1. Title	Examine the shapes and dimensions of prefabricated pieces according to standards
2. Code	EMSRIT301A
3. Range	In regular inspection, commissioning and testing of ship-repair works, apply the knowledge of welding and fabrication to examine welded, fabricated and rolled pieces to check whether the shape and dimension of prefabricated pieces /work pieces meet the engineering requirements, such as information on drawings or in standards of the survey company.
4. Level	3
5. Credit	3
6. Competency	Performance Requirements 6.1 Knowledge of examining welded, fabricated and rolled pieces according to standards ♦ Master the effects of the technical limitations of welding, fabrication and rolling on the precision of work pieces to be produced ♦ Master the basic working principles and standards for the production of welded, fabricated or rolled work pieces , such as: • Relationship between the properties of materials, such as their types, thickness, distance and angle, and the welding method • Relationship between the shortest distance of the nodal rivets and the margin of the structural piece with the bolt and rivet • Procedures and requirements of post-weld heat treatment 6.2 Methods of examining welded, fabricated and rolled pieces according to standards ♦ Effectively use appropriate examination tools or instruments to examine the shapes and dimensions of welded, fabricated and rolled pieces, such as: • Using curve model to check the shape of weld seams • Using profile model to check shell curvature and shapes of other elements • Accurately measure dimensions of work pieces
7. Assessment Criteria	The integrated outcome requirement of this unit of competency is: (i) Capable to correctly examine the shapes and dimensions of welded, fabricated and rolled pieces according to standards.
8. Remarks	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 and know how to read relevant engineering drawings (such as: EMSRIN101A "Read main basic ship hull drawings" and EMSRIT201A "Test the physical strength of materials")。