

SKILLS FRAMEWORK FOR PRECISION ENGINEERING SKILLS MAP - PROCESS SPECIALIST/SHIFT LEADER/TEAM LEADER				
Sector	Precision Engineering			
Track	Technical and Engineering			
Occupation	Production Technician			
Job Role	Process Specialist/Shift Leader/Team Leader			
Job Role Description	<p>The Process Specialist/Shift Leader/Team Leader coordinates the day-to-day operations of a production team to meet production and quality standards, while ensuring compliance with workplace safety and health (WSH) procedures. He/She also works with the team to assess the feasibility of improvements to enhance productivity and efficiency at the workplace. He also diagnoses faults, maintains machines and oversees the housekeeping of machine tools and devices.</p> <p>He may be required to work on rotating shifts in a factory setting. He possesses good communication and leadership skills to guide his team and ensure compliance to WSH requirements, organisational quality control and other parameters.</p>			
Critical Work Functions and Key Tasks	Critical Work Functions	Key Tasks		Performance Expectations (For legislated / regulated occupations)
	Manufacture components and end products	Apply three-dimensional (3D) computer modelling and programming to create models and drawings for manufacturing		
		Determine appropriate processes, tools and equipment for manufacturing products		
		Monitor and adjust process parameters to maintain or enhance production systems		
	Conform to management system requirements	Oversee shop floor operations for conformance to product and process specifications		
		Implement organisational quality systems in manufacturing production processes		
		Supervise manufacturing activities for workplace safety and health (WSH)		
	Manage manufacturing process workflow	Investigate issues in manufacturing processes and product designs to formulate corrective measures		
		Coordinate maintenance of equipment and machinery		
		Apply lean techniques to enhance manufacturing operations		
	Contribute to continuous improvement	Assist in implementation of improvement projects		
		Identify opportunities for continuous improvement projects		
		Perform evaluations and/or experiments		
Collect data for analysis				
Skills & Competencies	Technical Skills and Competencies		Generic Skills and Competencies (Top Level 5)	
	Additive Manufacturing	Level 2	Communication	Intermediate
	Augmented Reality Application	Level 2	Leadership	Basic
	Automated Operation Monitoring	Level 2	Interpersonal Skills	Intermediate
	Automated System Design	Level 2	Managing Diversity	Intermediate
	Automation Process Control	Level 3	Teamwork	Intermediate
	Automation System Maintenance	Level 2		
	Change Management	Level 3		
	Cleanliness and Contamination Control	Level 2		
	Computer-aided Design	Level 2		
	Computer-aided Manufacturing	Level 2		
	Continuous Process Improvement	Level 3		
	Cutting	Level 2		
	Data Synthesis	Level 3		
	Embedded System Integration	Level 2		
	Emergency Response Management	Level 3		
	Equipment Maintenance	Level 3		
	Failure Analysis	Level 3		
	Geometric Dimensioning and Tolerancing	Level 3		
	Hydraulic Systems Management	Level 3		
	Innovation Management	Level 3		
Internet of Things Management	Level 3			
Laser and Optics Application	Level 2			
Lean Manufacturing	Level 3			

	Machining	Level 2	
	Maintenance Coordination	Level 2	
	Manufacturing Process Management	Level 3	
	Manufacturing Technology	Level 2	
	Material Joining	Level 2	
	Non-destructive Testing	Level 4	
	Plastic Injection Moulding	Level 2	
	Pneumatic Systems Management	Level 3	
	Precision Measurement	Level 3	
	Product and Machine Assembly	Level 2	
	Production Line Set-Up	Level 2	
	Production Shut-down and Re-start	Level 3	
	Quality Process Control	Level 3	
	Quality System Management	Level 3	
	Surface Preparation and Protection	Level 2	
	Virtual Reality Application	Level 3	
	Welding	Level 2	
	Workplace Safety and Health Practice	Level 3	
Programme Listing	For a list of Training Programmes available for the Precision Engineering sector, please visit: www.skillsfuture.sg/skills-framework/pe		