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| 1. Title               | Identify different types of pipe materials and their range of application   |
| 2. Code                | EMCUIN109A  |
| 3. Range               | Capable to identify different types of pipe materials and their range of application in general industrial plants, power plants, and workplaces where ship engineering, fire engineering, plumbing or gas engineering is involved.  |
| 4. Level               | 1   |
| 5. Credit              | 3   |
| 6. Competency          | <p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Pipe materials and their range of application</p> <ul style="list-style-type: none"> <li>◆ Understand different types of pipe materials, such as: <ul style="list-style-type: none"> <li>• Cast iron</li> <li>• Low-carbon steel</li> <li>• Stainless steel</li> <li>• Copper</li> <li>• Aluminium</li> <li>• Plastic</li> </ul> </li> <li>◆ Understand the properties of different types of pipe materials, such as: <ul style="list-style-type: none"> <li>• Bend ability</li> <li>• Pressure resistance</li> <li>• Heat resistance</li> <li>• Resilience</li> <li>• Weldability</li> <li>• Corrosion resistance</li> </ul> </li> <li>◆ Understand the characteristics of pipeline manufacturing <ul style="list-style-type: none"> <li>• Casting</li> <li>• Plastic moulding</li> <li>• Lining</li> <li>• Electric welding</li> <li>• Seamless</li> <li>• Continuous welding, etc.</li> </ul> </li> <li>◆ Understand the range of application of different types of pipes</li> </ul> <p>6.2 Identify the application of different types of pipes</p> <ul style="list-style-type: none"> <li>◆ Identify the properties and range of application of different types of pipe materials for general pipe installation</li> </ul> |
| 7. Assessment Criteria | <p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Identify the properties and range of application of different types of pipe materials for general pipe installation.</p>  |
| 8. Remarks             | This unit of competency is applicable to new entrants of electrical and mechanical engineering services.  |