

**Specification of Competency Standards**  
**for the Manufacturing Technology Industry**  
**Unit of Competency**

Functional Area - Product Manufacturing

Title	Carry out mechanical surface treatment
Code	106431L3
Range	This unit of competency is applicable to the production department of the plastics industry corporation. Practitioners should be capable to carry out mechanical surface treatment, such as fitting and polishing
Level	3
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Understand relevant knowledge of mechanical surface treatment</p> <ul style="list-style-type: none"> <li>• Understand the methods and techniques of all kinds of mechanical surface treatment, such as fitting and polishing</li> <li>• Understand the plastic materials of all kinds of mechanical surface treatment</li> <li>• Understand the principles and applications of all kinds of mechanical surface treatment</li> <li>• Understand the technologies and final effect of moulding or product demoulding of mechanical surface treatment</li> <li>• Understand the equipment, tools and materials needed of all kinds of mechanical surface treatment, in accordance with the materials and products requirements to make the right choice</li> <li>• Understand the structure, safety operation and preventive maintenance of commonly used equipment of mechanical surface treatment</li> <li>• Understand the characteristics, safety installation and preventive maintenance of all kinds of commonly used tools of mechanical surface treatment</li> <li>• Understand the methods and techniques of optical fitting and polishing</li> </ul> <p>2. Apply mechanical surface treatment in production and carry out evaluation and improvement</p> <ul style="list-style-type: none"> <li>• Determine whether the product is suitable for mechanical surface treatment</li> <li>• Follow the requirements of drawings or product design, select suitable methods, tools and materials of mechanical surface treatment</li> <li>• Correctly select and operate the equipment of mechanical surface treatment</li> <li>• In accordance with the requirements of quality time and cost, operate appropriate equipment to complete the mechanical surface treatment</li> <li>• Examine the production efficiency of mechanical surface treatment</li> <li>• After completed the mechanical surface treatment, to check the appearance, size and geometry of the product, ensure that the product functions and operation of the product are not affected by the mechanical surface treatment</li> <li>• Analyse product quality problems of mechanical surface treatment and carry out improvement</li> </ul> <p>3. Professional handling of mechanical surface treatment</p> <ul style="list-style-type: none"> <li>• Follow safety guidelines and related codes of practice, in accordance with the requirements of technologies and techniques, product specifications and production efficiency, carry out mechanical surface treatment</li> </ul>
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> <li>• Capable to examine whether the product is suitable for mechanical surface treatment</li> <li>• Capable to carry out mechanical surface treatment</li> <li>• Capable to examine the production efficiency of mechanical surface treatment</li> <li>• Capable to analyse product quality problems of mechanical surface treatment and carry out improvement</li> </ul>

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Remark	
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