

Specification of Competency Standards
for the Jewellery Industry
Unit of Competency

Functional Area - Production □

Title	Apply the techniques of faceting/polishing diamonds
Code	108953L3
Range	This unit of competency is applicable to practitioners working in the diamond faceting/polishing department of jewellery manufacturing organizations. Practitioners should be capable of making judgments and understanding the characteristics of diamonds and rough diamonds. They should also master the operation of diamond faceting/polishing tools and equipment to facet and polish diamond materials after careful analysis and assessment, so as to achieve the highest brilliancy by obtaining the best cutting angles/proportion and perfect facets.
Level	3
Credit	6
Competency	Performance Requirements 1. Understand the principles of diamond faceting/polishing • Understand diamond cuts and respective requirements ○ Single-facet cuts ▪ Point cut ▪ Table cut ○ Round brilliant cut ○ Fancy cuts ▪ Oval cut ▪ Marquise cut ▪ Pear cut ▪ Heart cut ▪ Princess cut ▪ Radiant cut ▪ Emerald cut ▪ Cushion cut ○ Modern diamond cuts ▪ Flower cuts ▪ Fire-Rose cut ▪ Sunflower cut ▪ Marigold cut ▪ Zinnia cut ▪ Dahlia cut ▪ Flanders cut ▪ Lily cut ▪ Lucky star cut ▪ Cupid cut (Hearts & Arrows) • Understand the angles and proportion of diamond facets • Consider the characteristics of rough diamonds to design their cuts ○ Cut ○ Cleavage ○ Colour ○ Carat (the unit of weight for diamonds) • Know about the new technical knowledge related to diamond faceting/polishing 2. Master and apply diamond faceting/polishing techniques • Master diamond faceting/polishing procedures and techniques ○ Designing rough stones

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	▪ Designing diamonds with perfect crystals ▪ Designing diamonds with distorted crystals ▪ Designing diamonds with inclusion ▪ Designing diamonds with uneven colours ○ Marking ▪ Inspecting rough diamond ▪ Marking lines ○ Cutting rough stones ▪ Cleaving ▪ Sawing ▪ Laser cutting ○ Grinding ○ Sanding ○ Polishing • Master diamond facet trimming/repairing techniques 3. Professionalism • Following the requirements of the organization, code of practice and safety guidelines, facet/polish diamonds with the proper and safe use of various relevant tools and equipment with a professional attitude
Assessment Criteria	The integrated outcome requirements of this unit of competency are: • Able to master the characteristics of rough diamonds and apply faceting/polishing techniques to perform perfect faceting and polishing on diamond materials so as to strengthen the internal reflection and refraction of the diamonds to meet the standards of the cut specifications; and • Consider the requirements on quality, colour, cleavage and optical properties of the stones when performing diamond faceting/polishing, so as to achieve the highest brilliancy by obtaining the best cutting angles/proportion and perfect facets.
Remark	This unit of competency is written with reference to the 21st Century Higher Education Jewelry Professional Planning Material "Gem Processing Techniques" (21世紀高等教育珠寶首飾類專業規劃教材《寶石加工工藝學》) by China University of Geosciences Press Co. Ltd.