

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

Functional Area - Process Design and Development

Title	Develop and define automatic processing and testing procedures, methodologies and equipment for plastic products
Code	106492L4
Range	This unit of competency is applicable to the engineering or manufacturing development department of the plastic manufacturing corporations. Practitioners should be capable to develop suitable automatic equipment
Level	4
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Understand all kinds of automatic processing equipment and application</p> <ul style="list-style-type: none"> • Understand all kinds of automatic processing of plastic products and the types, specifications and applications of auxiliary equipment of handling parts, including transfer manipulator, multi-axis robot, conveyor belts, flat machine and feeder • Understand the advantages, disadvantages, equipment upgrades and maintenance ways of all kinds of plastic product automatic processing and auxiliary equipment of handling parts in the market • Understand the types, specifications, functions and applications of all kinds of automatic testing equipment of plastic products, including detectors of stacked pieces, optical measuring instrument high-speed camera and integrated measuring instrument • Understand the advantages, disadvantages, equipment upgrades and maintenance ways of all kinds of plastic product automatic testing equipment in the market • Understand the types, specifications and applications of commonly used pneumatic, hydraulic, vibration plate, Programmable Logic Controller (PLC) elements and systems <p>2. Develop and procure automatic processing, methods and equipment, ensure proper operation</p> <ul style="list-style-type: none"> • Meet the design, production quantity and quality requirements as a precondition, develop and procure automatic processing procedures, methods and equipment for plastic products • Ensure there is no defect of processes and equipment, control and minimise the chances of failure probability • Evaluate the effectiveness of plastic product automation and carry out continuously improvement • Ensure after the development and define of plastic product automatic processing procedures and equipment, no product defects will be created • Draw the automatic equipment layout and process flow diagram and set the technical specifications <p>3. Profession of developing and procuring automatic processing, methods and equipment</p> <ul style="list-style-type: none"> • Insight the potential safety issues and accident, optimise the development and definition of systems, and enhance the efficiency, stability and security of the automation systems
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> • Capable to prepare automatic processing procedures, methods and equipment for plastic products • Capable to prepare the automatic equipment layout and process flow diagram and set the technical specifications
Remark	