

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

Functional Area - Product Quality Control and Testing

Title	Carry out appearance inspection of plastic parts
Code	106443L3
Range	This unit of competency is applicable to all quality control department of the corporation of Plastics Industry. Practitioners should be capable to distinguish all kinds of surface defects of plastic parts, so as to carry out appearance test of plastic parts
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <ol style="list-style-type: none"> <li>1. Recognise the surface defects of plastic parts and testing standard <ul style="list-style-type: none"> <li>• Recognise all kinds of plastic surface defects that may occur, such as scratches, void, sewing patterns, shrinking, impurities, flashing, spots and deformation</li> <li>• Understand the causes of all kinds of surface defects of plastic parts</li> <li>• Understand the testing methods and techniques of all kinds of surface defects of plastic parts</li> <li>• Understand the plastic parts testing standard, methods, supporting tools of testing, testing environment and surface level of plastic parts of the internal and customers</li> </ul> </li> <li>2. Analyse the surface defects of plastic parts and propose improvements <ul style="list-style-type: none"> <li>• Carry out appearance test of plastic parts and detailed record relevant defects</li> <li>• According to the appearance test standards and limited samples, determine whether the appearance of the plastic part is qualified</li> <li>• Carry out testing of internal stress</li> <li>• Effectively distinguish the surface defects of plastic parts, make systematic analysis and propose feasible ways of improvement</li> <li>• Operate supporting tools of appearance testing, such as a microscope, magnifier and calipers</li> <li>• Implement the sampling program to ensure the quality of the products can reach Acceptance Quality Level(AQL)</li> </ul> </li> <li>3. Professional handling of appearance inspection of plastic parts <ul style="list-style-type: none"> <li>• Follow the safety guidelines and related operational codes of plastic materials inspection, carry out appearance test of plastic parts</li> </ul> </li> </ol>
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> <li>• Capable to describe all kinds of surface defects and their causes of general plastic products</li> <li>• Capable to carry out appearance test of plastic parts and detailed record relevant results</li> </ul>
Remark	