



Australian Government

MSFFF3011 Set up, operate and maintain mechanical coating systems

Release: 1

MSFFF3011 Set up, operate and maintain mechanical coating systems

Modification History

Release 1. Changes to code, application, elements, performance criteria, assessment requirements. Foundation skills added. Range of conditions removed. Assessment requirements changed.

Application

This unit describes the skills and knowledge required to set up, operate and maintain mechanical coating systems in order to apply coatings to specifications.

Furniture finishing workers with this competency follow established procedures, using discretion, judgement and problem-solving to identify and resolve potential issues. They recognise dependencies and use cooperative approaches to optimise workflow and productivity.

No licensing or certification requirements exist at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

Competency Field

Furniture finishing

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1.Prepare for task	1.1 Determine task requirements, including characteristics of surface and required surface coating, from work documentation 1.2 Plan work by identifying processing and application techniques, time and safety requirements and efficient work methods 1.3 Identify and follow work health and safety requirements 1.4 Identify tools, equipment and accessories to meet task requirements and check they are safe and functional 1.5 Identify and prepare coating materials required for the task
2. Check and prepare for spraying	2.1 Identify products with surface or other faults and report or repair faults in accordance with workplace procedures

Elements	Performance Criteria
	2.2 Protect other products and equipment in workplace from overspray in accordance with workplace procedures and safety standards 2.3 Perform trial applications of surface materials to check equipment operation, materials consistency and specified surface finish 2.4 Identify and rectify or report machine faults in accordance with workplace procedures 2.5 Identify material faults and rectify in accordance with workplace procedures
3. Apply surface coating	3.1 Ensure surfaces are kept free of contamination 3.2 Apply required surface coatings in accordance with job requirements and workplace procedures 3.3 Monitor surface coating viscosity and coverage and check against workplace requirements for even spread and thickness 3.4 Perform required rectification of surface faults in accordance with workplace procedures 3.5 Inspect products to assess suitability for further processing 3.6 Rectify or report defects in accordance with workplace procedures
4 Clean work area and maintain equipment	4.1 Check, clean and store equipment and unused materials in accordance with equipment instructions and workplace procedures 4.2 Tag unserviceable equipment, identify faults and inform appropriate personnel in accordance with workplace procedures 4.3 Clean work area, safely dispose of waste and identify items for recycling in accordance with workplace procedures and environmental standards 4.4 Complete required workplace records

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

- Reading skills to interpret familiar workplace procedures and work documentation
- Writing skills to communicate information in familiar workplace documents

- Numeracy skills to take accurate measurements, calculate area and estimate material requirements.

Other foundation skills essential to performance are explicit in the performance criteria of this unit.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSFFF3002 Set up, operate and maintain mechanical coatings systems.

Links

Companion Volume implementation guides are found in VETNet –

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0601ab95-583a-4e93-b2d4-cfb27b03ed73>

Assessment Requirements for MSFFF3011 Set up, operate and maintain mechanical coating systems

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Performance Evidence

There must be evidence the candidate has completed all the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- select and apply surface coatings, including the adjustment of spray equipment, to achieve required coating using a minimum of 2 of the following mechanical systems:
 - curtain coating
 - UV coating
 - tumbling
 - dipping
 - electrostatic powder coating
 - automatic (robotic) spray equipment.
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Knowledge Evidence

There must be evidence the candidate has knowledge of:

- mechanical spray system equipment and processes
- characteristics of coatings and base materials, including:
 - toxicity
 - reactivity
 - flammability
 - required viscosity
 - recoatability
- effects of fumes and heat and other radiation on surface coatings
- methods to prevent contamination of surfaces during and after surface coating
- workflow for spraying operations
- typical tools and equipment required when setting up, operating and maintaining mechanical coating systems, including:
 - computerised spray system
 - electrostatic spray gun
 - baking oven
 - barrel tumbler

- spray booth
- liquid containers
- air compressor and hoses
- screwdrivers
- shifting spanner and spanners
- ford cup
- typical materials used when setting up, operating and maintaining mechanical coating systems, including:
 - stains
 - lacquers
 - wax
 - oil
 - two-pack polyurethane
 - three-pack polyester
 - enamels
 - acrylics
- sources of workplace documentation, including:
 - workplace procedures relating to the use of tools and equipment
 - work instructions
 - workplace procedures relating to reporting and communication
 - manufacturer specifications and operational procedures
- work health and safety requirements, including personal protective equipment (PPE).
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Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - work orders
 - mechanical spray systems and equipment, spray booth, coatings and cleaning products required for performance evidence
 - PPE
 - items to be sprayed
 - workplace procedures, manufacturing specifications, codes, standards, manuals, and reference materials.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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