



Australian Government

MSFGG3006 Process glass by automatic machines

Release: 1

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Modification History

Release 1 - New unit of competency

Application

This unit of competency covers cutting, drilling, shaping and edging glass by automatic glass processing equipment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Competency Field

Unit Sector

Glass and Glazing

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Identify work requirements

- 1.1 Work requirements, including glass, types of cuts, shapes and edges, processes and quantities required, are identified from work instructions or job order in accordance with workplace procedures
- 1.2 Work health and safety (WHS) requirements, including personal protective equipment, are observed throughout the work
- 1.3 Tools, equipment and materials are selected and checked prior to use to ensure they are appropriate for the work, of the appropriate quality, serviceable and in a safe condition
- 1.4 Cutting list and quality standards are determined and procedures identified in accordance with workplace requirements and industry standards

- 1.5 Glass to be cut, shaped, drilled or edged is selected using information from the work order, including the type of glass, thickness, colour and dimensions
 - 1.6 Automatic, including computer numerically controlled (CNC) machines, related equipment and settings required to perform the work are identified, and information required to be entered into machine to match work requirements or job order is calculated
- 2 Prepare for work
 - 2.1 Technique and sequence of work is planned to ensure processing is conducted in a logical order
 - 2.2 Procedures for monitoring quality of materials, work in progress and finished items are identified in accordance with workplace requirements and industry practice
 - 2.3 Tools, equipment and attachments required for the work are assembled and checked for good working order
 - 2.4 Components and controls of machines, including emergency stops and guards, are identified and appropriate action taken if not in working order
 - 2.5 Information required by machine for required process is entered
 - 2.6 Work area is cleared of obstructions and potential hazards
 - 2.7 Glass to be processed is located in the work area using appropriate handling techniques
 - 2.8 Glass to be processed is checked for imperfections and damage
- 3 Conduct processing operations
 - 3.1 Tools, equipment and tables are operated and monitored in accordance with manufacturer instructions and workplace procedures to ensure correct product quality and output
 - 3.2 Glass is processed to required standard in accordance with job order, work instructions and procedures, including the performance of routine lubrication and adjustments of machines/equipment, if required
 - 3.3 Problems occurring during work operations are identified and reported to appropriate persons in accordance with enterprise procedures, and any authorised changes in working procedures followed

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| | 3.4 | Completed product is inspected for quality of work and repaired, reprocessed or discarded in accordance with workplace procedures |
| 4 | Complete work | |
| | 4.1 | Processed glass is labelled and stored following workplace procedures ensuring there are no projections |
| | 4.2 | Scraps and off-cuts are removed for disposal or recycling, as required |
| | 4.3 | Work area clean-up is completed following workplace procedures |
| | 4.4 | Equipment is cleaned and stored according to workplace requirements |
| | 4.5 | Tools, equipment and unused materials are removed and stored appropriately |
| | 4.6 | Workplace documentation is completed in accordance with workplace requirements |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency. Detail on appropriate performance levels for each furnishing unit of competency in reading, writing, oral communication and numeracy utilising the Australian Core Skills Framework (ACSF) are provided in the Furnishing Training Package Implementation Guide.

Range of Conditions

Specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Range is restricted to essential operating conditions and any other variables essential to the work environment.

Glass includes:	• annealed or laminated • float glass and coated glass • commercial windows and doors • architectural glazing • mirrors and furniture applications
Glass processing includes:	• cutting • shaping • drilling and edging
Tools and equipment include:	• flat felt covered cutting tables • gloves • safety glasses • marking pens • chinagraph pencils • templates and lubricants
Cutting includes:	• straight line cutting • shape cutting • circle and oval cutting
Edging includes:	• arrising • flat and mitre grinding • polishing and bevelling
Automatic machines include:	• computer-navigated and CNC: • straight line and shape annealed and laminated glass cutters • laser glass cutters • diamond saws • edgers • bevellers and brilliant cutter • water jet machines
Information requirements of CNC machines include:	• glass thickness • size • type • stock sheet size • off-cut sizes • print-out information or spreadsheets

Glass processing tables include:

- air flotation tables
- roller castor table or tilt table with air flotation or roller castors

Personal protective equipment includes:

- that prescribed under legislation, regulation and enterprise policies and practices:
 - gloves
 - gauntlets
 - safety glasses
 - footwear
 - aprons/overalls

Workplace procedures include:

- machine manufacturer specifications, operational and maintenance procedures
- workplace procedures relating to the setting and operation of computerised glass cutting, shaping, drilling and edging machines
- work instructions, including job sheets, cutting lists and plans
- safety standards, including personal protective equipment, WHS regulations and enterprise requirements
- AS/NZS 4667:2000 Quality requirements for cut-to-size and processed glass

Unit Mapping Information

LMFGG3005C Process glass by semi-automatic and automatic machines replaced by MSFGG3005 Process glass by semi-automatic machines and MSFGG3006 Process glass by automatic machines. Not equivalent.

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=0601ab95-583a-4e93-b2d4-cfb27b03ed73>