

# Specification of Competency Standards of the Watch & Clock Industry

## Unit of Competency

### Functional Area: Aftersales Repair

Title	Master Basic Hand-wound Mechanical Movements and the Repair Techniques for them
Code	104936L4
Range	This unit of competency (UoC) is applicable in general repair shops and aftersales repair stations for timepieces. It covers the abilities to Master the oil cleaning techniques for mechanical movements and carry out the repair of mechanical movements independently.
Level	4
Credit	9 (for reference only)
Competency	<p>Performance Requirements</p> <ol style="list-style-type: none"> <li>Possess the knowledge of mechanical movement repair <ul style="list-style-type: none"> <li>Understand the structure and functions of mechanical movements <ul style="list-style-type: none"> <li>Understand the structure of basic hand-wound mechanical movements</li> <li>Understand the functions, distribution and operation principle of individual systems and their quality standards</li> <li>Understand the criteria of quality control for basic hand-wound mechanical movements</li> </ul> </li> <li>Master the hand tools and equipment necessary for oil cleaning and repairing of ordinary mechanical movements</li> <li>Know the important notes and key points in using different oil cleaning machines for basic and multi-function mechanical movements</li> <li>Know other practicable oiling alternatives and important notes when oil cleaning machines are not available</li> <li>Understand the key points in using special lubricant for basic and multi-function mechanical movements:</li> <li>Right place to apply lubricant</li> <li>Appropriate measurement of lubricant to be applied</li> <li>Appropriate lubricants to be selected for individual systems</li> <li>Know about the application of professional mechanical movement testing instruments to carry out quality inspection after oil cleaning <ul style="list-style-type: none"> <li>Accuracy test</li> <li>Oscillation amplitude inspection</li> <li>Beat inspection</li> <li>Appearance test of a Complete Watch</li> <li>Multi-function performance test</li> </ul> </li> </ul> </li> <li>Repair mechanical movements <ul style="list-style-type: none"> <li>Oil and test mechanical movements <ul style="list-style-type: none"> <li>Correctly clean and oil mechanical movements</li> <li>Carry out quality inspection after oil cleaning using professional mechanical movement testing instruments</li> </ul> </li> </ul> </li> <li>Exhibit professionalism <ul style="list-style-type: none"> <li>Deliver aftersales service for timepieces according to the Occupational Safety and Health Ordinance and the code of practice for safety at work</li> </ul> </li> </ol>
Assessment Criteria	<p>The integrated outcome requirements of this UoC are the abilities to:</p> <ul style="list-style-type: none"> <li>Master the oil cleaning techniques for mechanical movements, including assembling, cleaning and oiling; and</li> <li>Carry out quality inspection after oil cleaning using professional mechanical movement testing instruments.</li> </ul>
Remark	