



Australian Government

MSTAT4023 Interpret textile information and make production calculations

Release: 1

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Modification History

Release 1. Unit Code, Title and Application changed. Elements and Performance Criteria simplified with Elements 1 and 4 removed. Foundation Skills field populated. Range of Conditions removed with relevant information moved to Knowledge Evidence. Assessment Requirements clarified with generic foundation skills statements moved to appropriate section and duplication with Performance Criteria removed. Supersedes and is equivalent to MSTTX4001 Interpret and apply textile calculations and specifications.

Application

This unit describes the skills and knowledge required to interpret technical information about textiles and make calculations to ensure specified job requirements and standards of quality and design are met in production. Textiles may be natural or synthetic.

This unit applies to individuals working in textile design and production roles.

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

Pre-requisite Unit

Nil

Competency Field

Apparel and Textile Production

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. Interpret and use textile information	1.1 Identify documented specifications and required techniques for converting specifications across systems for textile production 1.2 Interpret technical specifications for yarn and fabric analysis 1.3 Interpret specifications to determine work requirements for textile operations 1.4 Use appropriate information resources to clarify specifications
2. Make textile	2.1 Determine calculations required for specific production process

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
calculations	2.2 Identify and apply formulas used to convert specifications to desired format 2.3 Use formulas and graphs appropriate for specified textile, and calculate production requirements 2.4 Check and verify accuracy of calculations 2.5 Examine and validate deviations from expected outcomes with advice from appropriate information resources 2.6 Prepare documentation in accordance with workplace procedures

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 technical and detailed information about textiles
- Writing skills to record factual information in workplace documents
- Numeracy skills to use all basic mathematical operations and work with percentages, fractions and area.

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

Unit Mapping Information

Supersedes and is equivalent to MSTTX4001 Interpret and apply textile calculations and specifications.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a203ec5c-de7d-406b-b3e1-8f1a9b76e92e>

Assessment Requirements for MSTAT4023 Interpret textile information and make production calculations

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Performance Evidence

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

- interpret specifications and make production calculations for at least three different textile products which collectively involve the use of formulas and graphs.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- textile industry terminology
- international specification standards
- information resources and research techniques
- yarn analysis specifications, including:
 - mean variation
 - count or linear density
 - ply
 - dye weight
 - moisture or regain
 - winding speed
- fabric analysis specifications, including:
 - mass or unit area
 - thread density
 - dimensional change
- systems and formulas used in textile calculations, including:
 - calculation of percentages
 - calculation of fractions
 - conversion between systems
 - reading and constructing graphs
- weight–length ratio

- practical application of calculations
- recording and reporting practices.
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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:
 - textile specifications
 - textile information sources.

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

Links

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