

TEXTILE TESTING

UNIT CODE: ENG/CU/TEX/CR/01/6/A

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Perform Textile Testing and Quality Control

Duration of Unit: 140 hours

Unit description

This unit describes the competencies required by a Textile technician to perform textile testing. It involves competencies required to test textile fibre, textile yarn, inspect grey fabric, test processed fabric and inspect finished fabric.

Summary of Learning Outcomes

1. Perform textile fibre testing
2. Perform textile yarn testing
3. Inspect grey fabric
4. Test processed fabric
5. Inspect finished fabric

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Perform textile fibre testing	<ul style="list-style-type: none">• Sources of textile fibres• Textile fibres classification• Textile fibre properties• Fibre testing equipment• Fibre sampling methods• Fibre testing• Textile fibre reference standards• Documentation of testing results	<ul style="list-style-type: none">• Practical test• Observation• Written tests• Oral questioning• Portfolio of evidence
2. Perform textile yarn testing	<ul style="list-style-type: none">• Safety operations• Textile yarn testing equipment• Yarn testing equipment operation• Textile yarn properties• Yarn defects• Yarn testing	<ul style="list-style-type: none">• Practical test• Observation• Written tests• Oral questioning• Portfolio of evidence

	<ul style="list-style-type: none"> • Textile yarn reference standards • Sampling methods • Documentation of testing results 	
3. Inspect grey fabric	<ul style="list-style-type: none"> • Safety operations • Grey fabric testing equipment • Equipment operation • Grey fabric properties • Grey fabric defects • Fabric defect mending • Grey fabric grading <ul style="list-style-type: none"> ○ Documentation of inspection results 	<ul style="list-style-type: none"> • Practical test • Observation • Written tests • Oral questioning • Portfolio of evidence
4. Test processed fabric	<ul style="list-style-type: none"> • Safety operations • Processed fabric testing equipment • Equipment operation • Processed fabric properties • Processed fabric defects • Processed fabric test • Processed fabric reference standards • Sampling methods • Documentation of testing results 	<ul style="list-style-type: none"> • Practical test • Observation • Written tests • Oral questioning • Portfolio of evidence
5. Inspect finished fabric	<ul style="list-style-type: none"> • Safety operations • Finished fabric testing equipment • Equipment operation • Finished fabric properties • Finished fabric defects • Finished Fabric defect mending • Finished fabric grading • Finished fabric reference standards • Sampling methods • Documentation of inspection results 	<ul style="list-style-type: none"> • Practical test • Observation • Written tests • Oral questioning • Portfolio of evidence

Suggested Methods of Instruction

- Presentations and practical demonstrations by trainer;
- Guided learner activities and research to develop underpinning knowledge;
- Supervised activities and projects in a workshop;
- Visiting lecturer/trainer from the Plants service and repair sector;
- Industrial visits.

Recommended Resources

- Fibre
- Yarn
- Fabrics
- Garment
- Evenness tester
- Finesse tester
- Tensile tester
- Abrasion tester
- Light fastness tester
- Perspiration tester
- Microscope
- Moisture meter
- Crease recovery
- Bending length
- Flame tester
- Comb sorter
- Fibrograph
- Pressley index
- Twist counter
- Trash analyser
- Black board
- Tearing and bursting strength
- Acids
- Gravity tester
- Viscometer
- Spectrophotometer
- Alkalis
- Solvents