

1. Title	Installation and repairs of low or medium pressure pipes	
2. Code	EMSRIN206A	
3. Range	Install and repair of general low or medium pressure (below 30bar) pipes at shipyards, workshops, on board or at other workplaces.	
4. Level	2	
5. Credit	4	
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Content and illustration methods of pipe and valve assembly drawings</p> <ul style="list-style-type: none"> ◆ Understand the content and illustration methods of pipe and valves' parts drawings and assembly drawings ◆ Understand pipe and valve systems' expansion plans ◆ Understand pipe and valve system plan, the content and illustration methods for installation of piping systems ◆ Understand the illustration methods of pipe accessories in piping system plans ◆ Understand the overall arrangement of marine pipe and valve system ◆ Understand the overall arrangement of the pipe and valve system of ship boiler system <p>6.2 Install and inspect low or medium pressure pipes and select appropriate materials for installation and repairs</p> <ul style="list-style-type: none"> ◆ Disassemble, install and repair low or medium pressure pipes according to the standards ◆ Select appropriate ship hardware such as appropriate types and specifications for fastenings ◆ Select appropriate fillers, sealing, metal gaskets and non-metal gaskets ◆ Select appropriate detergents, coatings, grinding materials ◆ Select appropriate seal rings, safety valve seal rings, springs and orifice plates ◆ Select appropriate thermal insulation materials and lubricating materials <p>6.3 Professionalism in repairing low or medium pressure pipes</p> <ul style="list-style-type: none"> ◆ Follow the law and the code of practice to implement the following work processes: <ul style="list-style-type: none"> • Identifying the causes and hazards of water hammer and the ways to prevent it • Eliminating common faults in pressure piping systems • Identifying common faults and defects with ship pipes and their causes 	

7. Assessment Criteria	The integrated outcome requirements of this unit of competency are: (i) Capable to systematically install and repair low or medium pressure ship pipes; and (ii) Capable to make correct and detail reports on safety inspection items.
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses general bench fitting or pipe work techniques.