

SKILLS FRAMEWORK FOR MARINE AND OFFSHORE SKILLS MAP - PRODUCTION SECTION MANAGER/HEAD OF DEPARTMENT			
Sector	Marine and Offshore		
Track	Production Engineering		
Occupation	Marine Production Engineer		
Job Role	Production Section Manager/Head of Department		
Job Role Description	<p>The Production Section Manager/Head of Department leads the production department at the organisation and is in charge of ensuring efficient and productive operations in all projects. He/She acts as the liaison between other departments and ensures effective communication and seamless production workflow execution.</p> <p>He applies both technical and managerial skills to fulfil the responsibilities of managing both operations and employees within the department to meet the organisational business goals, leads a team of engineers and technicians, and is responsible for their training and development. He is comfortable with interacting with others frequently on the job, to direct and motivate a team to achieve operational goals.</p> <p>In the shipyard context, the Production Section Manager/Head of Department also takes full responsibility for organising and coordinating successful launches of ships and rigs into open water.</p>		
Critical Work Functions and Key Tasks	Critical Work Functions	Key Tasks	Performance Expectations (For legislated / regulated occupations)
	Manufacture marine components	Conduct feasibility studies of prospective projects to evaluate profitability and sustainability of production operations	In accordance with: • Classification Society regulations; • Workplace Safety and Health (WSH) Act
		Design manufacturing plans for machining, forming, joining and other relevant processes based on project requirements	
		Determine additional infrastructure requirements to support manufacturing and production requirements	
		Oversee production timelines against production status reports	
		Approve production strategies proposed by team members after evaluating budgets and resources	
	Assemble ships, rigs and marine equipment	Verify feasibility of design specifications for equipment installation locations and set-ups	
		Review vibration analysis, thermal analysis and other performance test results to confirm installation techniques	
	Execute launching operations	Strategise appropriate launching methods for ships and/or rigs	
		Verify acceptability of ballast tank conditions prior to launch	
		Produce keel laying plan for launch	
		Take stock of individual machinery, equipment and system status on board ships and/or rigs prior to launch	
		Prepare emergency response procedures for launch failures	
	Coordinate commissioning	Verify commissioning requirements proposed by team members	
		Review commissioning test results	
	Manage people and organisational function	Manage a team of production engineers	
		Evaluate results from market research and propose implementation of best practices in manufacturing	
Design equipment coding standards for organisation in liaison with quality department			
Approve deployment of new technologies for relevant manufacturing processes after evaluating budgets and skills on hand			
Manage department's compliance to risk management framework policies and processes			
Analyse viability of workplace improvements and change management initiatives			
Participate in negotiations with relevant key internal and external stakeholders			
Analyse financial implications of business strategies to the production department			

	Technical Skills and Competencies		Generic Skills and Competencies (Top 5)	
	Skills & Competencies	Additive Manufacturing	Level 5	Leadership
Big Data Analytics		Level 5	Communication	Advanced
Business Negotiation		Level 5	Decision Making	Advanced
Business Presentation Delivery		Level 4	Interpersonal Skills	Advanced
Change Management		Level 4	Transdisciplinary Thinking	Advanced
Commissioning Coordination		Level 4		
Conflict Resolution		Level 4		
Continuous Quality Improvement		Level 4		
Corporate Governance		Level 4		
Crisis Management		Level 4		
Emergency Response Management		Level 2		
Financial Budgeting		Level 4		
Financial Planning		Level 3		
Incident and Accident Investigation		Level 2		
Innovation Management		Level 4		
Intellectual Property Management		Level 4		
Interface Management		Level 5		
Laser and Optics Application		Level 5		
Launch Planning and Management		Level 5		
Manpower Forecasting		Level 4		
Manufacturing Workflow Management		Level 5		
Marine Engineering Calculations		Level 3		
Market Research		Level 4		
Naval Architecture Calculations		Level 4		
Operational Risk Management		Level 4		
Organisational Performance Management		Level 4		
Procurement Coordination and Policy Development		Level 3		
Programme Management		Level 5		
Quality Engineering Integration		Level 4		
Quality System Management		Level 4		
Robotics and Automation Application		Level 5		
Staff Performance Management		Level 4		
Stakeholder Management		Level 5		
Strategy Development	Level 4			
System Architecture Design	Level 5			
System Configuration Management	Level 5			
Systems Integration	Level 5			
Technical Inspection	Level 3			
Technical Writing	Level 4			
Value Engineering	Level 4			
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.