

J4.4 Form jewellery components using advanced techniques SQA Unit Code H9TJ 04

Unit Summary

This unit covers the skills and knowledge required to design and form more complex jewellery components, using advanced jewellery techniques. You will need knowledge of planning, organizing and know how to communicate your design ideas to others. You will be required to communicate your instructions and to use a range of hand and machine techniques appropriate to the type of material being used. You will be expected to take personal responsibility for your own actions and for the quality and accuracy of the work you carried out. You need to be able to recognise any defects, to determine the appropriate action to rectify them and to ensure that the finished work meets the required standard.

Performance Indicators

You will be able to:

- a) Produce jewellery components using a wide range of **advanced techniques**
- b) Check that the completed components are dimensionally accurate, correctly formed and are free from excessive tooling, stretching and blemishes
- c) Dry assemble the components to confirm the components fitting to the correct tolerance before final fixing

Knowledge and Understanding

You will know and understand:

- 1) The specific safety precaution to be taken when using hand and machine tools
- 2) Methods to illustrate and communicate ideas for jewellery design
- 3) The methods used to calculate dimensional information for producing components
- 4) Methods of creating complex three-dimensional jewellery forms
- 5) The combination of techniques, processes and knowledge of general gemology to provide secure settings in jewellery designs
- 6) How to identify the physical and working properties of materials associated with jewellery and how to utilize them
- 7) How to select the correct tools, materials and processes suitable for making jigs or aids to creating complex components
- 8) How to apply and use additional forming techniques to fabricate complex jewellery
- 9) CNC, laser and advanced technologies available in the production of jewellery
- 10) How to check finished work pieces for dimensional accuracy to the required specifications.

Range

You are required to:

- A Produce a range of jewellery that involves all of the following **advanced techniques**:
 - (i) Make custom tools/jigs
 - (ii) Formers, swages mandrels
 - (iii) Drawing metal
 - (iv) Multi part items
 - (v) Hand piercing
 - (vi) Plier work