

1. Title	Repair hull structures of non-steel ships
2. Code	EMSRRM301A
3. Range	Apply the techniques and knowledge of non-steel ship production to the repairs of non-steel ships when handling ship maintenance and repair works.
4. Level	3
5. Credit	6
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Construction of different hull line shapes and principles of repair</p> <ul style="list-style-type: none"> ◆ Understand the characteristics, construction and layout of basic hull line shapes (flat bottom, V-bottom and round bottom) <ul style="list-style-type: none"> ◆ Backbone frame • Skeleton frame • bulwark and vertical beam • horizontal beam • middle hull ◆ Know about the damages usually occur in non-steel hull <ul style="list-style-type: none"> • Collapse and cracks • Mold and moth • Erosion and spalling ◆ Know about the basic principles of repairing non-steel hull, such as carving, plate laying, strip cutting, cold plastic and lapping hoop strips ◆ Know about the techniques of jointing various types of honeycomb plates ◆ Know about some less popular materials (such as titanium and carbon fibre) <p>6.2 Methods of repairing non-steel ship hull structure</p> <ul style="list-style-type: none"> ◆ Effectively use correct tools to perform various repair procedures such as drying, saw-cutting, planing, fastening, jointing (use of enhanced plastics) , softening, bonding, gap filling and laying ◆ Perform repairs for common damages occurred in single-layer hull, double-layer hull and compound hull ◆ Perform the procedures of jointing and repairing honeycomb plates

	<p>6.3 Professionalism in repairing non-steel ship hull structure</p> <ul style="list-style-type: none"> ◆ Makes following preparations systematically for repair works, and adopt appropriate measures according to the actual environment and condition <ul style="list-style-type: none"> • Select appropriate materials • Draft working drawing • Prioritize the repair items • Allocate repair works and arrange for implementation ◆ Cut, disassemble and assemble non-steel hulls and structures according to approved practice and procedures or instructions of repair manuals ◆ Select appropriate protection gear such as earplugs and goggles according to implementation needs ◆ Compile simple repair reports ◆ Perform work procedures according to guidelines or material usage guides
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> (i) Capable to perform structural repairs on general non-steel ships and test the repair standard according to approved practice and procedures; and (ii) Capable to compile simple repair reports.
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses basic knowledge of ship repair.</p>