

# Tracked Loading Shovel

A22

Technical Test – Practical

## RESOURCES

### Required

Machine	<ul style="list-style-type: none"> <li>• Tracked Loading Shovel with:             <ul style="list-style-type: none"> <li>– Clamshell (4 in 1) bucket</li> </ul> </li> </ul>
Area	<ul style="list-style-type: none"> <li>• Ground, clear of hazards which must include:             <ul style="list-style-type: none"> <li>– level area to allow excavations up to 2 metres deep</li> <li>– rough terrain</li> <li>– slope or slopes</li> <li>– a straight run for reversing</li> <li>– spoil/material to load vehicles</li> </ul> </li> </ul>
Other equipment	<ul style="list-style-type: none"> <li>• Load-carrying vehicle for spoil/material</li> <li>• Laser equipped measuring equipment to ensure excavation specifications are met</li> <li>• Items to create restrictions for manoeuvring</li> </ul>
Notes	<ul style="list-style-type: none"> <li>• The machine selected for the test must be in serviceable condition and conform with current legislation</li> <li>• The operator's manual must be with the machine</li> <li>• The slope must have at least an 18% (1:5.5) incline with sufficient manoeuvring room at the top, or a straight ramp with an up and down route with a flat area at the summit</li> <li>• The load carrying vehicle must be rear tipping and have a minimum capacity equivalent to 4 full bucket loads of the loading shovel being used for the test</li> </ul>

### ACTIVITY

#### Instructions

Sequence	<ul style="list-style-type: none"> <li>• Activity 1 must be undertaken at the start of the test</li> <li>• Activity 2 can be undertaken at any time during the test</li> <li>• Activities 4 and 5 can be undertaken in any order</li> <li>• Activity 7 must be undertaken at the end of the test</li> </ul> <p>The test must be completed within a given time. The specifications' section gives further information.</p>
Preparing for work	1. Complete all manufacturers' pre-start and running checks and prepare the loading shovel for travel
Travelling & manoeuvring (refer to specifications)	2. In a loaded and unloaded state: <ul style="list-style-type: none"> <li>– travel up and down the slope</li> <li>– stop and start on the slope in the up direction</li> <li>– travel over rough terrain</li> <li>– reverse (loaded only) in a straight line for a minimum of 30 metres and pass through a restriction at the end of the run</li> </ul>
Setting up for work	3. Prepare and set the loading shovel for the relevant work
Working tasks (refer to specifications)	4. Extract material from below ground level to the specified dimensions and form a stockpile 5. Load material into a vehicle 6. Reinststate the work area back to the original state
Shutting down	7. Park the loading shovel and carry out shut-down and securing procedures
Notes	<ul style="list-style-type: none"> <li>• The stockpile formed by the excavation may be used to load the vehicle</li> <li>• If the machine is hot, checks unable to be carried out (i.e. coolant) may be assessed by the Tester using verbal questions</li> </ul>

#### Activity measurements

Travel restrictions	<ul style="list-style-type: none"> <li>• 800 mm</li> </ul>
Excavation depth	<ul style="list-style-type: none"> <li>• 0.5 metre ±35 mm</li> </ul>
Trench length	<ul style="list-style-type: none"> <li>• 5 x the length of the loading shovel</li> </ul>
Trench width	<ul style="list-style-type: none"> <li>• 2.5 times the width of the bucket</li> </ul>
Loading vehicle	<ul style="list-style-type: none"> <li>• Minimum of eight full bucket loads (vehicle can be re-loaded to achieve this figure)</li> </ul>
Test timings	<ul style="list-style-type: none"> <li>• The test must be completed within 2 hours and 45 minutes</li> </ul>

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<b>Basic details</b>	Test ref.	Candidate name
	Tester name	Candidate ref.
	Tester ref.	Date of test
	Make and model	Start time of test
		Duration

MANDATORY		Correctly carried out during the test?	Y / N
Preparing	1 All pre-start and running checks (or responses to relevant questions)		
Travelling	2 Loading shovel set for travel		
	3 Restrictions and hazards cleared		
	4 Full control maintained when ascending and descending slopes		
	5 No opposite movement of intended direction when restarting on slopes		
	6 Travel direction on slopes		
Setting up	7 Straight line kept during reversing activity		
	8 Allocated area checked and clear of hazards prior to extracting and loading		
Working	9 Excavation conforms to stated sizes and tolerances		
	10 Smooth ramp to the excavation		
	11 Loading vehicle positioning prior to loading		
	12 Vehicle loaded to capacity		
	13 Vehicle evenly loaded but not overloaded		
	14 Spillage of material kept to minimum		
Shutdown	15 Loading shovel stable during activities		
	16 Excavated area reinstated back to the original contours		
Other	17 All shutdown and securing procedures		
	18 Legislation, manufacturers' and health and safety requirements complied with		
	19 Test completed within the given time		
<b>All of these items must be awarded</b>			Achieved / Not achieved

FAULTS		Candidate incorrectly carried out the following:	Fault	Mark	Penalty
Travelling	1	Loading shovel mounting and dismounting		1	
	2	Full observation before moving and reversing		3	
	3	Full observation whilst travelling		2	
	4	Transmission drive engaged smoothly		1	
	5	Travel speed matched to the ground type and conditions		1	
Working	6	Bucket kept low at all times (except during loading work)		2	
	7	Minimised ground damage when turning		1	
	8	Full bucket loads maintained (except for cleaning work)		2	
	9	Material cleanly placed into the loading vehicle		1	
	10	Contact with vehicle avoided when loading		2	
	11	Use of steering/braking/hydraulic controls		1	
<b>Not exceeded 8 penalties</b>			Total penalties		
					Achieved / Not achieved

