



Australian Government

Department of Education, Employment and Workplace Relations

RIIPEO201B Conduct conveyor operations

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers the conduct of conveyor operations in the coal and metalliferous mining industries. It includes: planning and preparing for conveyor operations, operating conveyors, and carrying out operator maintenance.

Application of the Unit

This unit applies to the movement of material via a conveyor system in the extractive process and is appropriate for those working in operational roles, at worksites within:

- Coal mining
- Metalliferous mining

Licensing/Regulatory Information

Refer to Unit Descriptor.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare for conveyor operations	1.1. Access, interpret and apply compliance documentation relevant to the conduct of conveyor operations 1.2. Obtain, interpret and clarify briefings or handover details for the allocated task 1.3. Plan job to optimise production requirements 1.4. Perform conveyor pre-operational checks prior to conveyor operation 1.5. Resolve coordination requirements with others at the site prior to commencing and during work activities 1.6. Identify, address and report environmental issues and ground conditions 1.7. Identify, address and report potential hazards and risks
2. Operate conveyor	2.1. Adhere to emergency procedures to ensure safety of personnel, plant and equipment 2.2. Activate audio and visual safety indicators before conveying operation commences 2.3. Coordinate activities with others at site prior to the commencement of and during task activities 2.4. Ensure safe operation of equipment and maintain site safety at all times 2.5. Monitor conveyor performance utilising appropriate indicators to aid efficient operation 2.6. Assess weight and dimension of materials to ensure conveyor is not overloaded nor exceeding capacity of conveyor in compliance with specifications 2.7. Monitor conveying process to ensure that spillage is minimised 2.8. Remove or manage contaminants upon identification 2.9. Complete work according to agreed work plan and outcomes 2.10. Shutdown conveyor in accordance with procedures and safety requirements

3. Carry out operator maintenance	3.1. Isolate conveyor before conducting minor maintenance 3.2. Clean conveyor in accordance with standard operator procedures and safety requirements 3.3. Inspect equipment and report faults and make equipment available for routine operational servicing 3.4. Carry out minor maintenance and make minor adjustments to equipment 3.5. Inspect, test and report conveyor after maintenance and/or conveyor shift and prior to return to service 3.6. Clear worksite of tools, debris and defective components and restore to site and safety requirements 3.7. Carry out reporting of defects
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Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Specific skills are required to achieve the performance criteria in this unit, particularly for the application in the various circumstances in which this unit may be applied. This includes the ability to carry out the following as required to conduct conveyor operations:

- apply legislative, organisation and site requirements and procedures
- interpret and apply legislative requirements and procedures
- interpret and apply site requirements and procedures
- interpret and apply manufacturer's manuals, requirements and procedures
- interpret and apply work requirements
- apply worksite hazards identification and response procedures
- organise work tasks
- apply maintenance and housekeeping requirements and procedures
- apply conveyor equipment operation and maintenance requirements and procedures
- apply diagnostic techniques
- apply hazardous substances handling procedures
- use communications equipment
- apply records maintenance requirements
- apply report preparation requirements
- work in a team

Required knowledge

Specific knowledge is required to achieve the performance criteria of this unit, particularly its application in a variety of circumstances in which the unit may be used. This includes knowledge of the following as required to conduct conveyor operations:

- Legislative, manufacturer's and site requirements and procedures
- worksite coordination requirements
- site and equipment safety requirements and procedures
- site conveyor systems and related equipment configurations
- site conveyor systems equipment characteristics, technical capabilities and limitations
- conveyor operational procedures and checks
- night and day working conditions
- hazard identification and risk assessment and response procedures
- site environmental and ground condition requirements and constraints related to site conveyor systems
- production targets, optimum loading condition of belts
- materials transported and their characteristics

- minor maintenance requirements

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The evidence required to demonstrate competency in this unit must be relevant to worksite operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit and include evidence of the following: • knowledge of the requirements, procedures and instructions for conducting conveyor operations • implementation of requirements, procedures and techniques for the safe, effective and efficient completion of conveyor operations • working with others to undertake and complete conveyor operations that meet all of the required outcomes • consistent timely completion of conveyor operations that safely, effectively and efficiently meets the required outcomes
Context of and specific resources for assessment	• This unit must be assessed in the context of the work environment. Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated environment provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills. • The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job. • Customisation of assessment and delivery environment to sensitively accommodate cultural diversity. • Aboriginal people and other people from a non English speaking background may have second

	language issues. • Assessment of this competency requires typical resources normally used in the work environment. Selection and use of resources for particular worksites may differ due to site circumstances. • Where applicable, physical resources should include equipment modified for people with disabilities. • Access must be provided to appropriate learning and/or assessment support when required.
Method of assessment	This unit may be assessed in a holistic way with other units of competency. The assessment strategy for this unit must verify required knowledge and skill and practical application using more than one of the following assessment methods: • written and/or oral assessment of the candidate's required knowledge • observed, documented and/or first hand testimonial evidence of the candidate's: • implementation of appropriate requirement, procedures and techniques for the safe, effective and efficient achievement of required outcomes • consistently achieving the required outcomes • first hand testimonial evidence of the candidate's: • working with others to undertake and complete the conveyor operations
Guidance information for assessment	Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.

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. 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) may also be included.

Relevant compliance documentation may include:	• legislative, organisation and site requirements and procedures • manufacturer's guidelines and specifications • Australian standards • code of practice • Employment and Workplace Relations legislation • Equal Employment Opportunity and Disability Discrimination legislation
Briefings or handover details may include:	• status of system/permits • machine defects/faults • production and dogging plan • work group details • potential hazards • maintenance plan
Pre-operational checks are those checks specified by the manufacturer prior to operating the item of equipment and may include:	• computer systems • conveyor belt and components • display instrumentation and gauges (indicators, gauges, laser levels) • greasing components • visual and audio warning devices and lights • emergency stop systems
Environmental issues and ground conditions may include:	• culturally-sensitive sites and artefacts • drainage • dust • emissions • flora and fauna • hazardous chemicals • heritage legislation • noise • runoff • spills • water quality • fire holes

	• cracking • aquifers
Potential hazards and risks may include:	• power lines • overhead service lines • obstructions • structures • other equipment, vehicles, people • dangerous material • underground services • water • adjoining walls • abandoned equipment • adverse weather conditions • chemicals • contaminants • equipment • unsafe ground • unstable faces • overhanging rock
Indicators may include:	• computer indicators • conveyor indicators
Monitor conveyor may include:	• optimising the system, including belt tracking and loading/transfer of material at transfer stations • ensuring all personnel are authorised and correctly attired • investigating, rectifying and/or reporting faults/defects • applying manufacturer manual and site standard operating procedures
Capacity of conveyor may be affected by:	• duration of operations • efficient and safe operating speed • operating limitations • type of activities performed • weight and/or load limitations • weather conditions
Contaminants may include:	• animal carcasses (sheep, cows, kangaroos) • cigarette butts • consumables • ear plugs • explosives • metal basket teeth

	• metal or steel rods • old fencing • old piping • plastic • timber • rock bolts • vent bags • rubber
Shutdown must include:	• rectifying and/or reporting all faults/defects, conditions and outstanding faults • restoring conveyor to condition for next start-up • completing all logs and reporting requirements
Safety requirements and procedures may include:	• following access and permit procedures • adjust for safety requirements as specified in Australian standards for conveyors • procedures for clearing blocked chutes and excessive spills • procedures for moving parts and pot machinery • proving the equipment function and correct lamp is activated • activating all safety devices • testing lamp indicators
Clean conveyor may include:	• correct selection, use and storage of equipment • conveyor being free from spillage and obstructions • walkways clear and clean • water from monitor and excess water clear of electrical equipment • mobile plant organised for large spills
Inspect and test may include:	• conveyor conditions and wear • excessive build up of material • belts • sensors and indicators • idlers and pulleys • frames • motors and gear boxes • fish plates and sleepers • spill curtains
Conveyor shifting includes:	• removal of belt tension • clean head and tail sections

	• issue permits • anchor posts • test runs • position hopper
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Unit Sector(s)

Plant and Equipment Operations

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.