

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

Functional Area - Product Quality Control and Testing

Title	Analyse plastics material quality
Code	106442L3
Range	This unit of competency is applicable to all quality control department of the corporation of Plastics Industry. Practitioners should be capable to check and accept the quality of plastics
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Understand the information of plastic materials, including types, natures and detection methods</p> <ul style="list-style-type: none"> • Understand the types and scopes of plastic materials • Understand the physical properties, mechanical properties, thermal properties, chemical properties, electrical properties, thermal properties, transmittance, weather resistance and degradation etc of the plastic materials. • Understand different inspection methods, applications and limitations • Understand different analytical methods and equipment of plastic materials, such as far-infrared analysis, spectral analysis, and carbon composition analysis • Understanding the material database of all material suppliers in the market • Understand plastic materials analysis and performance testing of common standards, such as the international standards of ASTM, ISO and DIN • Recognise relevant international environmental protection and safety laws and regulations, such as WEEE, RoHS and EuP <p>2. Capable to carry out checking and accepting plastics</p> <ul style="list-style-type: none"> • Apply all kinds of material database in the market, collect, analyse and apply relevant materials information • Carry out general inspection of plastics • Formulate plastics checking and accepting scheme • In accordance with the internal resource, select and operate suitable equipment and carry out plastic inspection • Select suitable third-party testing agency, carry out complex plastic analysis <p>3. Professional handling of inspections of all kinds of plastic materials</p> <ul style="list-style-type: none"> • Follow the safety guidelines and related operational codes of plastic materials inspection, ensure the safety of inspection procedures, stability of inspection equipment and accuracy of inspection results
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> • Capable to formulate plastics checking and accepting scheme • Capable to formulate the important inspection indicators of plastic materials applications, such as composition and mechanical performance
Remark	