

J4.15 Produce enamelled surfaces using advanced techniques SQA Unit Code H9TT 04

Unit Summary

This unit covers the skills and knowledge required to use different styles of enamelling to produce a decorative surface, including the use of advanced techniques. In producing enamelled products, you will be required to work to instructions and to use a range of hand and machine tools. You will be expected to take personal responsibility for the quality and accuracy of the enamelling and the specifications required. You will need to be able to recognise any defects, determine the appropriate action to rectify them and to ensure that the finished work is completed to the given specification which may include timescales.

Performance Indicators

You will be able to:

- a) Demonstrate that you can carry out a wide range of **advanced enamelling**
- b) Enamel on a range of **metals**
- c) Enamel to a range of complex designs
- d) Enamel covering a range of **advanced techniques**
- e) Check that the completed enamelling is dimensionally accurate, proportionally correct and meets the specification
- f) Identify faults and take the appropriate actions to rectify them
- g) Produce multiples of a given design using casting, photo etching, and die stamping techniques

Knowledge and Understanding

You will know and understand:

- 1) The methods to illustrate and communicate ideas for enamelling designs
- 2) The relevant enamelling requirements to the given design
- 3) The correct fabrication process for the given design
- 4) The specific hazards associated with enamelling procedure
- 5) How to make, harden, temper and sharpen tools for cutting and carving techniques
- 6) Advanced etching techniques
- 7) Finishing process for both enamel and metal
- 8) How to produce multiples of a given design using a wide range of techniques
- 9) How to identify faults; what kinds of difficulties the specification might present, and the appropriate actions to rectify them

Range

You are required to:

- A. Carry out **advanced enamelling** on all of the following:
 - (i) Three dimensional shapes
 - (ii) Convex surfaces
 - (iii) Concave surfaces
 - (iv) Castings, die stampings, and photo etched surfaces
 - (v) Repair and Restoration

B. Enamel both of the following **metals**:

- (i) Silver
- (ii) Gold

C. Carry out the preparation and procedure for enamelling using all of following **techniques**:

- (i) Cloisonné
- (ii) Champlevé
- (iii) Basse-taille
- (iv) Plique-à-jour
- (v) Use of foils