
Overview

This standard identifies the competencies you need to apply surface finishes to engineering woodwork assemblies or installations, by hand methods, in accordance with approved procedures. You will be required to select the appropriate equipment to use, based on the materials to be applied and the surface area to be covered. You will be expected to use the specified or appropriate techniques to seal, prime, colour, varnish, stain, wax or polish the various parts, using brushes, rollers, pads or cloths, as appropriate to the task.

Your responsibilities will require you to comply with organisational policy and procedures for the finishing activities undertaken, and to report any problems with the finishing activities, components or equipment that you cannot personally resolve, or are outside your permitted authority, to the relevant people. You will be expected to work with minimum supervision, taking personal responsibility for your own actions and for the quality and accuracy of the work that you carry out.

Your underpinning knowledge will provide a good understanding of your work, and will provide an informed approach to applying hand-finishing techniques and procedures to woodwork assemblies or installations. You will understand the finishing procedures used, and their application, and will know about the finishing techniques, paints or coatings and equipment used, in adequate depth to provide a sound basis for carrying out the activities, correcting faults and ensuring the work is carried out to the required quality.

You will understand the safety precautions required when carrying out the finishing operations. You will be required to demonstrate safe working practices throughout, and will understand the responsibility you owe to yourself and others in the workplace.

Performance criteria

You must be able to:

1. work safely at all times, complying with health and safety and other relevant regulations, directives and guidelines
2. ensure the material surfaces to be treated are suitably prepared for the finishing operations to be carried out
3. check that the finishing equipment and treatment solutions are prepared and maintained at satisfactory operating conditions and levels
4. apply surface finishes in accordance with operating procedures and the component specification requirements
5. ensure that the treated workpiece achieves the required characteristics and meets the finishing specification
6. complete relevant data and documentation
7. deal promptly and effectively with problems within your control and report those that cannot be solved
8. dispose of waste and excess materials in line with agreed organisational procedures

Knowledge and understanding

You need to know and understand:

1. the specific safety precautions to be taken whilst carrying out the application of paint and other surface finishes (such as any specific legislation, regulations or codes of practice relating to the activities, equipment or materials)
2. the health and safety requirements of the work area in which you are carrying out the finishing activity, and the responsibility they place on you
3. the hazards associated with carrying out hand painting and finishing activities, and with the materials and equipment used, and how they can be minimised
4. the personal protective equipment and clothing (PPE) to be worn during the finishing activity
5. the various types of specification that are used during the finishing activity
6. the range of surface finishes that can be applied, and the types of surfaces for which they are best suited
7. the preparation methods and techniques that need to be undertaken prior to finishing for filling, and flattening
8. the surface treatment methods and techniques that need to be undertaken prior to finishing
9. how to determine the quantities of finishing materials required and, where applicable, mixing ratios
10. the preparation methods and techniques for mixing paints, varnishes, lacquers, stains and polishes
11. the various methods of applying the required finishes using brushes, rollers, paint pads and cloths
12. the procedures for the transportation and storage of finishing materials
13. the equipment care and control procedures. such as fume extraction systems
14. cleaning and maintenance procedures for brushes and rollers
15. the procedures for dealing with waste materials
16. recognition of defects such as bubbles, contamination, runs and other surface defects
17. the problems that can occur with the finishing operations, and how these can be overcome

18. the extent of your own responsibility and whom you should report to if you have problems that you cannot resolve

Scope/range related to performance criteria

1. Carry out all the following activities during the finishing process:

- 1.1 obtain and follow the relevant job instructions and finishing specifications
- 1.2 comply with relevant COSHH requirements and risk assessments
- 1.3 prepare the tools and materials in readiness for the finishing operations
- 1.4 wear appropriate protective clothing and breathing apparatus
- 1.5 clean all tools and equipment on completion of the finishing activities
- 1.6 leave the work area in a safe and clean condition

2. Apply finishes to four of the following:

- 2.1 doors and frames
- 2.2 storage units
- 2.3 furniture
- 2.4 transportation units
- 2.5 display units/stands
- 2.6 jigs and fixtures
- 2.7 structures
- 2.8 partitioning
- 2.9 cases
- 2.10 formers
- 2.11 portable screening
- 2.12 other specific items

3. Prepare for the finishing operations by carrying out six of the following activities:

- 3.1 cleaning
- 3.2 filling
- 3.3 mixing of colour
- 3.4 stripping old finishes
- 3.5 flattening down
- 3.6 masking
- 3.7 mixing of primers
- 3.8 re-activating treatments
- 3.9 sealing
- 3.10 pre-surface treatments
- 3.11 other specific activity

4. Apply six types of the following finishing materials, using appropriate hand tools and techniques:

- 4.1 sanding sealer
- 4.2 polyurethane varnish
- 4.3 French polish
- 4.4 water-based paints
- 4.5 lacquer
- 4.6 temporary protective coatings
- 4.7 oil/alkyd based paints

4.8 stain

4.9 wax

4.10 synthetic paints

4.11 other special finishes

5. Apply finishes to a range of surfaces, to include all of the following:

5.1 flat

5.2 horizontal

5.3 vertical

5.4 overhead

5.5 curved or cylindrical

6. Use three of the following consumables:

6.1 masking medium and tape

6.2 rubbing paper

6.3 abrasive pads

6.4 cleaning materials

6.5 other specific consumables

7. Apply finishes which comply with all of the following quality and accuracy standards:

7.1 has the required surface coating in line with specification or job requirements

7.2 acceptable colour match and gloss levels

7.3 free from runs, drips or other surface defects

7.4 meets customer/company requirements

8. Complete the relevant data/documentation from one of the following, and pass it to the appropriate person:

8.1 job cards

8.2 production records

8.3 company specific documentation/computerised system

Behaviours

You will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as:

- strong work ethic
- positive attitude
- team player
- dependability
- responsibility
- honesty
- integrity
- motivation
- commitment

SEMPAT309

Applying surface finishes to woodwork components and structures



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