

Specification of Competency Standards of the Watch & Clock Industry

Unit of Competency

Functional Area: Manufacturing

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| Title | Master the Electroplating Technique for Parts of a Complete Watch |
| Code | 104823L3 |
| Range | This unit of competency (UoC) is applicable in the production department of timepiece manufacturing companies. It covers the abilities to master the standard and method of electroplating a complete watch, and carry out general electroplating of complete watches according to the guidelines and safety regulations. |
| Level | 3 |
| Credit | 9 (for reference only) |
| Competency | <p>Performance Requirements</p> <ol style="list-style-type: none"> Understand the basic knowledge of electroplating <ul style="list-style-type: none"> Know about the objectives of dial treatment for timepiece products Understand treatments and basic procedures of electroplating, e.g.: <ul style="list-style-type: none"> Electroplating Organic spray Chemical plating Understand the treatment procedure, conditions and important points before electroplating, e.g.: <ul style="list-style-type: none"> Polishing, grinding Different cleaning and grease-releasing materials Understand the different electroplating procedures for different metals Master the electroplating standard and requirements <ul style="list-style-type: none"> Know about the categories of gold-plating solutions <ul style="list-style-type: none"> By the pH degree of the solution By the content of cyanide By the valence of gold ion Master the colour standard and features of gold-plating for a case Know about the features of silver-plating Know about the features, process and noting points for rhodium-plating Understand the application of pure palladium-plating or palladium alloy plating in the electroplating of timepiece Know about the features of palladium-plating Understand other types of electroplating <ul style="list-style-type: none"> Ruthenium-plating Electroplating of tin alloys Understand the EEC nickel prohibition ordinance and its effect on timepiece electroplating Know about the testing methods in relation to the EEC nickel prohibition ordinance Master the inspection and testing for electroplated layers Electroplate <ul style="list-style-type: none"> Carry out general electroplating of a complete watch according to working guidelines and safety regulations Master the operation of electroplating equipment Improve the effect of electroplating <ul style="list-style-type: none"> Master the advanced technology for treating metal dials Know about the significance of environmental protection during the process of electroplating Exhibit professionalism <ul style="list-style-type: none"> Carry out electroplating of timepiece products according to the Dangerous Goods Ordinance and Environmental Laws and Regulations Carry out electroplating according to the safety guidelines and code of practice of the Occupational Safety and Health Ordinance |
| Assessment Criteria | <p>The integrated outcome requirement of this UoC is the ability to:</p> <ul style="list-style-type: none"> Carry out general electroplating of a complete watch according to working guidelines and safety regulations as well as the standards and requirement. |
| Remark | |