



National Plant Matrix

	Articulated Haul Truck - National	Backhoe Operator - National	Bobcat / Skid Steer - National	Mobile Plant Operator - Concreting - National	Dogman - National	Dozer - National	Drilling Rig Operator - Directional Drilling - National	Dump Truck - NSW Only	Dump Truck - National	Earthworker - National	Elevated Work Platform Operator <11M - National	Elevated Work Platform Operator >11M - National	Excavator Operator - National	Forklift Operator - National	Front End Loader Operator - National	Grader Operator - National	Operator Crane / Hiab <10T - National	Operator Crane / Hiab >10T - National	Operator Gantry Crane - CB - National	Operator Non-Slewing Mobile Crane (>3T) - National	Operator Slewing Mobile Crane (>100T) - National	Operator Slewing Mobile Crane up to 100T - National	Operator Slewing Mobile Crane up to 20T - National	Operator Slewing Mobile Crane up to 60T - National	Rail Bound Plant Operator - National	Rail Bound Plant Operator Light - National	Rail Bound Plant Operator Medium/Heavy - National	Road-Rail Plant Operator - National	Roller Operator - National	Scraper Operator - National	Spreader Operator - National	Stabiliser Operator - National	Telehandler Non-Slewing crane above 3T - National	Telehandler Slewing crane above 3T - National	Telehandler under 3T - National	Tip Truck - National	Tractor Operator - National				
Rail Safety Worker (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Medical Requirements																																									
Railway Medical Category 1 (Cat 1) Safety Critical (>60 = yearly; 50 - 60 = every 2 years; <50 = every 5 years) <i>Normal colour vision required</i>																											M	M	M	M											
Railway Medical Category 3 (Cat 3) Non Safety Critical (on commencement of duty; >40 = every 5 years)		M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M					M											
Competency Requirements (non rail specific)																																									
Work Safely in the construction industry (White Card)	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	
Licence or machine specific unit of competence (specify type) <i>If HIGH RISK, licence is required even if unit is obtained - refer to licencing page.</i>				M							M	M		M			M	M	M	M	M	M	M	M												M	M	M			
TLI Certificate II - Rail Infrastructure																																									
Safely access the rail corridor (National unit of competency) or equivalent <i>Rail Operators have specific access requirements, therefore if you have obtained this unit of competence from a training provider not endorsed by the rail operator you may require further training.</i>								M																		M	M	M													
Maintain and use hand tools										M																M	M	M													
Shift materials safely using manual handling methods										M																M	M	M													
Participate in basic workplace communication										M																M	M	M													
Follow work health and safety procedures										M																M	M	M													
Apply fatigue management strategies										M																M	M	M													
Apply track fundamentals										M																M	M	M													
Apply environmental procedures to rail infrastructure										M																M	M	M													
TLI Certificate III - Rail Infrastructure																																									
Travel medium or heavy self-propelled on-track equipment <i>NOTE: If travelling outside the possession area, you may need additional competencies - please check with operator.</i>																										M(1)		M(1)													
Propel and operate light on-track equipment <i>NOTE: If travelling outside the possession area, you may need additional competencies - please check with operator.</i>																										M(1)	M(1)														
Operate road/rail vehicle																													M												
Install and maintain surface track drainage										M																															
Install and repair rail earthworks										M																															
TLI Other																																									
Carry out basic levelling										M																															
Access rail track to run track vehicle within defined worksite																										M	M	M	M												
Plant operator competencies - can hold any one or more																																									
Identify the principles of ballast cleaning operations																										M*	M*	M*													
Identify the principles of ballast regulator operations																										M*	M*	M*													
Identify the principles of dynamic track stabiliser operations																										M*	M*	M*													
Identify the principles of self-propelled rail grinder operations																										M*	M*	M*													
Identify the principles of tamping machine operations																										M*	M*	M*													
Statement of Attainment																																									
Operator Crane.Statement of Attainment.Conduct telescopic materials handler operations																																									M
Operator Dozer.Statement of Attainment.Dozer Operations						M																																			
Operator Crane.Statement of Attainment.Vehicle mounted loading crane < 10T																	M																								
Operator Elevated Work Platform.Statement of Attainment.Operate elevated work platform											M																														
Operator Front End Loader.Statement of Attainment.Civil Construction front end loader Ops														M																											



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Operator Front End Loader & Backhoe.Statement of Attainment.Conduct backhoe/loader operations	M																																							
Operator Grader.Statement of Attainment.Conduct grader operations															M																									
Operator Roller.Statement of Attainment.Conduct Roller Operations																																								
Rail.Statement of Attainment.Conduct surface directional drilling							1M																																	
Rail.Statement of Attainment.Conduct horizontal directional drilling							1M																																	
Rail.Statement of Attainment.Conduct Spreader Operations																																								
Rail.Statement of Attainment.Conduct Stabiliser Operations																																								
Rail.Statement of Attainment.Conduct Tractor Operations																																							M	
Rail.Statement of Attainment.Conduct civil construction scraper operations																																								
Licence																																								
C Class Drivers Licence	M							M																																
Boom Concrete Placing.High Risk Licence.Concrete placing booms (PB)				M																																				
Dogger.Licence.Perform Dogging					M																																			
Licence.Skid Steer Loader / Bobcat (LS)			M*																																					
Operator Crane Bridge & Gantry.High Risk Licence.Operate Bridge and Gantry Cranes (CB)																			M																					
Operator Crane.Licence.Operate a non-slewing mobile crane >3T																				M																				
Operator Crane.Licence.Operate a slewing mobile crane < 100T																					M																			
Operator Crane.Licence.Operate a slewing mobile crane < 20T																							M																	
Operator Crane.Licence.Operate a slewing mobile crane < 60T																								M																
Operator Crane.Licence.Slewing mobile cranes																																								
Operator Crane.Licence.Slewing mobile crane greater 100T																					M																			
Operator Crane.Licence.Operate a vehicle loading crane > 10T																		M																						
Operator Elevated Work Platform.High Risk Licence.Boom-type elevating work platform (WP)												M																												
Operator Excavator.Licence.Civil Construction Excavator													M																											
Operator Forklift.High Risk Licence.Licence to operate a forklift (LF)														M																										
Operator Truck.Licence.Dump Truck Operations									M																															
Operator Truck.Licence.Tip Truck Operations																																								M
Scraper Licence (LP)																																								

Notes:
M = Mandatory
M* = Must hold the machine specific competency or licence relevant to operations and/or state based requirement.
(1) = Must hold one of the UOC depending on machine size i.e. over/under 10T.
1M = Must hold at least one of these competencies.

The information contained in this matrix is for reference only and could be subject to change from the Rail Transport Operators.



National Plant Matrix

Licencing Details

High Risk Roles
Backhoe Operator - National
Dogman - National
Mobile Plant Operator - Concreting - National
Elevated Work Platform Operator>11M - National
Forklift Operator - National
Operator Crane/Hiab>10T - National
Operator Gantry Crane - CB - National
Operator Non-Slewing Mobile Crane(>3T) - National
Operator Slewing Mobile Crane(>100T) - National
Operator Slewing Mobile Crane up to 100T - National
Operator Slewing Mobile Crane up to 20T - National
Operator Slewing Mobile Crane up to 60T - National
Telehandler Non-Slewing crane above 3T - National
Telehandler Slewing crane above 3T - National

High Risk Licences
Boom Concrete Placing.High Risk Licence.Concrete placing booms (PB)
Dogger.Licence.Perform Dogging
Operator Crane Bridge & Gantry.High Risk Licence.Operate Bridge and Gantry Cranes (CB)
Operator Crane.Licence.Operate a non-slewing mobile crane >3T
Operator Crane.Licence.Operate a slewing mobile crane < 100T
Operator Crane.Licence.Operate a slewing mobile crane < 20T
Operator Crane.Licence.Operate a slewing mobile crane < 60T
Operator Crane.Licence.Slewing mobile cranes
Operator Crane.Licence.Slewing mobile crane greater 100T
Operator Crane.Licence.Operate a vehicle loading crane > 10T
Operator Elevated Work Platform.High Risk Licence.Boom-type elevating work platform (WP)
Operator Forklift.High Risk Licence.Licence to operate a forklift (LF)

NON High Risk roles
Bobcat / Skid Steer - National
Dozer - National
State-based.Drilling Rig Operator - Air - National
State-based.Drilling Rig Operator - Auger - National
State-based.Drilling Rig Operator - Core - National
State-based.Drilling Rig Operator - Rotary Mud - National
State-based.Drilling Rig Operator - Cable Tool - National
State-based.Drilling Rig Operator - Sonic Drilling - National
Drilling Rig Operator - Directional Drilling - National
Dump Truck - NSW Only
Dump Truck - National
Elevated Work Platform Operator<11M - National
Excavator Operator - National
Front End Loader Operator - National
Grader Operator - National
Operator Crane/Hiab<10T - National
Roller Operator - National
Scraper Operator - National
Telehandler under 3T - National
Tip Truck - National

National Plant Matrix
Role examples (A-Z)



NOTE: These are to be used as a guide only. If you are unsure which role applied to you, please seek clarification from the operator with whom you propose to work as to what role is required for your intended duties. It is the individual's responsibility to ensure that the appropriate role is held before work is carried out.

Role	Examples
Articulated Haul Truck - National	Can operate, load, haul and dump materials using both front and rear dumping articulated haul trucks.
Backhoe Operator - National	Can operate backhoes and attachments to excavate, break, drill, level and compact earth, rock and other material. * Will also require a High Risk Work Licence issued by Government or industry organisation.
Bobcat / Skid Steer - National	Can operate and shift materials with skid steer loaders using attachments.
Mobile Plant Operator - Concreting - National	Mobile plant operators drive and operate heavy machinery used to level, excavate, load and move earth, rock and other material.
Dogman - National	An assistant to a crane operator, responsible for securing the crane's load and directing the operator. * Will also require a High Risk Work Licence issued by Government or industry organisation.
Dozer - National	Can operate dozers using blades and other attachments to gouge out, level and move materials.
State-based.Drilling Rig Operator - Air - National	Utilise rigs that use compressed air as a fluid to carry out drilling activity in a range of contexts which could include blast hole drilling, sonic drilling, mineral exploration, piling, construction and maintenance of water wells. * Waterwell contractors will also require a card/licence issued by Government or industry organisation.The Waterwell card or licence must identify a Class of licence and state of issue.
State-based.Drilling Rig Operator - Auger - National	Utilise auger rigs to carry out drilling activity in a range of contexts which could include site investigation and sampling, geotechnical work, waterwell construction or maintenance, environmental sampling; piling, pier and foundation work. * Waterwell contractors will also require a card/licence issued by Government or industry organisation. The Waterwell card or licence must identify a Class of licence and state of issue.
State-based.Drilling Rig Operator - Core - National	Utilise rigs to carry out drilling activity in a range of contexts which could include mineral exploration, coring underground in areas of confined space, geotechnical drilling, taking core samples, some construction work. * Waterwell contractors will also require a card/licence issued by Government or industry organisation.The Waterwell card or licence must identify a Class of licence and state of issue.
State-based.Drilling Rig Operator - Rotary Mud - National	Utilise fluid-powered rigs to carry out drilling activity in a range of contexts which could include drilling water bores and monitoring bores, or in environmental and mineral exploration sectors. * Waterwell contractors will also require a card/licence issued by Government or industry organisation. The Waterwell card or licence must identify a Class of licence and state of issue.
State-based.Drilling Rig Operator - Cable Tool - National	Utilise cable tool rigs to carry out drilling activity in a range of contexts when working in soft, sedimentary rock formations which could include site investigation or sampling, for the geotechnical, mineral exploration and waterwell sectors or waterwell construction. * Waterwell contractors will also require a card/licence issued by Government or industry organisation. The Waterwell card or licence must identify a Class of licence and state of issue.
Drilling Rig Operator - Directional Drilling - National	Utilise rigs with a steerable system to positively change the borehole direction and angle in a range of contexts. Guided boring is a steerable system for the installation of pipes, conduits and cables or other services. In the trenchless technology sector, horizontal directional drilling is similar to guided boring.
State-based.Drilling Rig Operator - Sonic Drilling - National	Utilise rigs with rapidly vibrating drill casings and rods to pulverise or liquidise formation for shallower site investigation or sampling, for undisturbed samples for geological, environmental, archaeological, and seismic information. * Waterwell contractors will also require a card/licence issued by Government or industry organisation. The Waterwell card or licence must identify a Class of licence and state of issue.
Dump Truck - NSW Only	Does the same work as a Dump Truck driver, however may work on a restricted licence as per the requirements of NSW regulator Safework
Dump Truck - National	A dump truck operator drives large trucks that transport and dump waste materials like sand, gravel, rock or non-degradable garbage. a large truck for transporting heavy loads, with a back part that can be raised at one end so that its contents fall out, whereas a side dump truck (SDT) consists of a 3-axle tractor pulling a 2-axle semi-trailer. It has hydraulic rams which tilt the dump body onto its side, spilling the material to either the left or right side of the trailer.
Earthworker - National	Can install and repair rail earthworks, including accessing roads, reconstructing track formation and capping, rehabilitating waterways, including shaping channels and/or scour protection, shaping shoulders (cesses), sub-surface drainage, trackside or across, track trenching (less than 1.5 m depth). Supervise the installation and repair rail of earthworks in accordance with safeworking, regulatory and organisational requirements. It includes determining job requirements, undertaking trenching, establishing track formation and minor trackside earthworks, and completing documentation in accordance with specifications. (taken from old version of T&C matrix)
Elevated Work Platform Operator<11M - National	Can operate specific types of elevated work platforms (EWPs) safely and effectively in different locations, including on uneven terrain. Includes locating, setting up, operating and shutting down scissor lifts and self-propelled boom lifts with a boom length under 11 metres.
Elevated Work Platform Operator>11M - National	Can operate specific types of elevated work platforms (EWPs) safely and effectively in different locations, including on uneven terrain. Includes locating, setting up, operating and shutting down scissor lifts and self-propelled boom lifts with a boom length over 11 metres. * Will also require a High Risk Work Licence issued by Government or industry organisation.
Excavator Operator - National	Can operate excavator operations to lift, carry and place materials.
Forklift Operator - National	Can conduct forklift operation including checking forklift condition, driving forklift, and monitoring and maintaining forklift performance and site conditions. * Will also require a High Risk Work Licence issued by Government or industry organisation.
Front Ender Loader Operator - National	Can operate wheeled or tracked front-end loader safely to excavate, level and spread soil, remove and fit relevant attachments and carry out machinery maintenance.
Grader Operator - National	Can operate graders to spread and level materials.
Operator Crane/Hiab<10T - National	Can operate a vehicle-mounted loading crane to shift loads with a capacity of less than 10 metre tonnes.
Operator Crane/Hiab>10T - National	Can operate a vehicle-mounted loading crane to shift loads with a capacity of greater than 10 metre tonnes. * Will also require a High Risk Work Licence issued by Government or industry organisation.
Operator Gantry Crane - CB - National	Can operate bridge cranes and gantry cranes safely. Bridge crane consists of a bridge beam or beams, that are mounted to end carriages at each end, can travel along elevated runways, and has 1 or more hoisting mechanisms arranged to traverse across the bridge. Gantry crane consists of a bridge beam or beams supported at one or both ends by legs mounted to end carriages, can travel on supporting surfaces or deck levels, whether fixed or not, and has a crab with 1 or more hoisting units arranged to travel across the bridge. * Will also require a High Risk Work Licence issued by Government or industry organisation.
Operator Non-Slewing Mobile Crane(>3T) - National	Can operate a mobile crane of greater than 3 tonnes capacity that incorporates a boom or jib which includes articulated type mobile cranes and locomotive cranes, but does not include vehicle tow trucks, for licensing purposes. * Will also require a High Risk Work Licence issued by Government or industry organisation.
Operator Slewing Mobile Crane(>100T) - National	Can operate a slewing mobile crane with a maximum rated capacity (MRC) over 100 tonnes. * Will also require a High Risk Work Licence issued by Government or industry organisation.
Operator Slewing Mobile Crane up to 100T - National	Can operate a slewing mobile crane with a maximum rated capacity (MRC) up to 100 tonnes. * Will also require a High Risk Work Licence issued by Government or industry organisation.
Operator Slewing Mobile Crane up to 20T - National	Can operate a slewing mobile crane with a maximum rated capacity (MRC) up to 20 tonnes. * Will also require a High Risk Work Licence issued by Government or industry organisation.
Operator Slewing Mobile Crane up to 60T - National	Can operate a slewing mobile crane with a maximum rated capacity (MRC) up to 60 tonnes. * Will also require a High Risk Work Licence issued by Government or industry organisation.
Rail Bound Plant Operator - National	Track maintenance machines or items of plant which under normal conditions cannot be removed from the track
Rail Bound Plant Operator Light - National	Can operate light self-propelled on-track vehicle on a rail network.
Rail Bound Plant Operator Medium/Heavy - National	Can operate medium or heavy self-propelled on-track vehicle on a rail network.
Road-Rail Plant Operator - National	A rolling stock vehicle which can operate under its own power, both on and off rail, and which can transition from one mode of operation to the other. Road rail vehicles may or may not have the ability to travel on a public highway, and may or may not be road registered.
Roller Operator - National	Can operate a roller to compact material.
Scraper Operator - National	Can operate a scraper to load, haul and dump materials.
Spreader Operator - National	Can operate, relocate and carrying out operator maintenance on a spreader.
Stabiliser Operator - National	Can operate and relocate stabilisers using different additive types and carrying out plant maintenance.
Telehandler Non-Slewing crane above 3T - National	Can operate telescopic materials handler mobile crane of greater than 3 tonnes capacity including attaching, securing, lifting, carrying and placing materials; selecting, removing and fitting attachments; relocating the telescopic materials handler; and carry out machine operator maintenance. * Will also require a High Risk Work Licence issued by Government or industry organisation.
Telehandler Slewing crane above 3T - National	Can operate telescopic materials handler slewing mobile crane of greater than 3 tonnes capacity including attaching, securing, lifting, carrying and placing materials; selecting, removing and fitting attachments; relocating the telescopic materials handler; and carry out machine operator maintenance. * Will also require a High Risk Work Licence issued by Government or industry organisation.
Telehandler under 3T - National	Can operate telescopic materials handler mobile crane of less than 3 tonnes capacity including attaching, securing, lifting, carrying and placing materials; selecting, removing and fitting attachments; relocating the telescopic materials handler; and carry out machine operator maintenance.
Tip Truck - National	This is a similar description to a Dump truck but is generally used for longer hauls outside of the work site and therefore road registered.
Tractor Operator - National	Can operate tractors and use attachments.