

## **J4.17 Set gemstones using advanced setting techniques SQA Unit Code H9TW 04**

### **Unit Summary**

This unit covers the skills and knowledge required to use different styles of setting to secure various cuts of gemstones, including the use of advanced techniques. In producing gem set products, you will be required to work to instructions, and to use a range of hand tools and techniques, appropriate to the type of material being used and the style. You will be expected to take personal responsibility for your own actions and for the quality and accuracy of the work that you carry out

### **Performance Indicators**

You will be able to:

- a) Demonstrate that you can gem set in a range of different **styles**
- b) Set work made in a range of **materials**
- c) Set work using advanced **methods**
- d) Check the stones in the setting are level and adjusted for height.
- e) Check the setting is clean, the tables are level and stones are secure

### **Knowledge and Understanding**

You will know and understand:

- 1) The specific hazards with particular equipment
- 2) How to make, harden, temper and sharpen tools
- 3) How to lay out and cut a variety of styles
- 4) Advanced setting techniques
- 5) Basic gemology
- 6) How to avoid breakage of gemstones
- 7) The use of holding devices
- 8) The range of setting tools and their different uses
- 9) The other processes of jewellery manufacture
- 10) The use of the carborundum stick and grinding tools
- 11) How to identify faults; what kinds of difficulties the specification might present, and the appropriate actions to rectify these
- 12) The sequence of cleaning up
- 13) Where to find information on new and emerging technology and how it could be used in the context of your work

## Range

### You are required to:

- A. Set gemstones in all of the following **styles**:
  - (i) Pave setting with mixed stones
  - (ii) Cailbre and channel setting
  - (iii) A range of claw settings
  - (iv) Illusion/.invisible setting
  - (v) Gypsy setting with assorted shapes of stones
  - (vi) Pave and thread settings with graduating stones
  - (vii) Set a variety of shapes of diamonds and semi precious stones.
  
- B. Set work in all of the following **materials**:
  - (i) Silver
  - (ii) Gold
  - (iii) Platinum
  - (iv) Palladium
  
- C. Use at least one of the following **methods** to set gemstones:
  - (i) Scorper/graver
  - (ii) Air gravers
  - (ii) Stereo-microscopes