

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

Functional Area - Product Manufacturing

Title	Adjust equipment, carry out coating and resolve production problems
Code	106423L3
Range	This unit of competency is applicable to the production department of the corporation of metal coating industry. Practitioners should be capable understand the relevant knowledge of adjusting equipment and coating, so as to carry out coating and solve all kinds of production problems
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Understand the relevant knowledge of adjusting equipment and carrying out coating</p> <ul style="list-style-type: none"> • Recognise the surface characteristics, handling procedures and precautions of all kinds of substrate, including how to adjust the dilution of coating, thus select suitable spray coating technology and meet a variety of temperature requirements of coating solidification • Recognise the colour palette principles and the basic colour terminology, including understanding of characteristics of different pigments and coating types, such as rubber-based paint, polyurethane paint, resin glue paint and all kinds of epoxy light varnish • Recognise all kinds of coating methods, coating engineering points and procedures, including understanding the using methods and techniques of coating, recognise operation techniques and maintenance of all kinds of coating equipment, and the handling procedures of before the workpiece being processed • Understand the basic causes of defects and repair methods, including dust spots, tortoise, orange wrinkles peel structure, discoloration and uneven colour • Understand the basic structure of relevant coating equipment and basic characteristics of all kinds of coating <p>2. Carry out coating</p> <ul style="list-style-type: none"> • Select all the appropriate coating materials for substrate, including knowing different coating materials for different metal substrate, which are applicable in high temperature resistance and low temperature resistance of the coating • Carry out general substrate handling, including decontamination, degreasing, pickling, grinding, pre-treatment cleaning, plating of defective products and re-processing and handling methods for defective products • Adjust equipment, carry out coating and simple repair work, including the techniques of repeated spraying to make thicker coating • Improve the production efficiency of the coating, including how to effectively average the surface spray coating and reduce paint waste • Determine the quality problems of products of coating and carry out immediate corrections <p>3. Professional handling of adjusting equipment and carrying out coating</p> <ul style="list-style-type: none"> • Follow the safety guidelines and relevant codes, in accordance with the requirements of the technologies and techniques and carry out coating
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> • Capable to adjust equipment and independently operate the relevant technologies and techniques of coating • Capable to fine-tuning the relevant technologies and techniques with the workpiece materials and products requirements

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	<ul style="list-style-type: none">• Capable to solve the general operation problems of equipment of coating and carry out maintenance
Remark	