

SSCAR06 Production Technician [Mechanical/Process]

Disclaimer

These Occupational Frameworks and Skill Profiles have been developed as workforce planning, occupational mapping and skills reference resources for the Australian textile, clothing and footwear (TCF) industry. They are intended to describe the typical functions, responsibilities, skills and capabilities associated with occupations across the industry.

These documents are not intended to replace or override industrial instruments or employment arrangements, including awards, enterprise agreements, employment contracts, position descriptions, classification structures, licensing or regulatory requirements, or other statutory obligations. Where differences arise, the relevant industrial, legislative or regulatory requirements take precedence. The Skill Profiles should be used as complementary reference documents to support workforce planning, career development, training and skills recognition.

1. Job role

TCF sub-sector	Carpet and Textile Floor Covering Manufacturing
Functional area	Carpet Manufacturing Operations
Job role	SSCAR06 Production Technician [Mechanical/Process]
Job role description	Provides technical support to carpet manufacturing operations by maintaining, optimising and troubleshooting production equipment and processes across tufting, backing/coating and finishing lines. In Australia's carpet manufacturing industry, the Production Technician plays a critical role in ensuring machinery operates efficiently and production processes remain stable and optimised. The role bridges production and engineering functions, supporting equipment performance, process control and continuous improvement. The technician works closely with production operators, maintenance teams and supervisors to diagnose faults, implement adjustments and support automation systems in a highly capital-intensive manufacturing environment.
Performance expectations	• Maintaining equipment performance and uptime. • Supporting consistent production quality and process stability. • Diagnosing and resolving mechanical and process faults. • Minimising downtime and production disruptions. • Supporting continuous improvement initiatives. • Ensuring compliance with WHS and technical standards. • Maintaining accurate maintenance and process records. • Supporting efficient operation of automated systems.
Specialisation	Tufting machinery systems, coating line processes, finishing automation, PLC-controlled systems, mechanical maintenance and process optimisation.
Application in other sectors	• Maintaining equipment performance and uptime.

	• Supporting consistent production quality and process stability. • Diagnosing and resolving mechanical and process faults. • Minimising downtime and production disruptions. • Supporting continuous improvement initiatives. • Ensuring compliance with WHS and technical standards. • Maintaining accurate maintenance and process records. • Supporting efficient operation of automated systems.
--	---

2. Key tasks and critical work functions

Key tasks	• Monitoring and maintaining production equipment. • Diagnosing mechanical and process faults. • Adjusting machine settings and process parameters. • Supporting installation and commissioning of equipment. • Performing preventative maintenance activities. • Coordinating with maintenance and production teams. • Recording technical and maintenance data. • Supporting process improvement initiatives.
Critical work functions	• Ensuring reliable operation of production machinery. • Maintaining process stability and product quality. • Minimising downtime through rapid fault resolution. • Supporting safe operation of complex equipment. • Improving efficiency and productivity of production systems. • Integrating technical solutions with production needs. • Supporting automation and digital system performance.

3. Technical skills

Mechanical systems knowledge	Understanding machinery components and operation.
Process control	Managing and adjusting production parameters.
Fault diagnosis	Identifying mechanical and process issues.
Preventative maintenance	Maintaining equipment to prevent failures.
Automation systems	Working with PLCs and automated controls.
Technical problem solving	Resolving complex production issues.
Data analysis	Interpreting production and performance data.
Documentation	Recording maintenance and technical activities.

4. Generic Skills

Analytical thinking	Assessing equipment and process performance.
Problem solving	Resolving technical and operational issues.
Attention to detail	Ensuring precision in adjustments and repairs.
Communication	Coordinating with production and maintenance teams.
Teamwork	Working across functions.

Time management	Prioritising maintenance and technical tasks.
Adaptability	Responding to changing production conditions.

5. Emerging skills

Emerging skills	• Advanced automation and robotics systems. • Data-driven maintenance and predictive analytics. • Integration with ERP and MES systems. • Digital twins and process simulation. • Energy efficiency and sustainability technologies. • Advanced materials processing techniques.
-----------------	---

6. VET Qualifications and Skill Sets

Entry-level preparation	MSM30116 Certificate III in Process Manufacturing or equivalent in Engineering (Mechanical).
Advanced development	MSM50316 Diploma of Production Management or equivalent in Engineering, Process Manufacturing, Competitive Manufacturing or Leadership.

7. Job progression

Possible job progression	Production Operator → Senior Operator → Production Technician → Senior Technician → Maintenance Supervisor / Production Supervisor.
--------------------------	---

8. Classification

Australian Qualifications Framework	Level 3-5
Australian Bureau of Statistics (ABS) Skill Levels	Skill Level 3
Open Source Classification of Occupations for Australia (OSCA)	332299 Metal Fitters and Machinists nec



Skills Insight is a Jobs and Skills Council funded by the Australian Government Department of Employment and Workplace Relations.