

Technical test - Practical

Tunnel locomotive – A67



Resources required

Machine	<ul style="list-style-type: none"> • Tunnel locomotive
Area	<ul style="list-style-type: none"> • Suitable training track of the following lengths and areas: <ul style="list-style-type: none"> - A distance of at least 60 metres (endorsements A and C) - A distance of at least 100 metres (endorsements B, D and E) - 1 x change in gradient and 1 x shunt or crossover (points) - A safe area to allow loading and discharging/unloading of materials and personnel - underground and/or above ground - Restrictions for travelling
Other equipment	<ul style="list-style-type: none"> • Machine to load material or resources • Signalling and communication devices • A rolling stock/train specification that includes skip bogies, segment bogies and a man-rider • Person(s) for transportation • Additional personnel (designated person) for signalling/communicating duties and for man-rider boarding/disembarking operations
Loads	<ul style="list-style-type: none"> • Suitable and sufficient tunnelling-type materials or resources for loading and discharging/unloading
Notes	<ul style="list-style-type: none"> • The locomotive selected for the test must meet the specification for the required endorsement, be in serviceable condition and conform with current legislation • The operator's manual must be with the locomotive • The tester cannot act as the passenger or the additional person for signalling duties • The person selected for signalling and shunting duties must be competent in those activities • The person undertaken the shunting duties shall be restricted to those duties only

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Activity instructions

<p>Sequence</p>	<ul style="list-style-type: none"> • Activity 1 must be undertaken at the start of the test • Activity 3 may be spread over the period of the test • Activities 7 to 10 may be taken at any time during the test • Activity 20 must be undertaken at the end of the test <p>This test can be undertaken at different times and at different locations. The test must be completed within a given collective time. The specification section gives further information</p>
<p>Preparing for work</p>	<ol style="list-style-type: none"> 1. Complete all manufacturers' pre-start and running checks and prepare the tunnel locomotive for travel as detailed in the operator's manual which must be referred to by the candidate during the activity <ul style="list-style-type: none"> • Additional information to be identified by the candidate referring to the operator's manual. Tester to decide what information will be identified 2. Agree communication/signalling codes with the additional person 3. Couple up the following types of rolling stock to form a train from a given specification: <ul style="list-style-type: none"> - Skip bogie - Segment bogie - Man-rider 4. Couple the rolling stock 5. Configure and set the train for travel
<p>Travelling & manoeuvring <i>(refer to specifications)</i></p>	<ol style="list-style-type: none"> 6. Travel the train to a loading point 7. Travel whilst pushing and pulling loaded and unloaded rolling stock 8. Negotiate crossings and a restriction loaded and unloaded 9. Travel through a restriction 10. Carry out an emergency braking activity 11. Travel whilst carrying passengers
<p>Working tasks <i>(refer to specifications)</i></p>	<ol style="list-style-type: none"> 12. Position the tunnel locomotive for loading following given signals 13. Receive loads 14. Discharge/remove loads into given locations following given signals 15. Load the passenger(s) and prepare for train travel 16. Disembark the passenger(s) at given location 17. Communicate with the designated person during loading/unloading following given instructions
<p>Completing work</p>	<ol style="list-style-type: none"> 18. Park the train following given instructions 19. Disconnect the locomotive from the rolling stock and park
<p>Shutting down</p>	<ol style="list-style-type: none"> 20. Carry out shut-down and securing procedures

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Activity instructions (*Continued*)

Notes	<ul style="list-style-type: none"> • If the machine is hot (diesel units), checks unable to be carried out (i.e. coolant) may be assessed by the Tester using verbal questions • Emergency braking must be carried out at the site’s permitted maximum speed appropriately loaded • Passengers must be boarded and disembarked at suitable safe locations • At least two methods of signalling and/or communicating shall be used during the test
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Activity measurements

Travelling restrictions	<ul style="list-style-type: none"> • Maximum of 300 mm refuge side • Maximum of 300 mm above cab • Maximum of 300 mm rib side (other)
Braking distance	<ul style="list-style-type: none"> • Maximum of 60 metres
Travelling with loads and passengers	<ul style="list-style-type: none"> • Minimum distance of 60 metres
Loading	<ul style="list-style-type: none"> • Rolling stock to be loaded with suitable tunneling-type materials or resources
Discharging / unloading of loads	<ul style="list-style-type: none"> • Minimum of two difference locations (Activity 14)
Test timings	<ul style="list-style-type: none"> • This test must collectively be completed within 1 hour and 30 minutes

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Basic details

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/>	Start time of test:
<input type="checkbox"/>	Duration:
Make and model:	

Mandatory		Correctly carried out during the test?	Y/N
Preparing	1. All pre-start and running checks (or responses to relevant questions)		
	2. Locomotive set for travel		
	3. Signal/communication codes agreed with signaller		
	4. Restrictions and hazards cleared		
	5. Rolling stock coupled as per given specification		
	6. Train set for travel		
Travelling and working tasks	7. Crossing/points approached and negotiated		
	8. Rolling stock pushed and pulled smoothly		
	9. Control maintained when carrying out emergency braking and within specified distance		
	10. Comply with given speed limits		
	11. Candidate fully within operating cab/area		
	12. Safe place selected during loading/unloading		
	12. Appropriate speed used when approaching loading and discharging points		
	14. Instructions followed during loading/unloading		
	15. Signals adhered to at all times		
	16. Communicated effectively with relevant personnel during all activities		
	17. Safety systems procedures followed		
	18. Ensured loads are secure		
Completing work	19. Train parked in given location following given signals		
	20. Uncouple locomotive from rolling stock at given location		
	21. Ensured uncoupled rolling stock left in safe situation		
	22. Locomotive parked according to given instructions		
Shutdown	23. All shutdown and securing procedures		
Other	24. Legislation, manufacturers' and health and safety requirements complied with		
	25. Test completed within the given time		

All of these items must be awarded Achieved / Not achieved

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AN NOCN JOB CARD

Faults		Candidate incorrectly carried out the following:	Fault	Mark	Penalty
Travelling	1. Tunnel locomotive mounting and dismounting			1	
	2. Identify information from the Operator's Manual			2	
	3. Full observation before moving and reversing			3	
	4. Full observation whilst travelling			2	
	5. Travel speed matched to the track type and conditions			3	
	6. Transmission drive engaged smoothly from rest			2	
Working	7. Train positioned correctly for loading and unloading			2	
	8. Use of directional lights			2	
	9. Smooth use of braking controls			1	
Not exceeded eight penalties			Total penalties		
Achieved / Not achieved					