

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

Functional Area - Product Quality Control and Testing

Title	Mould assembly, internal and external surface quality inspection
Code	106527L4
Range	This unit of competency is applicable to the production and quality control department of the tooling industry corporation. Practitioners should be capable to understand the knowledge of tooling assembly, internal and external surface quality inspection, arrange appropriate tests to inspect the coordinations of all components and subsystems of tooling, the internal and external surface quality of the tooling
Level	4
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Understand the knowledge of tooling assembly, internal and external surface quality inspection</p> <ul style="list-style-type: none"> • Understand all fitting methods of tooling components and subsystems, such as tight fit, loose fit and slide fit • Understand all components and the assembly methods, common assembly defects, including parts specification error, lack of lubrication, lack of grade of fit of components and excessive tolerance • Understand all defects of tooling surface, such as rust, loose parts, cracks and over-rough surface • Understand the inspection method and applications of all kinds of tooling • Understand all functional systems and the installation methods, including mould temperature controllers of injection moulding and gas-assisted injection system • Recognise and fit with different international and regional standards and requirements of types of finished goods, such as SPI/SPE Standard <p>2. Carry out tooling assembly, internal and external surface quality inspection</p> <ul style="list-style-type: none"> • Selected important parts and components and arrange all kinds of inspections for sizes and tolerances detection and surface • Arrange appropriate tests to inspect the grade of fit of all components and subsystems of tooling • Inspect the function of the system is properly installed and functions properly • Solve the problems of tooling assembly and internal and external surface quality, improve the tooling quality • Integrate and record the results of all inspections <p>3. Professional handling of tooling assembly, internal and external surface quality inspection</p> <ul style="list-style-type: none"> • Follow the safety guidelines and related operational codes of tooling assembly, internal and external surface quality 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 arrange an appropriate tooling assembly, internal and external surface quality inspection in accordance with the drawings and techniques and technologies requirements • Capable to integrate and record the results of all inspections and make recommendations for tooling improvement
Remark	Person who has the above knowledge and ability should also obtain the knowledge and ability of Tooling fitting and adjustment (106515L4) at the same time