

1. Title	Test marine engineering equipment		
2. Code	EMSRIT305A		
3. Range	In work related to regular inspection, commissioning and testing for ship repair and marine engineering, assist in planning test arrangements and implementing the tests for marine engineering equipment, and use the test results for analysis.		
4. Level	3		
5. Credit	3		
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Knowledge of testing marine engineering equipment</p> <ul style="list-style-type: none"> <li>◆ Master the indicators and cycle of testing general marine engineering equipment, and normal procedures and performance criteria for testing, such as: <ul style="list-style-type: none"> <li>• Speed</li> <li>• Temperature</li> <li>• Pressure</li> <li>• Vibration</li> <li>• Power</li> <li>• Sounds</li> </ul> </li> <li>◆ Be familiar with the sensing and transmission mode of monitoring and alarm signals of marine engineering equipment system</li> <li>◆ Master the operating principles of quantitative conversion instruments for speed, temperature, pressure, vibration, power and sounds and message transmission system</li> <li>◆ Master basic regulation concept and the operating principles of open and closed loop regulation systems</li> </ul> <p>6.2 Methods and procedures of testing marine engineering equipment</p> <ul style="list-style-type: none"> <li>◆ Systematically implement tests on general marine engineering equipment</li> <li>◆ Know how to illustrate all processes of the system operation of marine engineering equipment with block diagrams</li> <li>◆ Interpret display signals for the monitoring and alarm of marine engineering equipment system, and understand and integrate the messages</li> <li>◆ Master the regulation techniques, and process and integrate the regulated data according to the inter-relationship of input and output items</li> <li>◆ Appropriately coordinate the functions of individual marine engineering equipment and the performance of its associated system after testing</li> </ul>		

	<p>6.3 Professionalism in testing marine engineering equipment</p> <ul style="list-style-type: none"> <li>◆ Follow user manuals of general marine engineering equipment and make use of the knowledge and experience of equipment test indicators to implement test procedures and analyze test data</li> <li>◆ Record the setting point of each test item, and maintain effective monitoring and alarm required after regulation</li> <li>◆ Assist in planning test arrangements</li> </ul>
7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to correctly implement test procedures for general marine engineering equipment, use testing tools and equipment, record and process data, and use the data to clearly demonstrate the test results.</p>
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses basic knowledge of inspection, commissioning and testing.</p>