

SKILLS FRAMEWORK FOR MARINE AND OFFSHORE SKILLS MAP - TECHNICIAN				
Sector	Marine and Offshore			
Track	Production Engineering			
Occupation	Marine Production Technician			
Job Role	Technician			
Job Role Description	<p>The Technician performs activities related to manufacturing, installation, calibration, repair and maintenance of electrical circuits and components and/or mechanical equipment. He/She possesses technical knowledge necessary for interpreting technical design drawings and specifications.</p> <p>The Technician's duties require him to work outdoors on the shop floor, within dry docks and on-board ships. He must possess a level of physical fitness appropriate to the job requirements, and is also required to work in shifts based on operations schedules. He is adaptable to working under different job demands to handle new build projects that require meticulous attention to detail and repair jobs which emphasise quick response and turnaround.</p>			
Critical Work Functions and Key Tasks	Critical Work Functions	Manufacture marine components	Identify job requirements based on manufacturing requirements	Performance Expectations (For legislated / regulated occupations) In accordance with: • Classification Society regulations; • Workplace Safety and Health (WSH) Act
			Select and calibrate tools for production	
			Carry out operational dry runs to identify and mitigate possible errors	
			Operate manufacturing machinery and tools to manufacture required components	
	Assemble ships, rigs and marine equipment	Use appropriate tools for assembly work according to drawings, instructions and workflow plans		
		Perform marine equipment installation in accordance to assembly workflows and design specifications		
		Check accuracy of functional dynamic components according to work instructions		
		Assist in conduct of system testing and commissioning		
	Plan surface preparation and protection	Set up machines for blasting, priming and/or application of paint and other protection media		
		Set up components for surface protection and finishing operations according to job requirements		
		Apply surface preparation and/or protection techniques according to work plans and instructions		
	Execute maintenance and repair of ships, rigs, equipment and systems	Carry out machinery service and overhauls		
		Carry out troubleshooting to maintain equipment operating levels		
		Monitor and adjust machinery parameters in marine equipment and systems to acceptable operating ranges		
			Document maintenance reports containing service and overhaul information	
Skills & Competencies	Technical Skills and Competencies		Generic Skills and Competencies (Top 5)	
	Additive Manufacturing	Level 2	Leadership	Basic
	Component Assembly	Level 1	Teamwork	Basic
	Computer Numeric Control Operations	Level 1	Managing Diversity	Basic
	Emergency Response Management	Level 2	Service Orientation	Basic
	Forming	Level 1	Interpersonal Skills	Basic
	Installation Planning and Execution	Level 1		
	Instrumentation and Control System Design	Level 2		
	Joining and Welding	Level 1		
	Laser and Optics Application	Level 2		
	Lift Planning and Management	Level 1		
	Machining	Level 1		
	Marine Auxiliary System Maintenance	Level 1		
	Marine Equipment and System Maintenance	Level 2		
	Non-destructive Testing	Level 2		
	Programme Management	Level 1		
	Quality System Management	Level 2		

	Robotics and Automation Application	Level 2	
	Scaffolding	Level 2	
	Surface Preparation and Protection	Level 1	
	WSH Culture Development	Level 2	
	WSH Performance Management	Level 2	
Programme Listing	For a list of Training Programmes available for the Marine and Offshore sector, please visit: www.skillsfuture.sg/skills-framework/marineandoffshore		

The information contained in this document serves as a guide.