



Australian Government

**MSFFDM5009 Generate and transfer
complex computer-aided drawings and
specifications**

Release: 1

MSFFDM5009 Generate and transfer complex computer-aided drawings and specifications

Modification History

Release 1. Unit Code and Application changed. Elements and Performance Criteria simplified and changed to active voice. Range of Conditions removed with relevant information moved to assessment requirements. Assessment Requirements changed. Supersedes and is equivalent to MSFDN5001 Generate and transfer complex computer-aided drawings and specifications.

Application

This unit describes the skills and knowledge required to prepare complex drawings using computer-aided techniques and capabilities, including three-dimensional (3D) modelling, exploded assembly drawings and conversion of drawings for computer numerically controlled (CNC) applications.

This unit applies to individuals working in design and manufacturing roles who produce and manage complex computer-aided drawings and specifications, either alone or as part of an internal or external team.

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 design and manufacturing – general

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. Create exploded assembly drawings	<ul style="list-style-type: none">1.1 Obtain and complete drawing preparations, including applying expected features of drawing1.2 Prepare accurate 3D models for all components1.3 Create and confirm perspective view of model1.4 Explode model so that all components are visible1.5 Label all individual components in accordance with workplace requirements1.6 Complete quality checks to ensure accuracy of outcomes1.7 Store drawings in accordance with workplace requirements

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
2. Create job sheets	2.1 Identify and complete preparations in accordance with workplace requirements 2.2 Set up job sheet template in accordance with workplace requirements and practices 2.3 Create and accurately dimension necessary orthographic views 2.4 Identify and accurately list sequencing of machine operations, safety and operator requirements 2.5 Prepare, review and test draft job sheets and amend to workplace requirements 2.6 Store job sheets in accordance with workplace requirements
3. Convert drawings for CNC applications	3.1 Identify and confirm conversion requirements from CNC machine specifications 3.2 Create layers and additional information required for final conversion 3.3 Assign drawing entities to relevant layers 3.4 Complete conversion to required file type 3.5 Store converted file in accordance with workplace requirements

Foundation Skills

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

- Numeracy skills to interpret technical information and perform calculations and measurements.

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

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSFDN5001 Generate and transfer complex computer-aided drawings and specifications.

Links

Companion Volume implementation guides are found in VETNet -

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

