



Australian Government

Department of Education, Employment and Workplace Relations

PMBPROD238A Perform creel rack operations

Revision Number: 1

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Modification History

Not applicable.

Unit Descriptor

Unit descriptor

This unit covers the skills and knowledge to perform creel rack operations and the resolving of routine problems to procedure.

Application of the Unit

Application of this unit

The unit applies to skills associated with loading spools onto creel racks for making steel cored belts or other applications. Steel wire requirements are set by belt specifications and may be complex, with numerous spools in operation at any one time. Work may involve individual and team activities. This competency is typically performed by operators working either independently or as part of a work team. The application of this unit is according to 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 is based on *LMTTX2005A Perform creeling operations* and modified to suit the plastics, rubber and cabling industry, particularly belt manufacture.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisites

This unit has **no** prerequisites.

Employability Skills Information

Employability Skills

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes of a unit of competency	Performance Criteria describe the required performance needed to demonstrate achievement of the Element. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT ELEMENT	PERFORMANCE CRITERIA Performance Criteria describe the required performance needed to demonstrate achievement of the Element. Assessment of performance is to be consistent with the Evidence Guide.
1. Set up and load creel racks according to procedures.	1.1 Complete set up checks. 1.2 Report non-conforming items. 1.3 Load spools onto creel rack. 1.4 Complete required set-up. 1.5 Re-check wire sequence and set-up.
2. Maintain continuous flow of cord during production.	2.1 Replace broken cord. 2.2 Reload creel racks with spools as required. 2.3 Crimp/join cord as required.
3. Complete operations	3.1 Despatch empty spools 3.2 Clean area and dispose of waste as required. 3.3 Park crane in required manner.
4. Respond to routine problems to procedures.	4.1 Recognise known faults that occur during the operation. 4.2 Identify and take action on causes of routine faults. 4.3 Log problems as required. 4.4 Identify non-routine process and quality problems and take appropriate action.

Required Skills and Knowledge

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

Application of an operational knowledge of the materials, equipment and process sufficient to recognise out of specification products, process problems and materials faults.

Knowledge of organisation procedures and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and work standards.

Application of the knowledge of managing risks using the hierarchy of controls applied to the creel rack process. Application of approved hazard control, safety procedures and the use of PPE in relation to handling materials, equipment operation and cleanup.

Knowledge of and skills in the operation of creeling equipment and main components sufficient for consistent production of quality products including:

- production workflow sequences and materials demand
- the reasons for checking process control panels and reporting readings which are outside of normal range of process variability
- accurately monitoring equipment operation and product quality
- the potential effects of variations in raw materials and equipment operation in relation to quality of product
- waste management
- correct selection and use of equipment, materials, processes and procedures
- identify factors which may affect product quality or production output and appropriate remedies
- procedures and guidelines for safe operation of creel racks
- typical fault conditions and related fault finding procedures
- crimping techniques
- quality standards and practices
- OHS practices, including hazard identification and control measures
- workplace practices
- recording and reporting practices.

Competence also includes the ability to:

- plan own work, including predicting consequences and identifying improvements
- identify when the operator is able to rectify faults, when assistance is required and who is the appropriate source for assistance
- identify and describe own role and role of others involved directly in the creeling moulding process.

Language, literacy and numeracy requirements

This unit requires the ability to read and interpret typical product specifications, job sheets, procedures, basic machine control panels, material labels and safety information as provided to operators.

Writing is required to the level of completing workplace forms.

Basic numeracy is required for measuring and recording data.

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 this Training Package.

Overview of assessment

A holistic approach should be taken to the assessment.

Assessors must be satisfied that the person can consistently perform the unit as a whole, as defined by the Elements, Performance Criteria and skills and knowledge.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

It is essential that competence is demonstrated in the knowledge and skills defined in this unit. These may include the ability to apply:

- skills and knowledge required to operate creel rack equipment
- skills and knowledge required to operate the overhead crane
- approved procedures.

Consistent performance should be demonstrated. For example, look to see that creel rack production standards are met consistently.

Assessment method and context

Assessment will occur on industrial creeling equipment and will be undertaken in a work-like environment.

Competence in this unit may be assessed:

- by using an appropriate, industrial creel rack/lifting device
- in a situation allowing for the generation of evidence of the ability to respond to problems
 - by using a suitable simulation and/or a range of case studies/scenarios
 - through a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment. Assessors need to be aware of any cultural issues that may affect responses to questions.

Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the assessee and the work being performed.

Specific resources for assessment

This section should be read in conjunction with the Range Statement for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent they form part of the assessment method.

Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

Access must be provided to appropriate learning and/or assessment support when required. Where applicable, physical resources should include equipment modified for people with disabilities.

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. 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.

Where reference is made to industry codes of practice, and/or Australian/international standards, the latest version must be used.

Context

This competency applies to all creeling operations within the industry. It includes the operation of all relevant additional equipment where that equipment is integral to the creeling process.

Procedures

All operations are performed in accordance with procedures.

Procedures include all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

Tools and equipment

This competency includes use of equipment and tools such as:

- spools and components of spools
- ancillary equipment integral to the operation of the creel racks (does not include belt building or pressing)
- hand tools used in the creel rack process
- material loading/removing equipment
- relevant personal protective equipment.

Set-up checks

Set-up checks includes checking:

- crane components for wear
- crane safety catch on hook
- warning and flashing lights are operating
- kinks in crane operating cable
- passage for crane is clear
- correct materials have been brought to creel racks on pallets that are sealed and dry
- steel wire for conformity to specifications
- all components are clean of dirt, oil and other contaminants.

Hazards

Typical hazards include:

- broken wire
- moving wire spools
- moving equipment (such as spools/creel components)
- manual handling hazards.

Completing set-up

Completing set-up includes:

- loading top rack with wire fed from bottom of spool.
- pulling wires through eyelet boards at front of creel
- placing poly between creel and organiser where wire will cross floor
- crimping wire using hydraulic crimping press (one to one or doubled).

Parking crane

Parking crane includes ensuring it:

- is in position to avoid blocking work area / walk ways
- has crane hook raised in line with OHS procedures.

Problems

'Respond to routine problems' means 'apply known solutions to a limited range of predictable problems'. Typical process problems may include:

- equipment malfunction
- variations in process conditions such as speed
- variations in materials or contamination of materials.

Appropriate action for non-routine problems may be reporting to designated person or other action specified in the procedures.

Unit Sector(s)

Not applicable.