



Australian Government

RIIARO409 Optimise automated in-loading and out-loading operations

Release: 1

RIIARO409 Optimise automated in-loading and out-loading operations

Modification History

Release 1	This version first released with RII Resources and Infrastructure Industry Training Package Version 9.0. Newly created unit.
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Application

This unit describes the skills and knowledge required to optimise the performance of in-loading and out-loading operations to meet performance targets relating to quality, efficiency, and safety. It includes optimising the operation of automated in-loading and out-loading control systems and responding to abnormal situations.

The unit applies to those who oversee in-loading and out-loading operations at locations remote from the control centre. They control in-loading and out-loading equipment, such as car dumpers, apron feeders, conveyors, stackers, reclaimers, screening units, surge bins, sample stations and ship-loaders.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Coal mining

Metalliferous mining

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes	Performance criteria describe the performance needed to demonstrate achievement of the element
1. Optimise automated in-loading control system	1.1 Confirm incoming train circuits against car dumpers, conveyors and stockpiles designated in scheduling plan 1.2 Confirm train loadout information with upstream systems and take action as required by the load characteristics in accordance with organisational protocols 1.3 Monitor availability and operational status of in-loading fixed plant as required by plan of the day

ELEMENT	PERFORMANCE CRITERIA
	1.4 Optimise product throughput and stockpiling required by plan of the day by troubleshooting in-loading equipment faults and flow problems
2. Optimise automated out-loading control system	2.1 Confirm availability of stockpiles and reclaimers to meet customer product requirements as scheduled in plan of the day and manage stockyard based on equipment availability 2.2 Prepare ship-loading plan within control system in accordance with hatch order and tonnage per hatch calculated by ship surveyor 2.3 Monitor ship-loading sequence and quantities against ship-loading plan and confirm completion of each cycle with on-site personnel following designated protocols 2.4 Monitor automated sampling data to confirm product quality is as required by plan of the day and escalate if outside required parameters
3. Respond to abnormal situations	3.1 Interact with rail team to solve rail or port interface problems according to organisational protocols 3.2 Determine and implement best option from those available to maintain production if stockyard equipment becomes unavailable 3.3 Identify and troubleshoot stockpile issues based on sampling data that is inconsistent with required product quality and escalate as required in line with escalation protocols 3.4 Prioritise active alarms to determine order in which actions are taken to resolve faults and maintain a steady flow of product 3.5 Refer issues that disrupt ship-loading schedule to scheduling team and recommend solutions in line with organisational protocols according to the situation, and implement amended requirements 3.6 Maintain running log of resolved faults and items requiring attention and update delay accounting and trend databases

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION
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SKILL	DESCRIPTION
Numeracy	• Interprets and uses a range of mathematical information and sampling data relating to automated in-loading and out-loading operations • Uses ship-loading hatch plans to confirm correct sequence and quantities of operations

Unit Mapping Information

No equivalent unit. Newly created unit.

Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>