

**Specification of Competency Standards for the Jewellery Industry**  
**Unit of Competency**

1. Title	Master jewellery electroforming techniques	
2. Code	JLZZPD304A	
3. Range	This unit of competency is applicable in jewellery electroforming worksites. Practitioners should be capable to independently operate electroforming equipments in a safely manner to complete the electroforming process for precious metal (pure gold and silver) in accordance with relevant legislations and operational guidelines on electroplating. The products include hollow display items and ornaments.	
4. Level	3	
5. Credit	9	
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Understand the electroplating operation</p> <ul style="list-style-type: none"> <li>◆ Know the relevant legislations on electroplating <ul style="list-style-type: none"> <li>• Drainage and environmental protection ordinances</li> <li>• Disposal of chemical waste ordinance</li> </ul> </li> <li>◆ Know how to use chemical drugs in a safely manner</li> <li>◆ Know the recovery treatment of electroplating solution for precious metal</li> <li>◆ Know how to solve the problem of electroplating defects</li> </ul> <p>6.2 Control electroforming effect</p> <ul style="list-style-type: none"> <li>◆ Master the necessary preparation prior to putting electroforming items into container <ul style="list-style-type: none"> <li>• Install hangers</li> <li>• Apply silver solution/electric conductivity coating</li> </ul> </li> </ul>	

	<ul style="list-style-type: none"> <li>◆ Control electroforming effect <ul style="list-style-type: none"> <li>• The weight of electroforming items</li> <li>• The surface of electroforming items</li> <li>• The time for electroforming</li> <li>• The impact of the temperature of the electroplating solution on electroforming items</li> <li>• Current and voltage control</li> </ul> </li> <li>◆ Prepare electroforming solution <ul style="list-style-type: none"> <li>• Replenish gold potassium cyanide</li> <li>• Add chemical drugs</li> </ul> </li> <li>◆ Remove wax core and silver solution</li> </ul>
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <p>(i) Capable to understand thoroughly the relevant ordinances and operational guidelines on electroplating, and can independently operate electroforming equipments in a safely manner to conduct electroforming work on the surface of hollow jewellery wax mould; and</p> <p>(ii) Capable to master and adjust the normal operation of electroplating solution.</p>
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person concerned already possesses basic knowledge on jewellery electroplating.</p>