

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

Functional Area - Product Manufacturing

Title	Operate injection moulding equipment, perform processing products to meet application requirements
Code	111568L2
Range	This unit of competency is applicable to the product manufacturing departments / production departments of companies engaged in the plastics industries. Practitioners should be capable to understand relevant knowledge of operating injection moulding equipment and are able to perform various general injection moulding processes as instructed, ensuring that products meet specified requirements
Level	2
Credit	3
Competency	Performance Requirements - Understand relevant knowledge of operating injection moulding equipment and injection moulding processes - Understand traditional injection moulding processes and working principles - Understand types, specifications, applications, operation, and maintenance methods of injection moulding machines and peripheral equipment (include material drying machines, mould temperature controllers, etc.) - Understand processing methods and techniques of various injection moulding processes - Understand basic structure of moulds - Understand installation method of injection moulds - Be familiar with common product defects in injection moulding processes, such as colour streaks, air traps, jetting marks, weld lines, surface peeling, stress whitening / stress cracking, hazy spots near the gate, and record mark (flow mark) effects - Injection moulding process - Able to correctly use all devices on injection moulding equipment, include safety and control devices - Able to perform material pretreatment (include drying) according to instructions - Able to set injection moulding parameters according to instructions - Able to correctly install the mould on the injection moulding machine - Able to correctly connect various injection moulding peripheral equipment to the injection moulding machine / mould - Able to identify whether the injection moulding machine has reached stable state and determine whether injection can begin (include checking melt state, mould ejector pin movement, etc.) - Able to perform various injection moulding processes according to instructions - Able to identify whether the injection moulding process is normal - Able to report problems discovered during the injection moulding process to superiors - Able to perform simple maintenance on injection moulding machines and peripheral equipment according to instructions - Professional handling of injection moulding equipment operation and processing - Able to follow safety guidelines and relevant procedures, and operate injection moulding equipment and perform injection processing in accordance with instructions

Assessment Criteria	The integrated outcome requirements of this unit of competency are: • Able to operate various injection moulding equipment according to instructions, and perform general injection moulding processes and simple daily equipment maintenance • Able to report problems discovered during the injection moulding process to superiors
Remark	