



Australian Government

MSFFDT5006 Design a furniture product using high volume technology services (HVTs) in production

Release: 1

MSFFDT5006 Design a furniture product using high volume technology services (HVT S) in production

Modification History

Release 1 - New unit of competency

Application

This unit of competency covers identifying qualities of high volume technology production and designing a furniture product which utilises this technology to produce details and components for the design. It applies to a custom furniture business and/or design support environment.

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

Pre-requisite Unit

Competency Field

Unit Sector

Furniture design and technology

Elements and Performance Criteria

Elements describe the essential outcomes.

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

- | | | | |
|---|--|-----|---|
| 1 | Identify and analyse qualities and properties of HVT S | 1.1 | Applicable work health and safety (WHS), legislative and enterprise requirements relevant to the design of furniture product using HVT S are verified and complied with |
| | | 1.2 | Details of types of HVT S production methods are identified and documented |
| | | 1.3 | Details of qualities and properties of HVT S are analysed and reviewed for suitability for furniture products |
| | | 1.4 | Features of HVT S production methods are identified |
| | | 1.5 | Resource and equipment implications for HVT S production methods are assessed |

- | | | | |
|---|--|-----|--|
| 2 | Research product needs | 2.1 | All external parameters affecting the design of the furniture product are obtained from the client or from information sources |
| | | 2.2 | Client needs for product are obtained and recorded |
| | | 2.3 | Inspirational information is collected from relevant sources |
| | | 2.4 | Visual needs of the product are identified and documented |
| | | 2.5 | Ethical considerations are obtained, reviewed and documented |
| | | 2.6 | Product needs are prioritised and recorded in accordance with enterprise practice |
| 3 | Prepare the design brief | 3.1 | Product needs and external parameters and factors are reviewed and clarified with the client |
| | | 3.2 | Report on product needs is produced, including HVT'S opportunities |
| | | 3.3 | Feedback from the client is recorded |
| | | 3.4 | Details of changes are negotiated with client and recorded |
| | | 3.5 | Outcomes of design process are clarified and agreed to with client |
| | | 3.6 | Design brief is prepared and documented, including budget, timelines, production needs and methods |
| 4 | Generate ideas in response to design brief | 4.1 | All relevant information on product need and client needs are analysed and absorbed |
| | | 4.2 | Ideas are generated from information provided using lateral thinking methods |
| | | 4.3 | Ideas are visually presented |
| | | 4.4 | Ideas are matured through review and re-working |
| | | 4.5 | New ideas are generated from initial ideas |
| | | 4.6 | Final ideas are visually presented |
| 5 | Evaluate and | 5.1 | Each design idea is evaluated against design brief and |

	develop design proposals		requirements for HVT'S production
		5.2	Design proposals are scored against weighted assessment criteria and results recorded
		5.3	Feasible high scoring design proposals are selected for further development
		5.4	Design proposals are completed in response to evaluation feedback
6	Present product proposals to client	6.1	Product proposals are prepared for presentation to client
		6.2	Presentation arrangements are made, checked and confirmed
		6.3	Design proposals are presented to the client
		6.4	Client feedback is gained, analysed and confirmed
		6.5	Design proposals are completed with consideration to client feedback
7	Produce final product proposal information ready for making	7.1	Construction details are finalised and documented
		7.2	Visual aspects of product proposal are documented
		7.3	Part details are documented
		7.4	Manufacturing methods are documented
		7.5	Details are recorded in accordance with enterprise practice

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.

- Unit context includes:**
- WHS requirements, including legislation, building codes, material safety management systems, hazardous and dangerous goods codes, and local safe operating procedures or equivalent
 - work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements
 - work requires individuals to demonstrate conceptual and analytical ability, discretion, judgement and problem solving
 - customers or suppliers may be internal or external
- HVTS include:**
- laser cutting
 - machine point to point cutting
 - water jet cutting
 - plasma cutting
 - **stereolithography (SLA)** and computer numerically controlled (CNC) machining
- Inspirational information includes:**
- catalogues
 - brochures
 - magazines
 - existing products
 - reference books
 - other existing enterprise design information
 - transferable technological ideas or concepts
 - natural or man-made structures and objects
- Visual needs of the product include:**
- point
 - line
 - plane
 - volume
 - shape
 - form
 - tone
 - colour
 - surface
 - texture
 - scale
 - size
 - vertex
 - edge

- face
 - position
 - direction
 - space
 - balance
 - movement
 - proportion
 - rhythm
 - repetition
 - pattern
 - relief
 - mass
 - movement
 - social justice
 - environmental sustainability
 - biodiversity
 - cultural heritage
 - social responsibility of furniture makers
- Ethical considerations include:**
- Lateral thinking methods include:**
- suspending belief
 - looking for gaps of need alternatives
 - daydreaming
 - creative leaping
 - filaments
 - brainstorming
 - six thinking hats
 - asking questions of norms and beliefs
- Information and procedures include:**
- work procedures/instructions
 - manufacturer specifications and instructions
 - standard forms of workplace process and procedures
 - organisation work specifications and requirements
 - legislation, regulations and codes of practice
 - quality and Australian Standards and procedures

Unit Mapping Information

Supersedes and is equivalent to LMFFDT5008A Design a furniture product using high volume technology services (HVT S) in production

Links

Companion Volume implementation guides are found in VETNet -

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