

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

Functional Area - Product Manufacturing

Title	Intermediate electroplating
Code	106521L4
Range	This unit of competency is applicable to the production department of the corporation of metal electroplating industry. Practitioners should be capable to understand a higher level of the knowledge of electroplating, manage intermediate electroplating, solve the production problems and improve the techniques and technologies
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Understand the techniques and technologies of intermediate electroplating</p> <ul style="list-style-type: none"> • Understand the chemical and electrochemical theory related to electroplating • Understand the principles and methods of electroplating • Understand the principles and methods of pre/ post electroplating treatment • Understand the standard of water usage and treatment of electroplating • Understand the relevant technologies of electroplating, such as anodized, electroless plating, electrophoretic painting, vacuum deposition, physical vapor deposition and chemical vapor deposition • Understand the local specifications of electroplating • Understand all kinds of test methods of electroplating, such as solder test, corrosion resistance test, artificial sweat test, salt spray test, abrasion test, adhesion test, aging test and electrical measurement • Understand the knowledge of safety operations of electroplating production and knows the characteristics of electroplating wastes and treatment methods <p>2. Carry out intermediate electroplating</p> <ul style="list-style-type: none"> • Plan all kinds of pre-treatment and post-treatment engineering • Carry out electroplating, effectively design of the types, thickness, electroplating conditions and time, the distribution and process of the electroplating layer • Review the production efficiency of electroplating • Identify and systematically analyse the common quality problems and causes of electroplating products and improve them • Carry out adjustments, maintenance and repair of common electroplating equipment • Compile relevant production guidelines and detailed arrangements in accordance with all kinds of surface treatment technologies of electroplating • Examine if the required chemicals in the electroplating process is safely stored and comply with the laws and regulations <p>3. Professional handling of intermediate electroplating</p> <ul style="list-style-type: none"> • Follow safety guidelines and related codes of practice, in accordance with the requirements of technologies and techniques, product specifications and production efficiency, carry out intermediate electroplating and solve production problems
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> • Capable to manage the relevant techniques and technologies of electroplating independently and examine if the required chemicals in the electroplating process is safely stored and comply with the laws and regulations • Capable to coordinate the workpiece material and product requirements, compile the relevant techniques and technologies process

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	<ul style="list-style-type: none">• Capable to solve the problems of intermediate electroplating and carry out continuously improvement
Remark	