

Specification of Competency Standards for the Watch & Clock Industry

Unit of Competency

1. Title	Know about the Electroplating Technique for Parts of a Complete Watch
2. Code	WCZZHM302A
3. Level	3
4. Credit	9
5. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>5.1 Understand the electroplating method</p> <ul style="list-style-type: none"> ◆ Understand electroplating as one of the commonly used treatments for dials: <ul style="list-style-type: none"> • Electroplating • Organic spray • Chemical plating ◆ Know about the objectives of dial treatment for Timepiece products ◆ Master the important points and conditions of electroplating ◆ Master the treatment procedure and control before electroplating: <ul style="list-style-type: none"> • Polishing, grinding • Different cleaning and grease-releasing materials ◆ Know about the basic procedure of electroplating ◆ Understand the different electroplating procedures for different metals <p>5.2 Ensure the electroplating standard and requirements</p> <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

	<ul style="list-style-type: none"> ◆ Know about the features of silver-plating ◆ Know about the features of rhodium-plating ◆ Know about the important points to note for the process of rhodium-plating ◆ Know about 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 ◆ Briefly understand the EEC nickel prohibition ordinance and its effect on Timepiece electroplating
5.3 Master the testing methods and scopes	<ul style="list-style-type: none"> ◆ Know about the testing methods in relation to the EEC nickel prohibition ordinance ◆ Master the inspection and testing for electroplated layers
5.4 Electroplating equipment	<ul style="list-style-type: none"> ◆ Master the facilities for electroplating process
5.5 Improve the effect of electroplating	<ul style="list-style-type: none"> ◆ Know about the advanced technology for treating metal dials ◆ Master how to control electroplating equipment, materials, solutions and other elements of electroplating methods ◆ Know about the significance of environmental protection during the process of electroplating
5.6 Electroplate	<ul style="list-style-type: none"> ◆ Capable of carrying out general electroplating of a Complete Watch according to the guidelines and safety regulations

6. Range	In Timepiece factories, capable of understanding the standard and method of electroplating a Complete Watch, and carrying out general electroplating of Complete Watches according to the guidelines and safety regulations.
7. Assessment Criteria	The integrated outcome requirements of this unit of competency are: (i) capable of carrying out general electroplating of a Complete Watch in conformity to the standards and requirements according to the guidelines and safety regulations.
8. Remarks	The credit value of this unit of competency is set on the presumption that the learners already have basic knowledge about workshops.