

1. Title	Repair and maintain machinery components below the waterline and dockyard repair work
2. Code	EMSRRM205A
3. Range	Apply techniques and knowledge of repairing and maintaining marine auxiliary machinery components to cleaning, maintaining, repairing and replacing auxiliary machinery components at dockyards, maintenance shipyards and related work sites.
4. Level	2
5. Credit	8
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Basic knowledge of auxiliary machinery components below the waterline</p> <ul style="list-style-type: none"> ◆ Know about general components and propelling system below the waterline below the waterline <ul style="list-style-type: none"> • Thrust bearing, propeller • variable pitch propeller and accessory equipment • rudder blade and steering gear devices (inside the steering gear room) • stern tube bush, intermediate shaft and bearing • stern tube seal and its devices • bow thruster, various types of subsea valves, sand box and grid • stabilizer ◆ Know about the arrangement and basic working principles of the components <p>6.2 Methods and procedures of repairing and maintaining auxiliary machinery components below the waterline</p> <ul style="list-style-type: none"> ◆ Follow the instructions to clean, disassemble, repair and reinstall components ◆ Effectively use general repairing tools for marine auxiliary machinery components to perform repairs and maintenance <p>6.3 Professionalism in repairing and maintaining auxiliary machinery components below the waterline</p> <ul style="list-style-type: none"> ◆ Understand the components and sections usually worn, abraded and corroded, such as hull, propeller, stern rudder and stern tube seal below the waterline; and give advice on repair if necessary ◆ Identify the sections where failures usually occur and assist in implementing preventives against damage ◆ Describe the details of repairs and maintenance clearly
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <p>(i) Capable to clean, disassemble, repair and reinstall below the waterline auxiliary machinery components ; and</p> <p>(ii) Capable to correctly select and use appropriate tools to implement relevant tasks according to repair instructions.</p>
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses basic mechanical knowledge.