

Overview

This standard covers the competence required to coordinate and control the use of port infrastructure and equipment. It is about ensuring that locks and bridges (including weighbridges) are used in a safe and cost effective manner, maintaining an awareness of changing circumstances at all times. It requires knowledge of relevant legislation and procedures and the ability to operate within these constraints.

Target Group

This standard applies to authorised Port Operations supervisors and line managers who have a responsibility to coordinate and control port marine operations.

There are 4 elements in this standard:

1. Coordinate and control lock and lock gate operations
2. Coordinate and control bridge operations
3. Coordinate and control the use of weighbridges
4. Plan and coordinate routine maintenance of port plant and equipment

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Performance criteria

Coordinate and control lock and lock gate operations

You must be able to:

- P1 obtain all information relevant to determining the locking order, including details regarding the nature of vessels, loads, tide and weather conditions
- P2 establish and agree locking requirements in discussion with relevant ship's agents and vessels
- P3 analyse the information and determine the proper locking order
- P4 inform relevant people of probable traffic on the tide
- P5 ensure water levels in the dock are maintained in a safe and cost effective manner, making optimum use of labour, power and equipment
- P6 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
- P7 confirm that winches, capstans and sluices are operating properly before a vessel is accepted into the lock
- P8 ensure clear and constant contact with the relevant person on the vessel ahead of and during its passage through the lock is maintained
- P9 ensure clear instructions are provided to vessels entering the lock as to where they must stop, and it is confirmed that these instructions are understood
- P10 ensure mooring lines from the vessel are secured safely and securely at the correct locations, with proper allowance made for wind conditions and changes in water level
- P11 ensure fenders are used effectively and safely
- P12 identify and report any risk to a vessel's safe movement through the lock
- P13 take relevant action to ensure that health, safety, security and environmental requirements are met
- P14 wear, use and maintain personal protective equipment
- P15 ensure that all equipment is operated properly and carefully, minimising the likelihood of damage to equipment and vessels
- P16 maintain all required records accurately
- P17 prioritise work to make the best use of time and resources
- P18 communicate clearly, precisely and unambiguously and check understanding
- P19 make information available to those who need it
- P20 recognise changes in circumstances and adjust plans and activities accordingly
- P21 seek opportunities to safely improve working procedures and practices

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Coordinate and control bridge operations

- You must be able to:*
- P22 obtain all information relevant to determining bridge operations, including details of vessel movements, the nature of loads, tide and weather conditions
 - P23 establish and agree vessel movement requirements affecting bridge operations in discussion with relevant ship's agents and vessels
 - P24 analyse the information correctly and determine a bridge operation plan
 - P25 ensure 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
 - P26 confirm that bridge operating equipment is working properly before a vessel is accepted to pass through
 - P27 ensure clear and constant contact is maintained with the relevant person on the vessel ahead of and during its passage through the water crossed by the bridge
 - P28 ensure clear instructions are provided to vessels approaching and passing through as to how to proceed and where they must go, and it is confirmed that these instructions are understood
 - P29 ensure bridges are clear of all pedestrians, traffic and any obstructions before commencing movement of the bridge
 - P30 ensure all equipment is operated safely and carefully, minimising the likelihood of damage to equipment and vessels

Coordinate and control the use of weighbridges

- You must be able to:*
- P31 check the weighbridge(s) according to an agreed schedule and confirm that the weighbridge(s) are operating properly
 - P32 identify and address any faults affecting a weighbridge's operational effectiveness and safety
 - P33 establish usage requirements
 - P34 identify the resources necessary to meet usage requirements
 - P35 confirm that the resources are available and coordinate these
 - P36 provide clear instructions and information to relevant colleagues necessary to ensure the availability of the weighbridge(s) when required
 - P37 ensure that the weighbridge(s) are operated in line with organisational procedures
 - P38 identify maintenance requirements and arrange for these to be undertaken according to an agreed schedule

Plan and coordinate routine maintenance of port plant and equipment

- You must be able to:*
- P39 identify the maintenance schedules for plant and equipment, and coordinate the work to ensure that personnel, tools and any specialist equipment are available for the work

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- P40 identify in discussion with plant and equipment operators any defects that they have observed, and record these
- P41 check plant and equipment for defects in line with manufacturers' requirements
- P42 identify any defects that prevent full and effective use of the plant or equipment
- P43 undertake basic servicing and maintenance procedures, within own level of authority and responsibility
- P44 coordinate routine maintenance according to the agreed schedules, and organise it to minimise disruption to operations
- P45 confirm that the plant or equipment to be withdrawn for maintenance is not required for operational purposes throughout the proposed maintenance period
- P46 identify the maintenance period and maintenance requirements of plant and equipment to be maintained, including any items to be replaced and tested, ahead of the work being started
- P47 liaise and coordinate maintenance requirements with relevant specialists, ensuring that they understand the nature of any defects observed and the desired maintenance schedule
- P48 return maintained plant and equipment back into service according to organisation procedure, including testing and issuing certification as appropriate
- P49 inform the relevant persons where satisfactory maintenance of plant and equipment cannot be achieved , ensuring that the item cannot be returned to service unless or until it is fit for purpose
- P50 return maintained and repaired plant and equipment to operations in a clean and tidy condition, and ensure that own work area is also maintained to the correct standards of cleanliness

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Knowledge and understanding

You need to know and understand:

- K1 the legal responsibilities for maintaining own and others' health and safety in your workplace
- K2 the requirements placed upon the individual and the organisation by current legislation, directions and bye-laws
- K3 current industry guidance
- K4 own organisation's policies, procedures and working practices
- K5 the principle types of hazard and risk likely to encountered
- K6 the precautions appropriate for minimising risks
- K7 how to wear, use and maintain personal protective equipment
- K8 how to locate, use and maintain the principle types of safety and incident response equipment
- K9 the accident and emergency procedures of the organisation
- K10 location of and how to operate alarm systems
- K11 procedures for contacting the emergency services
- K12 location of the approved escape routes and assembly points
- K13 the responsibilities as set out by the organisation for reporting accidents and emergencies
- K14 own role, responsibilities and limits of authority
- K15 the roles, responsibilities and limits of authority of others
- K16 how to read and use tidal and chart information
- K17 the principal methods for communicating with vessels
- K18 the impact of the motion of vessels and tidal range upon lock and bridge operations in ports
- K19 the principal terminology and mechanical principles, relevant to: locks, bridges weighbridges and plant and equipment in ports
- K20 the effects of squat, interaction and bank effect upon vessel manoeuvring
- K21 the dimensions, limitations and maintenance requirements of docks, locks, approach channels and bridges
- K22 the power sources and light characteristics of navigation marks
- K23 the types, functions and adjustments of equipment, and regulations governing radio transmission in both normal and emergency situations, and also conditions likely to affect the transmission and reception of signals
- K24 the importance of closing dock gates correctly and the impact of not doing so upon dock levels, and the procedures for addressing such an emergency should this occur
- K25 local geography and water conditions, including navigable channels and tides, and their impact upon the passage of vessels through your lock
- K26 the dimensions, limitations and maintenance requirements of: weighbridges, bridges and approach channels

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- K27 how to operate the principal types of plant and equipment found in own area of operations and what their limitations are
- K28 the possible consequences of operating poorly serviced or unsafe plant or equipment
- K29 how to conduct safe, routine maintenance of the plant and equipment, including pre-start maintenance requirements, operating procedures, defects and faults, and the correct use of lubricants and other fluids

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Additional Information

External Links

This standard is applicable to the coordination and control of lock, bridge and weighbridge operations and to the planning and coordination of routine maintenance of port plant and equipment

The performance criteria, knowledge and understanding requirements are related to the individual's own organisation, job role and area of operations. This includes but is not limited to the individual's immediate place of work. It extends to areas, operations and persons that may be impacted upon by the individual's activity in the workplace.

The performance criteria, knowledge and understanding requirements are specific to the: regulations, industry and other guidance recognised by the individual's employer, employing organisation's objectives, policies, procedures, and working practices; that relate to the elements covered in this standard.

The performance criteria, knowledge and understanding requirements are specific to the individual's own level of authority and responsibility.

Ports and the activities which take place there vary. Employers and any other duty holders must comply with the legal duties imposed on them by health and safety legislation, including the Health and Safety at Work Act 1974. This will also involve careful and continuing risk assessments to enable duty holders to plan, implement, manage and review policies and procedures which address the risks associated with the conduct of their business. The statutory duty of the employee to take reasonable care for the health and safety of themselves and other persons who may be affected by their acts or omissions at work and to cooperate with the employer with regard to the employer's health and safety duties, are an essential part of this standard.

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Developed by Port Skills and Safety

Version number 2

Date approved February 2013

Indicative review date February 2016

Validity Current

Status Original

Originating organisation Skills for Logistics

Original URN PSSSPO103

Relevant occupations Supervision of Ports

Suite Supervision of Port Operations

Key words Supervision of port operations; Port security operations; port safety; ports; vessels