



Australian Government

Department of Education, Employment and Workplace Relations

LMTTN2008B Conduct heat setting on technical textiles

Revision Number: 1

LMTTN2008B Conduct heat setting on technical textiles

Modification History

Not applicable.

Unit Descriptor

Unit descriptor This unit covers the skills and knowledge to conduct heat setting processes on technical textiles.

Application of the Unit

Application of the Unit

The unit applies to heat-setting operations on technical textiles.

Heat setting is mainly conducted on synthetic technical textiles especially nylon and polyester. Machines covered by this unit include stenters, drying, curing and heating ovens, steamers, humidifiers, and similar machines, including associated conveyors.

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 planning and organising for the safe and efficient application of heat setting processes. This unit also requires the ability to check the quality of products, identify and communicate inconsistencies or other problems and complete workplace documentation. Self management skills are applied to ensure workplace and quality standards are achieved.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisites

Employability Skills Information

Employability Skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Prepare for heat setting process	1.1 Appropriate checks are made to ensure that textile fabric or web is ready for heat setting process. 1.2 Work area is prepared according to <i>OHS practices</i>. 1.3 Heat setting machine is prepared and adjusted according to specifications required for work. 1.4 Problems are reported and recorded.
2 Prepare technical textile for heat setting	2.1 Appropriate pre-heat-setting tests are conducted on technical textile if required. 2.2 Technical textile is fixed into position on heat setting machine or conveyor. 2.3 Job or batch requirements are checked.
3 Operate and monitor heat setting machine	3.1 Temperature is set to achieve quick and even heat over width of technical textile. 3.2 Duration of heating process is set according to job requirements. 3.3 Other controls such as conveyor speed, moisture and fans are set according to job and process requirements. 3.4 Technical textile and machine are monitored during heat setting process to ensure safe and efficient operation. 3.5 Technical textile is removed from heat setting machine and dimensional and other tests carried out as required. 3.6 Technical textile is directed to next operation.

Required Skills and Knowledge

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

Demonstrates knowledge of:

- heat setting principles, including potential for variation in outcomes caused by temperature, moisture and fibre or yarn stress.
- OHS practices, including hazard identification and control measures
- quality practices
- workplace practices
- recording and reporting practices

Demonstrates skills to:

- read temperature and other gauges
- consistently achieve quality and production output requirements
- read, interpret and follow information on work specifications, standard operating procedures and work instructions, and other reference material
- maintain accurate records
- communicate within the workplace
- sequence operations
- meet specifications
- 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: • safely set up and operate technical textile heat setting machines • identify machine or process faults • follow job specifications and orders
Consistency in performance	Consistently applies skills and knowledge when: • organising work • completing tasks according to instructions • working systematically, with attention to detail • identifying improvements and avoiding damage • using workplace practices • using OHS practices • recording and reporting accidents and incidents • assessing operational readiness of equipment • 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.
Heat setting process	Heat setting process is a process designed to give a technical textile dimensional stability or other permanent characteristic through heat induced molecular change.
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
Technical textile	Technical textiles are textile products that have been manufactured for special technical performance and applications. A clothing, carpet or furnishing textile product is generally not regarded as a technical textile unless a specific technical feature beyond what is normally found in clothing, carpet or furnishing has been added. An example would be special fire retardant clothing.

Unit Sector(s)

Sector	Technical Textiles and Non-wovens
---------------	-----------------------------------

