



Australian Government

Department of Education, Employment and Workplace Relations

LMTTX4005A Undertake textile colouration and finishing

Revision Number: 1

LMTTX4005A Undertake textile colouration and finishing

Modification History

Not applicable.

Unit Descriptor

Unit descriptor This unit relates to the skills and knowledge associated with selecting and applying textile colourisation and finishing processes.

Application of the Unit

Application of the Unit

This unit applies to the application textile production colouration and finishing processes. Colouration and finishing processes are undertaken in a production environment, using standard procedures to meet predetermined design and quality specifications. Colouration and finishing processes may be undertaken on a wide range of fabric types as well as fibres, yarns or garments.

Work may be conducted in small to large scale enterprises and may involve individual and team activities.

The application of this unit is according to OHS practices of the enterprise and workplace practices, which may include:

- requirements prescribed by legislation, awards, agreements and conditions of employment
- standard operating procedures
- 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

This unit requires the application of skills associated with communication to interpret specifications, perform calculations, apply formulas and complete documentation. Planning and organising and problem solving skills are required to determine colourisation requirements, test and evaluate outcomes and determine required modifications to fabrics or finishing processes.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisites LMTTX4002A

Employability Skills Information

Employability Skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

1 Determine colouration specifications	1.1 Colouration specifications are obtained and interpreted 1.2 Technical aspects of production requirements are identified 1.3 Calculations are undertaken and colour charts used to determine colour formulas 1.4 Calculations are undertaken to determine production material quantities 1.5 Specifications and calculations are confirmed with appropriate personnel as required
2 Determine finishing specifications	2.1 Finish specifications are obtained and interpreted 2.2 Technical aspects of production requirements are identified 2.3 Materials, tools and equipment required for finishing process are determined 2.4 Specifications and calculations are confirmed with appropriate personnel as required
3 Undertake colouration process	3.1 Equipment, tools and materials are set up according to specifications for work 3.2 Fabrics to be coloured are checked against quality standards 3.3 Sample pieces are produced using colourisation techniques to assess compliance with specifications 3.4 Coloured samples are checked to ensure specifications are met 3.5 Colour formulas are adjusted as required 3.6 Colouration techniques are undertaken to meet design specifications and according to OHS practices
4 Undertake finishing process	4.1 Equipment tools and materials set up according to specifications for work 4.2 Fabrics to be finished are checked against quality standards 4.3 Sample pieces are produced using finishing techniques to assess compliance with specifications 4.4 Finishing samples are checked to ensure specifications are met 4.5 Finishing processes are adjusted as required 4.6 Finishing techniques are undertaken to meet design specifications and according to OHS practices
5 Evaluate colouration and finishing processes	5.1 Samples are assessed against colouration and finish specifications 5.2 Colours are checked and design or production problems recognised 5.3 Finish is checked and design or production problems recognised 5.4 Outcomes are analysed and evaluated to identify opportunities for improvement

ELEMENTS**PERFORMANCE CRITERIA**

5.5 Production process is evaluated to identify opportunities for improvement

5.6 Formulas, processes and improvements are documented and information stored for later use

Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit.

Demonstrates knowledge of:

- textile industry terminology
- physical properties of textiles and associated materials
- chemical properties of textiles and associated materials
- standard textile colourisation processing techniques
- standard finishing techniques
- standard textile test procedures
- textile test equipment
- international specification standards
- quality practices
- workplace practices
- practices for recording and reporting
- production processes

Demonstrates skills to:

- read, interpret and follow specification information, standard operating procedures and work instructions, and other reference material
- undertake textile tests
- identify specification information
- recognise, rectify and report deviations from specifications
- achieve colour matching outcomes
- maintain accurate records
- communicate within the workplace
- sequence operations
- clarify and check task-related information
- carry out work according to OHS practices

Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence	Demonstrates skills and knowledge to: • identify and select relevant textile colourisation and finishing processes required to achieve specifications • determine potential impact of colourisation and finishing processes on textiles and associated materials • determine standard procedures to overcome or minimise impact on textiles and associated materials • conduct colourisation and finishing processes to achieve specification • recognise deviations in textiles and associated materials • record information accurately • apply OHS practices in work operations
Consistency in performance	Consistently applies skills and knowledge when: • organising work • working systematically with attention to detail • identifying unacceptable deviations in production results • identifying improvements and avoiding damage • using workplace practices • using OHS practices • recording and reporting accidents and incidents • recognising and adapting to cultural differences in the workplace, including modes of behaviour and interactions
Resource implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Context for assessment	Assessment may occur on the job or in an appropriately simulated environment
Interdependent assessment	This unit may be assessed independently or in combination with other relevant units.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Legislative/regulatory requirements	All work must comply with relevant Federal and State or Territory legislative or regulatory requirements.
Colouration specifications may include	The impact of textile material properties on the colourisation process, such as: • type of fibres, plant, animal or synthetic • chemical properties • physical properties • fibre pre treatments • type of yarn • type of fabric • type of dye
Finishing specifications may include	The impact of textile material properties on textile finishing process, such as: • type of fibres: plant, animal or synthetic • chemical properties • physical properties • fibre pre-treatments • type of fabric
Colouration and finishing techniques may include	• bleaching • skein dyeing • bath dyeing • batch processing • continuous and semi continuous dyeing • drying and curing • thermasol process
Equipment, tools and materials may include	• dyes • chemical • dyeing equipments • finishing equipments
Resources and search techniques may include	• standard operating procedures, safety procedures, job lists, manufacturer manuals, specifications, textile production patterns and machine settings, Australian and International Standards, trade journals, quality system documentation customer requirements,

	workplace and site procedures and manuals, industry manuals, codes of practice, awards, legislation, plans, diagrams, log books • hard copy or electronic data • using colour index, table of contents, numbering and classification systems, etc. • computer database search or look-up, questioning, cross-referencing • basic techniques to identify relevant information including scanning • key personnel, supervisors, trainers, colleagues
Appropriate personnel may include	• supervisor • manager • trainer • designers
OHS practices	OHS practices include hazard identification and control, risk assessment and implementation of risk reduction measures specific to the tasks described by this unit, and may relate to: • manual handling techniques • standard operating procedures • personal protective equipment • safe materials handling • taking of rest breaks • ergonomic arrangement of workplaces • following marked walkways • safe storage of equipment • housekeeping • reporting accidents and incidents • environmental practices

Unit Sector(s)

Sector	Textile Production
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