

Veneering and finishing vehicle components

Overview

This standard identifies the competences you need to veneer and finish vehicle hard trim components, in accordance with approved procedures. You will be required to select and match veneers, and to bond them to substrates and/or ply sandwich. You will also be expected to finish components by using a variety of finishing methods and techniques, and to check that they have been completed to the level of accuracy and quality required by the specification.

Your responsibilities will require you to comply with organisational policy and procedures for the assembly activities undertaken, and to report any problems with the process that you cannot resolve, or that are outside your permitted authority, to the relevant people. You will be expected to work with a minimum of 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 procedures appropriate to the manufacture, assembly and finishing of veneers to hard trim components. You will understand the manufacturing methods and techniques used, and their application. You will also know about the ancillary equipment, and the properties and workability of materials and consumables, in adequate depth to provide a sound basis for carrying out the activities to the required specification.

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

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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. follow the relevant instructions, assembly drawings and any other specifications
3. ensure that the specified components are available and that they are in a usable condition
4. assemble the components in their correct positions using appropriate methods and techniques
5. produce veneered vehicle hard trim components
6. secure the components using the specified connectors and securing devices
7. check the completed assembly to ensure that all operations have been completed and the finished assembly meets the required specification
8. deal promptly and effectively with problems within your control and report those that cannot be solved
9. ensure that work records are completed, stored securely and available to others as per organisational requirements
10. leave the work area in a safe condition on completion of the activities, as per organisational and legal requirements

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Knowledge and understanding

You need to know and understand:

1. the specific safety precautions to be taken whilst carrying out the activities (including any specific legislation, regulations or codes of practice relating to the activities, equipment or materials)
2. the health and safety requirements of the area in which you are carrying activities
3. the personal protective equipment (PPE) and clothing to be worn during the activities
4. the hazards associated with the activities (such as using adhesives, hot glues, pinch points, cutters), and how to minimise them and reduce any risks
5. the procedure for obtaining the required drawings, job instructions and other related specifications, and how to interpret them correctly
6. the consumables, tools and equipment that are used for veneering components; how to check that the tools and equipment are set for correct operation
7. component preparation prior to assembly and the importance of ensuring that surfaces are free from dirt, defects or foreign bodies
8. how to identify the materials that are to be used and their orientation within the assembly
9. how to identify faults in the materials that could affect finish and quality, and the procedure to be adopted to overcome such faults
10. the assembly methods and techniques for adhesives; pressure and time requirements to make a correct bond
11. the order in which the parts are to be assembled and the importance of complying with this procedure
12. the procedure to be adopted for the safe disposal of waste materials of all kinds
13. the procedure to check that the veneered assemblies have been finished to meet the specification and quality control procedures
14. the correct use of lifting and handling devices, and the procedure for the safe handling of components and equipment
15. how to check that tools and equipment are free from damage or defects, and are in a safe and usable condition
16. the correct and safe methods of cleaning and storing equipment used in the adhesive process
17. the problems that can occur with producing veneered components and how these can be overcome
18. the extent of your own responsibility and to whom you should report if you have problems that you cannot resolve
19. how to access, use and maintain information to comply with organisational requirements and legislation

Scope/range related to performance criteria

1. Carry out all of the following during the veneering activities:
 1. obtain and use the appropriate documentation (such as job instructions, assembly drawings, quality control documentation)
 2. adhere to procedures or systems in place for risk assessment, hazardous substances, personal protective equipment and other relevant safety regulations and procedures to realise a safe system of work
 3. check that all cables, extension leads or air supply hoses are in a safe, tested and serviceable condition
 4. check that all tools and equipment to be used are within current calibration/certification dates
 5. ensure that assemblies and components used are free from damage, foreign objects, dirt or other contamination before veneering them
 6. use safe and approved techniques to produce veneered and finished components
 7. return all tools and equipment to the correct location on completion of the veneering activities
 8. leave the work area in a safe and appropriate condition on completion of the activities
2. Produce veneered vehicle hard trim components, to include both of the following:
 1. bonded construction to substrate
 2. bonded construction to ply sandwich
3. Use a variety of manufacturing methods and techniques to produce all of the following:
 1. mirror match
 2. inlays
 3. cross banding
 4. compound angular surface
4. Assemble a veneer panel and bond to base component, using two of the following adhesives:
 1. hot glues
 2. cold adhesives
 3. adhesive tapes

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5. Assemble a veneer panel and bond to base component, using two of the following assembly aids:
 1. templates
 2. presses
 3. jigs and fixtures
 4. cutters
6. Finish the veneered component using two of the following:
 1. wood fillers
 2. power sanders
 3. hand finishing using appropriate grades of finishing paper
 4. stains
 5. flat bed finishers
7. Produce three of the following hard trim components:
 1. seat tables/frames
 2. component covers/doors
 3. waist rails
 4. arm rests
 5. component surrounds
 6. dash panel fascias
 7. consoles
 8. door finisher
8. Check veneered components comply with all of the following quality and accuracy standards:
 1. the veneered component is complete
 2. the assembly is free from damage, cuts and rub-through
 3. surplus material has been removed and components are clean
 4. all finish quality control checks have been carried out and the required standards achieved

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