

# A22

## Tracked Loading Shovel Intermediate Certificate

### Unit A22 Tracked Loading Shovel

#### Learning outcomes

On completion of this unit, the candidate will be able to:

1. Identify the basic construction, purpose and function of components and the purpose and use of all controls and gauges.
2. Identify and comply with manufacturers' instructions in accordance with the operator's handbook, other information sources and applicable legislation.
3. Carry out all pre-use and running checks.
4. Set the loading shovel for travel.
5. Travel over differing types of terrain, including rough, undulating ground in both a loaded and unloaded state.
6. Travel up and down substantial inclines in a loaded and unloaded state.
7. Manoeuvre in confined areas using forward and reverse direction, in a loaded and unloaded state.
8. Ensure load integrity and security.
9. Explain precautions to be taken for underground and overhead services and other hazards.
10. Carry out excavations from an embankment of different materials and form stockpiles.
11. Load various types of materials into receptacles i.e. vehicles, hoppers etc.
12. Carry out excavations from below ground level.
13. Backfill; spread and level differing types of material using a multi-purpose front bucket.
14. Place the loading shovel in an out-of-service condition.
15. Explain the loading and unloading procedures on and off a transporter.

#### Evidence requirements

To achieve the learning outcomes the candidate must complete a theory test and a practical test.

## Practical Test

### A. Equipment specification

1. Serviceable tracked loading shovel that meets current legislation, fitted with a clamshell type (*4 in 1*) excavating bucket, with the operator's manual.
2. Rear tipping dump truck or tipping lorry, which must have a capacity at least equivalent to 4 full bucket loads of the loading shovel being used for the test.
3. An area of ground, clear of hazards which must include:
  - a) uneven, rough terrain
  - b) a slope(s) not less than 18% (1:5.5) incline having sufficient manoeuvring room at the top and bottom of the incline
  - c) a straight run of at least 30 metres in length
  - d) an area to allow excavations up to 2.0 metres deep.
4. Cones/materials etc., to create restrictions for travelling and manoeuvring.
5. Appropriate marking, sighting and lining equipment to ensure excavation levels.

### B. Exercise specification

The candidate is required to:

1. Carry out full pre-start and running checks as required by the manufacturer.
2. Prepare the loading shovel for travel, and travel to the excavating area.
3. Reduce an area of ground by 0.6 metre  $\times$  35 mm and form a single stockpile. The width of the excavation is to be 2.5 x the width of the bucket, and the length of the excavation is to be 5 x the total length of the loading shovel.
4. Load the vehicle to capacity using material from the stockpile. (*At least 8 full bucket loads must be placed into the vehicle before this item is completed. This may mean that the vehicle may need to be loaded more than once.*)
5. Fill the bucket to capacity and travel up and down the incline.
6. Reverse the loading shovel in a straight line for at least 30 metres, and pass through a restriction of no more than width of the loading shovel plus 800 mm at the end of the run.
7. Reinststate the excavation area back to the original contours, using the applicable functions of the clamshell bucket.
8. Travel the loading shovel to a park position, shut down and secure.

**Note:** Items 5 and 6 may be undertaken during any part of the test.

The practical test is marked using the Operator Assessment Form (sections A and B). The candidate must also complete a theory test paper which is centrally set by Lantra Awards and marked by the assessor. For this unit, there is a maximum of 35 marks available and the pass mark is 80% (28 or more marks for correct answers). The theory test mark is entered on the Operator Assessment Form (section C). Candidates must pass all three sections to achieve the unit.