

Specification of Competency Standards
for the Jewellery Industry
Unit of Competency

Functional Area - Technology Support

Title	Master the technological development of jewellery materials and production
Code	108973L4
Range	This unit of competency is applicable to practitioners working in the production department of jewellery manufacturing organizations. Practitioners should be capable of making careful analysis and judgments. They should be able to master the relation between the use of jewellery materials and production technology. They should also be able to select and apply appropriate technology to jewellery product development and production after careful analysis.
Level	4
Credit	6
Competency	<p>Performance Requirements</p> <p>1. Know about the technology related to jewellery production</p> <ul style="list-style-type: none"> • Know about the channels to obtain, analyze and process technological information related to jewellery • Master the development trend of the jewellery market • Know about the materials, equipment and standards commonly used in jewellery production, such as: <ul style="list-style-type: none"> ○ Material properties ○ Surface treatment ○ Electroplating equipment ○ Safety standards of the finished products <p>2. Master the technological development of jewellery materials and production</p> <ul style="list-style-type: none"> • Select and apply appropriate technology in each product development process of jewellery according to the development trend of relevant technology, the conditions of the organization and customers' demands: <ul style="list-style-type: none"> ○ Introduce newly developed and improved materials to improve or develop new products <ul style="list-style-type: none"> ▪ Know about the quality and uses of the newly developed materials ▪ Test the reliability of the newly developed materials ○ Implement improved or newly developed production technology to improve product quality and enhance cost effectiveness ○ Select appropriate investigation and survey technology to obtain accurate market information, so as to understand user needs (including the psychological index which has gained weight in recent years) ○ Master the acceptance of the market on the jewellery or accessories made with the newly developed materials <ul style="list-style-type: none"> ▪ Appearance ▪ Health and safety (skin allergies/irritation) ▪ Stability ○ Master the supplementary technology of product research and development ○ Introduce appropriate supplementary technology according to the needs of the organization, such as computer-aided design, analysis and tests, to shorten the product development cycle and improve product quality <p>3. Professionalism</p> <ul style="list-style-type: none"> • Ensure the jewellery materials/finished products/technologies developed meet international safety standards

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	<ul style="list-style-type: none">• Avoid plagiarism when developing products to prevent individuals and the organization from falling into the trap of infringement of intellectual property rights
Assessment Criteria	The integrated outcome requirement of this unit of competency is: <ul style="list-style-type: none">• Able to master the technological development relevant to product development of jewellery, and select new technology to meet organizational development after careful analysis, so as to enhance the effectiveness in performing the duty of jewellery product development and manufacturing.
Remark	