

1. Title	Basic layout and assembly of ship power units	
2. Code	EMSRIN201A	
3. Range	For ship power and mechanical system installation, apply the knowledge of ship power unit technology to combination and assembly of general ship power systems.	
4. Level	2	
5. Credit	6	
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Power layout and system arrangement for motor ships</p> <ul style="list-style-type: none"> ◆ Know about the machine types of ships and mechanical theory, such as: <ul style="list-style-type: none"> • Inboard machine and outboard machine • Gasoline engine and diesel engine • Power generation process • High-speed engine, gas turbine and injection system ◆ Know about the basic layout of ships' power units and the combination arrangement of main mechanical accessories ◆ Know about the layout and circulation flow of various systems of power units and the assembly arrangement of the peripherals <p>6.2 Methods of assembling ship power units</p> <ul style="list-style-type: none"> ◆ Effectively use installation tools required and appropriately apply assembly techniques to ship power unit assembly ◆ Identify the characteristics, limitations and applicability of different ship power unit assembly tools and materials ◆ Assist in performing different auxiliary tasks for ship power and mechanical system installation, such as making preparations, collecting materials, transferring tools and cleaning up the site <p>6.3 Professionalism in assembling ship power units</p> <ul style="list-style-type: none"> ◆ Correctly understand important information on assembling power components of typical motor ships, such as supervisor's instructions and installation manual guidelines ◆ Follow guidelines to assemble power units and main mechanical accessories of typical ships and peripheral systems ◆ Consider the limitations of the actual environment and of work when installing and assembling systems and accessories 	

7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> (i) Capable to correctly select and use appropriate tools assist in performing auxiliary tasks for ship power unit assembly, and correctly understand relevant assembly guidelines; and (ii) Capable to consider the impact of the layout of ship power system units on the installation work of ship power and marine engineering equipment systems.
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses basic mechanical knowledge and the ability to read common ship work drawings.</p>