MSTDE3002 Digitise artwork for computerised embroideries

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Modification History

Release 2. Supersedes and is equivalent to MSTDE3002 Digitise artwork for computerised embroideries (Release 1).

Pre-requisite unit, MSTGN2011 Identify fibres, fabrics and textiles used in the TCF industry, is **superseded by** MSTGN2013 Identify fibres, fabrics and textiles used in the TCF industry.

Release 1. Supersedes and is equivalent to LMTDE3002A Digitise artwork for computerised embroideries.

Application

This unit of competency covers the skills and knowledge required to apply fundamental digitising techniques to artwork for computerised embroidery production.

The unit of competency applies to a range of digitising techniques using industry standard software to convert artwork from images to production of embroideries to industry standard. It includes use of manual and automatic digitising techniques, documenting and storing images, and producing samples to confirm result meets artwork specifications.

Work involves liaison with specialist embroiderers and digitisers. Work may be conducted in a variety of environments, such as operational workplace activities, or home-based activities.

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

Pre-requisite Unit

MSTDE3001   Apply hooping and fabric handling techniques

MSTGN2013 Identify fibres, fabrics and textiles used in the TCF industry

Competency Field

Digitising and computerised embroidery

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the	Performance criteria describe the performance needed to

essential outcomes.

demonstrate achievement of the element.

1	**Determine job requirements**	1.1	Follow standard operating procedures (SOPs)
		1.2	Comply with work health and safety (WHS) requirements at all times
		1.3	Use appropriate personal protective equipment (PPE) in accordance with SOPs
		1.4	Identify job requirements from specifications, drawings, job sheets or work instructions
2	**Prepare to digitise artwork for computerised embroideries**	2.1	Use computer basic operations, installing and navigating software to source and import selected artwork
		2.2	Prepare materials and equipment for digitising according to design specifications
		2.3	Digitise shapes using manual techniques
		2.4	Apply automated digitising techniques
3	**Develop digitised artwork**	3.1	Select and apply a range of fill and outline stitch types, and save design to library
		3.2	Complete image to stitch conversion, adding complex fills to selected designs, and make colour selections
		3.3	Adjust embroidery designs and optimise embroidery stitch quality
		3.4	Finalise design to optimise productivity and quality
		3.5	Prepare for export and save to library
		3.6	Prepare designs for output to printer and machine
4	**Complete embroidery sample and finalise work**	4.1	Select fabric, stabiliser, toppings and backings, needles, thread and hoop types, and use according to the design production requirements
		4.2	Complete a range of embroidery pieces, according to specifications to test design specifications

4.3	Minimise and dispose of waste according to environmental guidelines and workplace procedures
4.4	Seek feedback and integrate into outcomes
4.5	Maintain records according to workplace procedures

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

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

Range of Conditions

This field allows for 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.

Workplace procedures include one or more of the following:	• requirements prescribed by legislation, awards, agreements and conditions of employment • SOPs • work instructions • oral, written and visual communication • quality practices, including responsibility for maintenance of own work quality and contribution to quality improvement of team or section output • housekeeping • tasks related to environmental protection, waste disposal, pollution control and recycling • WHS practices
Australian Standards include:	• the relevant industry or Australian Standards that are current at the time this unit is being undertaken
Software includes:	• any software classed as a digitising software (as opposed to customising or editing software)
Import selected work includes the	• opening software and exploring workspace functionality, elements and icons

following:	• setting defaults to machine requirements • determining image importation requirements • processing images as necessary in preparation for automated and semi-automated digitising techniques • recognising and selecting file types • importing image into working area
Prepare materials and equipment includes the following:	• selecting machine format and confirming capability to meet image requirements • selecting fabric type • selecting workspace/canvas and adjusting colour • identifying colour blocks and colour thread changes and adjusting • setting up thread palette • determining and planning optimum digitising sequence • manually adjusting stitching order and making colour changes to selected areas
Manual digitising techniques include one or more of the following:	• identifying and applying basic stitch types • creating free shapes with fixed angle stitching, with and without holes • creating free shapes with turning stitching, with and without holes • creating borders, runs and details
Automated digitising techniques include one or more of the following:	• converting file types and manipulating for application • converting design objects and shapes to embroidery and digitising using semi-automated and fully automated techniques
Fills and outlines include one or more of the following:	• modifying basic property options, including design size, to meet specific design requirements • selecting and altering fill stitch pattern properties (single and multiple areas) and direction • selecting and altering outline properties • creating a realistic computer representation (3-D view)

Adjust embroidery designs and optimise stitch quality includes one or more of the following:	- adjusting image inclusions and objects to support design effects - introducing machine hoop, for output sizing, and integrating into design - adjusting stitch densities and lengths and eliminating small stitches - optimising corner stitching and long satin stitches - minimising stitch bunching - stabilising fabric with automatic underlays - stitching design - assessing and adjusting pull compensation
Finalise design includes one or more of the following:	- assessing stitch sequence, stitch entry and exit points, and start/end of design and confirming optimal quality outcome - assessing and revising insertion and deletion of trim functions, where possible, to optimise productivity - assessing and revising colour sequencing, where possible, to optimise productivity - making adjustments to digitising specifications to ensure optimal quality outcome of embroidery
Output to printer and machine includes the following:	- creating template and worksheet, printing and checking to ensure design requirements are achieved - exporting completed design to the machine ready for stitching according to manufacturer specifications and save for later access - printing design reports
File types includes one or more of the following:	Bitmap: .jpeg .gif .tiff .bmp .png Vector: .wmf .emf .eps/.ps

	• .ai
	• .cdr

Optimum digitising sequence includes the following:	• minimising registration problems caused by fabric distortion • planning colour sequence

Unit Mapping Information

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Links

Companion Volume implementation guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a203ec5c-de7d-406b-b3e1-8f1a9b76e92e