

SKILLS FRAMEWORK FOR MARINE AND OFFSHORE SKILLS MAP - QUALITY ASSURANCE/QUALITY CONTROL MANAGER			
Sector	Marine and Offshore		
Track	Production Engineering		
Occupation	Quality Engineer		
Job Role	Quality Assurance/Quality Control Manager		
Job Role Description	<p>The Quality Assurance/Quality Control Manager is responsible for leading, implementing, and improving quality management systems (QMS) infrastructure, governance and compliance processes and related frameworks in the organisation. He/She carries out audits to assess compliance with regulations, guidelines and operating procedures.</p> <p>He serves as the organisation's expert on quality assurance and quality control (QA/QC) matters and provides consultation to stakeholders to interpret quality-related regulations, guidelines, policies, and procedures.</p>		
Critical Work Functions and Key Tasks	Critical Work Functions	Key Tasks	Performance Expectations (For legislated / regulated occupations)
	Deploy quality assurance and quality control (QA/QC) policies, processes and procedures	Formulate and update organisational quality strategies according to legal and client requirements	In accordance with: • Classification Society regulations; • Workplace Safety and Health (WSH) Act
		Collaborate with other departments to devise design, production and repair quality parameters for projects based on client specifications and standards	
		Integrate quality policies, processes and requirements to structure quality management systems	
		Cascade quality-related roles and responsibilities across departments to ensure integration of quality assurance and correction throughout product, project and/or service lifecycles	
		Advise improvements in testing and commissioning procedures and processes	
		Drive implementation of industry best-practices and improvement initiatives to address quality management system (QMS) and QA/QC gaps	
		Develop customer-centric performance management metrics	
		Recommend engineering and procurement processes and systems improvements	
	Initiate external compliance audits	Lead external audits with regulators, classification societies, service providers and customers	
		Formulate internal audit scope and criteria in accordance with internal and external QA/QC and QMS requirements	
		Evaluate audit findings to identify vulnerabilities and devise rectification plans as necessary	
		Guide respective non-compliant departments on how to implement rectification plans and improve quality management integration	
		Oversee closure of quality compliance issues	
	Coordinate testing and commissioning	Develop inspection and testing plans (ITPs) for larger scale projects, including the development of technical test cases, test ware and test scripts	
		Approve test cases, test ware and test scripts and evaluate test results and findings	
		Formulate testing and commissioning policies and parameters based on organisation-wide policies and incorporate Workplace Safety and Health (WSH) practices essential to QA/QC	
		Monitor progress of testing and commissioning activities	
		Host mock regulatory inspections and regulatory facility inspections to ensure continuity of quality and preparedness for audits	
		Lead commissioning from the QA/QC standpoint	
		Conduct final review of testing and commissioning procedures and results to ensure compliance with all requirements and specifications	
Ensure all faulty parts, equipment and systems have been replaced or rectified and proper re-testing procedures have been implemented to verify their operations			

	Documentation and reporting	Establish documentation procedures and management systems regarding formatting, review processes, version control, distribution, and filing				
		Oversee reporting of quality and regulatory issues and maintain the quality control record systems				
		Approve QA/QC-related technical documents				
		Issue in-house quality compliance documents				
		Consolidate audit findings and prepare reports for relevant stakeholders				
	Manage people and organisational function	Manage the engineering procurement team				
		Develop strategies for resource planning and utilisation				
		Manage department's compliance to organisation's risk management framework				
		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 relevant functional areas				
		Monitor employees' understanding of relevant legislative and regulatory procedures				
	Skills & Competencies	Technical Skills and Competencies		Generic Skills and Competencies (Top 5)		
		Big Data Analytics		Level 5	Decision Making	Advanced
Business Negotiation		Level 5	Leadership	Advanced		
Business Presentation Delivery		Level 4	Global Mindset	Advanced		
Business Proposal Writing		Level 5	Communication	Advanced		
Change Management		Level 4	Developing People	Advanced		
Commissioning Coordination		Level 4				
Conflict Resolution		Level 4				
Continuous Quality Improvement		Level 5				
Corporate Governance		Level 4				
Crisis Management		Level 4				
Electrical Testing		Level 4				
Emergency Response Management		Level 2				
Financial Budgeting		Level 4				
Financial Planning		Level 4				
Manpower Forecasting		Level 4				
Manufacturing Workflow Management		Level 4				
Marine Engineering Calculations		Level 3				
Naval Architecture Calculations		Level 4				
Operational Risk Management		Level 4				
Organisational Performance Management		Level 4				
Programme Management		Level 5				
Project Quality Management		Level 5				
Quality Engineering Integration		Level 6				
Quality Systems Management		Level 6				
Service Excellence		Level 3				
Staff Performance Management		Level 4				
Stakeholder Management		Level 5				
Structural Testing		Level 4				
Technical Inspection		Level 4				
Technical Writing		Level 4				
Value Engineering		Level 3				
WSH Culture Development	Level 3					
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.