

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

Functional Area - Product Manufacturing

Title	Carry out plastic functional modification
Code	106525L4
Range	This unit of competency is applicable to the production department of the plastics production corporation. Practitioners should be familiar with plastic functional modification and capable to carry out plastic functional modification
Level	4
Credit	9 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Understand relevant knowledge of plastic functional modification</p> <ul style="list-style-type: none"> • Understand the characteristics applications and limitations of all kinds of plastic functional modification • Understand the principle and the final effects of plastic functional modification • Understand the principles, methods, equipment and production technology of all kinds of applicable plastic functional modification, such as Mechanical Blending and Chemical Reaction • Understand integration requirements and restriction of all kinds of plastics • Recognise the tips, product design, tooling design and mechanical requirements of plastic functional modification • Recognise the types, applications and restrictions of all kinds of plastic additives, such as plasticizers, colorants, fillers, heat stabilizers, lubricants, antistatic agents, antioxidants, light stabilizers and blowing agents • Understand the testing methods of the characteristics of all kinds of plastics (such as physical performance, chemical performance and mechanical performance) <p>2. Carry out plastic functional modification</p> <ul style="list-style-type: none"> • According to the formulations of plastic functional modification, select the appropriate production processes and equipment • Carry out and monitor the production of plastic functional modification, including post-treatment (such as cooling and cut method) and packaging • Carry out standard spline production for testing • Carry out basic test for plastic functional modification and compile the Material Specification, ensure the plastics compliance with all the necessary standards and regulations • Develop production conditions and testing specifications of plastic functional modification • Determine and manage the performance and life of machinery and tooling, preventively maintain machinery and equipment and carry out troubleshooting <p>3. Professional handling of plastic functional modification</p> <ul style="list-style-type: none"> • Carefully consider elements of safety, risk, capacity, quality, environmental protection and cost etc, carry out plastic functional modification and also meet all aspects of requirements
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> • Capable to carry out plastic functional modification and compile the Material Specification
Remark	