

Overview

This standard covers the competence required to operate locks and bridges. It is about working under supervision to operate entrance locks to enclosed docks within a port. It includes preparing a lock and a bridge for use, monitoring vessels moving through the locks and bridges and undertaking basic maintenance of lock and bridge equipment.

Target Group

This standard applies to port workers who are required to operate locks and bridges

There are 2 elements in this standard:

- Operate lock systems (Performance Criteria 1-10)
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Operate bridges (Performance Criteria 11-22)

Performance criteria

You must be able to:

1. ensure that the quay area at the sides of the lock pit, and the water area within the lock, are clear of obstructions and hazards before a vessel is accepted into the lock
2. confirm that winches, capstans and sluices are operating to specification before a vessel is accepted into the lock
3. establish and maintain clear and constant contact with the relevant person on the vessel ahead of and during its passage through the lock
4. provide clear instructions to vessels entering the lock as to where they must stop, confirming that these instructions are understood
5. ensure mooring lines from the vessel are secured and at the correct locations, with allowance made for wind conditions and changes in water level
6. use fenders in line with procedure
7. identify and report immediately any risk to a vessel's safe movement through the lock
8. operate all equipment in such a way as to minimise the risk of damage to equipment and vessels
9. report any damage to vessels, lock walls, gates or other equipment
10. refer any difficulties during lock operations immediately to the relevant person
11. prevent all pedestrians and traffic from using the bridge ahead of allowing a vessel through
12. commence movement of the bridge only after confirming that the bridge is clear of all pedestrians, traffic and any obstructions
13. confirm that the quay area at the sides of the bridge, and the water area under the bridge, are clear of obstructions and hazards before a vessel passes through
14. confirm that bridge operating equipment is working to specification before a vessel is accepted to pass through
15. establish and maintain clear and constant contact with the relevant person on the vessel ahead of and during its passage through the water crossed by the bridge
16. provide clear instructions to vessels approaching and passing through as to how to proceed and where they must go, confirming that these instructions are understood
17. move the bridge fully and confirm that vessels have clear access before instructing vessels to proceed
18. identify and report immediately any risk to a vessel's safe movement through the water crossed by the bridge
19. operate all equipment and in such a way as to minimise the risk of damage to equipment and vessels
20. return the bridge fully to its normal position and confirm that it is

- secured before allowing pedestrians and traffic to cross
21. report any damage to vessels, bridge or other equipment
 22. refer any difficulties during bridge operations to the relevant person

Operate locks and bridges

Knowledge and understanding

You need to know and understand:

1. the legal responsibilities for maintaining own and others' health and safety in the workplace
2. the requirements placed upon the individual and the organisation by current legislation, relevant to operating bridges and lock systems, in own area of operations
3. current industry guidance relevant to operating bridges and lock systems, in own area of operations
4. own organisation's policies and procedures and working practices
5. operating bridges and lock systems, in own area of operations
6. the operating capabilities and limitations of the operating bridges and lock systems, in own area of operations
7. the principal terminology and mechanical principles associated with the operation of locks and bridges in ports
8. the principal methods for communicating with vessels
9. the impact of the motion of vessels and tidal range upon lock and bridge operations in ports
10. the organisational requirements for addressing and reporting difficulties, or equipment faults, associated with lock and bridge operations
11. the workplace procedures for dealing with incidents and emergency situations associated with operating locks and bridges and the passage of vessels through them
12. the importance of closing lock gates properly and the impact of not doing so upon lock levels, and the procedures for addressing such an emergency should this occur
13. the local geography and water conditions, including navigable channels and tides, and their impact upon the passage of vessels through locks and bridges

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