

J3.7 Produce rubber moulds for lost wax casting SQA Unit Code H9VF 04

Unit Summary

This unit covers the skills and knowledge required to produce rubber moulds for lost wax castings. You will be expected to check the quality of your work. You will need to report any defects, to seek guidance on defects, seek advice on the appropriate action to rectify them, and to ensure that the finished work meets the required standard. Whilst taking part in these activities, you will need to report any difficulties or problems that arise, and to carry out any subsequently agreed actions.

Performance Indicators

You will be able to:

- a) Prepare both mould frames and sprue formers
- b) Inspect all master patterns for surface defects, and ensure that they have sufficient material to allow for shrinkage
- c) Follow the correct techniques and procedures for producing and cutting vulcanized moulds
- d) Produce wax components
- e) Remove master patterns without damage
- f) Check the completed moulds, rectifying any faults, and visually examining work to ascertain that it meets the standard required

Knowledge and Understanding

You will know and understand:

- 1) The specific safety practices and procedures to be observed when handling sharp instruments and chemicals, including safe transport and storage
- 2) The specific materials to be used, quantities and mixing ratios to be applied, working life of materials and mixes
- 3) The importance of preparing the master patterns and equipment before starting mould work, and what preparations are required
- 4) The methods and techniques of mould making
- 5) The wax burn out process
- 6) The methods and techniques for the removal of master patterns
- 7) How to check that finished moulds meet the standard required

Range

You are required to:

- A. **Produce wax components** using both of the following curing mould processes:
 - (i) Hot
 - (ii) Cold