

1. Title	Repair large diameter steel pipes
2. Code	EMPERM302A
3. Range	Repair large diameter steel pipes in general industrial plants, power plants or other places. "Large diameter" refers to pipe diameter above 600mm or; and materials carried by the pipes include water (or chemical liquid), steam, oils and gas.
4. Level	3
5. Credits	6
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Construction of pipe system</p> <ul style="list-style-type: none"> ◆ Know about the construction and components of pipe system including: <ul style="list-style-type: none"> • Flange joint, screw joint • Compression ring • Properties of large diameter steel pipes <p>6.2 Methods and procedures of repairing large diameter steel pipes</p> <ul style="list-style-type: none"> ◆ Repair large diameter steel pipes according to the properties of materials carried by the pipes, including the items of: <ul style="list-style-type: none"> • Pipe replacement • Welding ◆ Arrange lifting machines to move large diameter steel pipes ◆ Perform centering <p>6.3 Professionalism in repairing large diameter steel pipes</p> <ul style="list-style-type: none"> ◆ Follow manufacturer's guidelines to perform the procedures of repairing large diameter steel pipes ◆ Take safety measures in the process of pipe repair according to the properties of materials carried by the pipes ◆ Assist competent persons to conduct pipe leakage test according to safety procedures
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <p>(i) Capable to repair large diameter steel pipes independently;</p> <p>(ii) Capable to assist competent persons to conduct pipe leakage test; and</p> <p>(iii) Capable to complete simple reports on large diameter steel pipe repair.</p>
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses basic knowledge of installing and repairing pipes (including the required post-welding heat treatment) and basic welding techniques.