1	5
MSA20107	8	16			1	2	27
MSA20208	5~	2	1	19~		1	28
MSA30107	10	44			1	5	60
MSA30309	5^	2	1		1		9
MSA40311	3	11				1	15
MSA50311		1					1

*All NSW and QLD schools
^4 in NSW, 1 in WA
~All in QLD

The Certificate III in Process Manufacturing MSA30107 is most commonly delivered in private RTOs, one factor making it hard to determine the exact scope of use of this qualification. In 2014, there were 2,302 enrolments in this qualification in publically funded institutions, and 4,673 enrolments were recorded under TVA. The other qualification to show strong delivery in the private sector is MSA40311 Certificate IV in Process Manufacturing with 1,742 enrolments in publically funded institutions and 2,375 enrolments were recorded under TVA. Publicly funded enrolments have almost trebled in the two years following its release.

The Diploma of Production Management MSA50311 has only one private RTO with scope, with one enrolment publicly funded and a total of five recorded under TVA.

In the table above, when looking at RTOs delivering lower level qualifications, we can see how many schools have the qualifications MSA10107 and MSA20208 on scope. These schools are all NSW and Queensland based, and have very healthy enrolments (see VET in schools enrolments table below). Stakeholders report that this does not necessarily translate into workers entering into the industry.



Source: NCVER VOCSTATS, VETiS Program enrolments 2006-2014. Accessed 02.05.2016

The qualification MSA30309 Certificate III in Surface Preparation and Coating Application has low enrolments despite the fact that many of workers do this type of work. RTOs do not push industry towards this qualification as it is not declared as a trade, but listed as a traineeship and therefore funded differently. Industry would rather employ a qualified tradesperson or put a worker through a trade apprenticeship than a traineeship. Industry may not be aware of this qualification, leading to workers that are not necessarily qualified correctly to do the work. TAFE Illawarra, who MSA understands to have moved over from MEM qualifications (production stream) to MSA30309, actively promotes use of the qualification and deliver nationally with good success.

Another factor which may impact delivery of qualifications in this sector is the restructure and amalgamation of the TAFE providers in Western Australia[7] and New South Wales[8].

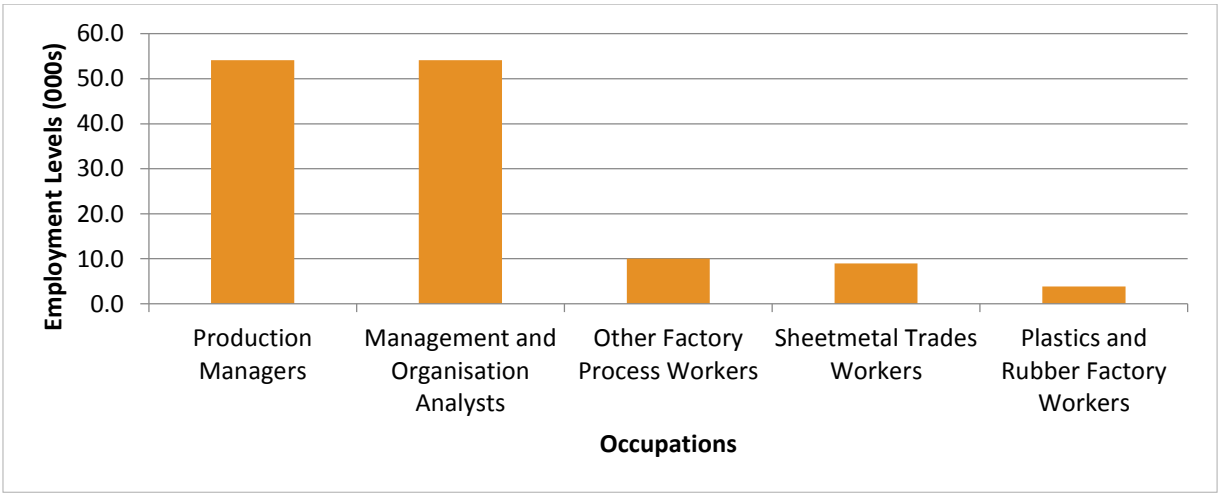
Note: Completion data has not been included as initial analysis of the data shows very low completion rates. This may be skewed by the fact that the enrolment in the public system is set up to capture only full qualification enrolments, even if the participant only intends to do a Unit of Competency or a Skill Set. The introduction of the Unique Student Identifier (USI) may provide data that will permit better identification on cohort outcomes and student pathways.

Additional information

The following graphs have been supplied by the Department of Education and Training. The Department has sourced national occupation-related data from the Department of Employment and the Australian Bureau of Statistics to inform the work of the IRCs.

MSA07 Training Package

Key Occupations – Employment Levels (000s)[9]



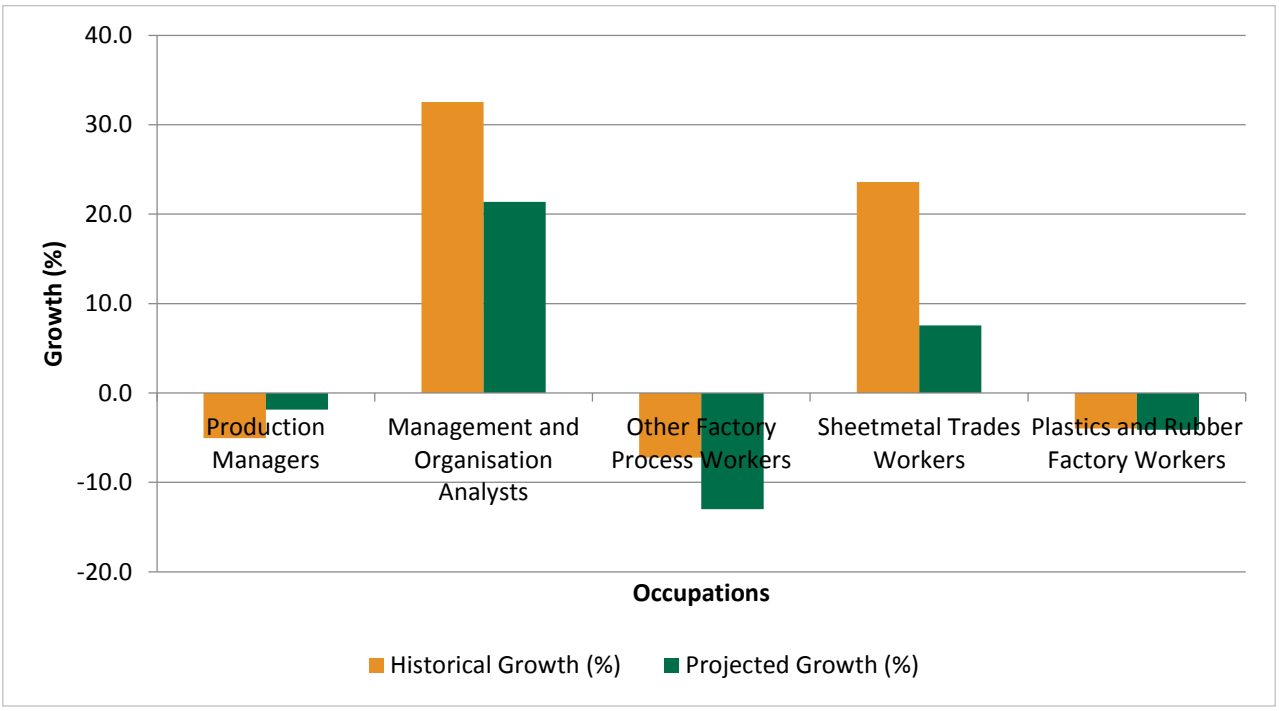
Source: Australian Bureau of Statistics (ABS)

[7] Department of Training and Workforce Development, 2016, *Changes to TAFE in Western Australia*, http://www.dtwd.wa.gov.au/trainingproviders/training-sector-reform-project/Pages/changes-TAFE-WA.aspx

[8] NSW TAFE Commission, 2016, *A Vision for TAFE NSW*, https://www.tafensw.edu.au/__data/assets/pdf_file/0016/22570/a-vision-for-tafe-nsw.pdf

[9] Note: Occupations are at the four digit ANZSCO code. Employment levels are the five year annual average to 2015. Figures include all employed in the occupation across the economy, not just the relevant industry.

Key Occupations – Historical and Projected Employment Growth (%)[10]



Source: Historical employment growth from the Australian Bureau of Statistics (ABS) and projected employment growth from the Department of Employment.

IRC analysis

Data provided in the graphs above represent five Key Occupations as determined by the Department of Employment. Apart from Production Managers, these occupations do not represent the occupational outcomes from the MSA and MSM Training Packages. The following table provided by MSA to the IRC uses occupational projections made by the Department of Employment. It more accurately reflects the Key Occupational outcomes of training identified by stakeholders for qualifications from the MSA and MSM Training Packages.

[10] Note: Occupations are at the four digit ANZSCO code. The historical employment is the five year growth rate to 2015 and the projected employment growth rate is the expected growth rate to 2019. Rates are based on figures that include all employed in the occupation across the economy, not just the relevant industry.

Employment projections for occupations relevant to the MSA and MSM Training Packages[11]

Occupation Code	Occupation	Employment level - November 2015 ('000)	Department of Employment Projections		
			Projected employment level - November 2020 ('000)	Projected employment growth - five years to November 2020	
				('000)	(%)
1334	Manufacturers	19.7	20.8	1.1	5.4
1335	Production Managers	55.5	56.6	1.1	2.0
2335	Industrial, Mechanical and Production Engineers	31.4	29.5	-1.8	-5.9
3129	Other Building and Engineering Technicians	25.4	26.2	0.8	3.1
3242	Vehicle Body Builders and Trimmers	5.7	5.0	-0.8	-13.1
6213	Motor Vehicle and Vehicle Parts Salespersons	36.8	41.4	4.6	12.4
7123	Engineering Production Workers	17.3	14.4	-2.9	-16.6

Source: Department of Employment

The MSM Training Package covers manufacture as well as sales, service and repair of recreational vehicles. The ANZSCO classification does not separate sales of motor vehicles from recreational vehicles, and hence this data includes automotive figures and should be viewed accordingly. With the reported growth in recreational vehicle manufacture[12] in Australia, we expect that this prediction of negative growth to be attributed to the decline of automotive manufacturing in Australia.

[11] Department of Employment, 2016 *Employment Projections. Occupation projections*. http://lmip.gov.au/default.aspx?LMIP/EmploymentProjections

[12] Jasmina, 2016, Australia's caravan and camping industry creates "trifecta of growth" for the country, *Australian Manufacturing*, August 14, http://www.australianmanufacturing.com.au/39838/australias-caravan-and-camping-industry-creates-trifecta-of-growth-for-the-country

D. Skills outlook

International and national trends

As previously mentioned, the advent of new battery technologies has the potential to transform the recreational vehicle industry through all its sectors in the next four to five years. The industry is watching these developments closely and monitoring the impact in terms of skills and training needs. There are also implications for regulations.

Nationally, two major trends are the significant move to lean processes and the introduction of new technologies[13], both will impact workplace and job design. The move to lean always results in a significant restructure of both the physical space and the way people work. New technology often demands new ways of working and the application of new skills.

Process manufacturing

The five most important skills for the sector's workforce within the next three to five years.

Rank	Skill	How identified
1	Technical	Industry consultations
2	LLN	Industry consultations
3	Sustainability/environmental	Industry consultations
4	STEM	Industry consultations
5	Lean/5 S/Six Sigma etc	Industry consultations

Generic workforce skills

Ranked from 1 being the most important, to 12 being the least important.

1	Technology
2	LLN
3	Environmental and Sustainability
4	STEM
5	Design mindset / Thinking critically / System thinking / Solving problems
6	Communication / Virtual collaboration / Social intelligence
7	Managerial / Leadership
8	Learning agility / Information literacy / Intellectual autonomy and self-management
9	Customer service / Marketing
10	Entrepreneurial
11	Financial
12	Data analysis

[13] Finkel. A, Foley, C and Sahajwalla, V, 2015, The future of manufacturing in Australia is smart, agile and green, *The Conversation*, July 6, https://theconversation.com/the-future-of-manufacturing-in-australia-is-smart-agile-and-green-43645

Recreational vehicles

The five most important skills for the sector's workforce within the next three to five years.

Rank	Skill	How identified
1	Technical	Industry consultations
2	Electrical and plumbing	Industry consultations
3	Sustainability/environmental	Industry consultations
4	LLN	Industry consultations
5	Lean/5 S/Six Sigma etc	Industry consultations

Generic workforce skills

Ranked from 1 being the most important, to 12 being the least important.

1	Technology
2	Environmental and Sustainability
3	LLN
4	STEM
5	Managerial / Leadership
6	Customer service / Marketing
7	Design mindset / Thinking critically / System thinking / Solving problems
8	Entrepreneurial
9	Communication / Virtual collaboration / Social intelligence
10	Learning agility / Information literacy / Intellectual autonomy and self-management
11	Financial
12	Data analysis

E. Other relevant skills related insights for this sector

The recreational vehicle market in Australia is crowded and unsophisticated. The caravan industry is seeking government assistance through a partnership to encourage a maturing of the industry via a range of strategies including funding of education opportunities and enforcement of regulation. This will result in some consolidation and rationalisation, open up new entrants through certainty (both internationally and locally) and provide for a more efficient and open market.

The industry is currently looking forward to 2030 and is undertaking a future trends analysis around manufacturing.

F. Training Product Review Plan – 2016-17 – 2019-20

Stakeholders identified a range of training product items that need to be considered in the Training Product Review Plan.

Items identified as time critical and included in the priorities for 2016-17:

- Units of Competency/Skill Set to support a restricted gas fitting licence
- Technology and design Units of Competency
- Electrical testing Units of Competency
- Certificate III in Fenestration to support the window and glass door manufacturing sector

Items identified for the 2017-2020 plan:

Technical

- lean processes and productivity improvement
- gas testing/licensing
- electrical testing
- a full review of all qualifications within the four year cycle

Business management

- customer service
- digital marketing skill set
- management skill set
- career marketing
- research and design
- compliance

The Australian Window Association (AWA) has identified an urgent need for a Certificate III in Fenestration to meet the needs of window and door manufacturers (identified as time critical and included in the work for 2016-17).

G. IRC signoff

This work plan was agreed as the result of a properly constituted IRC decision and was approved by the Chair

Samantha Read on 22 September 2016.

(Date)

IRC Training Product Review Plan 2016-17 – 2019-2020

Contact details: Samantha Read, Chair

Date submitted to Department of Education and Training: 22 September 2016

Planned review start (Year)	Training Package code	Training Package name	Qualification code	Qualification name	Unit of Competency code	Unit of Competency name
IRC to recommend the most appropriate financial year in which to review the training product. E.g. 2016-2017	Note: The Department will pre-populate these fields		IRCs to complete only if they propose to review different qualifications or units of competency of a training package at different stages			
2017 - 2020			*Technical* • lean processes and productivity improvement • gas testing/licensing • electrical testing • a full review of all qualifications within the four year cycle • lean processes and productivity improvement			
2017 - 2020			*Business management* • customer service • digital marketing skill set • management skill set • career marketing • research and design • compliance • customer service			