Plan lifting operations in ports



Overview

This standard covers the competence required to plan the transfer and storage of loads. It covers the planning and implementation of a lifting plan where there are large, awkwardly shaped, or very heavy loads which require specialised handling techniques. It is important that relevant sources of information are accessed in order to establish the load characteristics and that an operational plan is developed for loading and discharging in a port environment.

The standard also covers the planning of vessel loading and discharge as well as planning load storage within a port environment. It includes gathering information about the vessel and its resource requirements from various sources, and using this information to assist in developing an operational plan. It also includes gathering information regarding the load and storage operation from various sources. In both cases it includes the use of this information to present a comprehensive plan to those personnel and/or statutory bodies that must be advised.

Target Group

This standard applies to authorised Port Operations supervisors and line managers who have a responsibility to plan lifting and storing operations in ports.

There are 3 elements in this standard:

- 1. Plan and implement a lifting plan
- 2. Plan vessel loading and discharge within a port environment
- 3. Plan load storage within a port environment

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Performance criteria

Plan and implement a lifting plan

You must be able to:

- P1 identify the load to be lifted, and the particular features that planning needs to address
- P2 identify all relevant information, including the nature of the load, whether it is hazardous, its quantity, quality, dimensions and the way it is to be transported as well as any restrictions from labelling and other information provided regarding the load
- P3 identify any gaps in the information required and address these, seeking advice and information from the relevant person(s)
- P4 plan lifts, taking into consideration the nature of the load, safe working practice, the lifting gear required, the destination of the load and timescale
- P5 ensure the method, materials and equipment selected for the lift are suitable for the nature of the load, the planned work areas, and the lifting operation
- P6 anticipate where specialised services may be needed, or where circumstances may require contingencies to be planned, making the appropriate and reasoned recommendations for action to the relevant person
- P7 make contact and work with relevant statutory bodies and other personnel, where required
- P8 identify providers of specialist services, where necessary, and confirm that they can meet operational requirements
- P9 confirm that all lifting equipment, materials and lifting points are safe and working properly before beginning the lift
- P10 confirm that the load to be lifted is secure and will not shift during the lift
- P11 report any difficulties, including defective materials and equipment, in line with organisational procedures
- P12 communicate clearly, precisely and unambiguously, checking understanding and make information available to those who need it
- P13 ensure all relevant communications systems are confirmed as working properly
- P14 ensure any obstructions on the route of the lift are cleared in advance of lifting operations
- P15 ensure lifts are undertaken correctly and safely
- P16 prioritise work to make the best use of time and resources
- P17 recognise changes in circumstances promptly and adjust plans and activities accordingly
- P18 seek opportunities to safely improve working procedures and practices
- P19 take personal responsibility for making things happen

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Plan vessel loading and discharge within a port environment

You must be able to:

- P20 obtain all relevant information required to establish the characteristics of the vessels to be loaded/discharged, including where applicable, any loading/discharge plans prepared by vessel staff
- P21 address any problems in obtaining suitable and sufficient information
- P22 assess the requirements for load handling and/or lifting equipment, as well as appropriate safety, anti-pollution and waste disposal equipment
- P23 identify port and vessel berthing equipment, and appropriate method(s) of loading/discharging the vessel
- P24 assess the load characteristics and determine correctly the nature of any specialist services that may be required
- P25 identify and confirm the availability of all required facilities and resources, referring any difficulties to the relevant person
- P26 prepare vessel loading/discharge plans, identifying potential areas of uncertainty and agreeing contingency plans designed to address these
- P27 agree own plans with all relevant people, including appropriate vessel staff
- P28 ensure that the plan sets out the systems for loading and discharging loads, taking into account the characteristics of the vessel and the load, including, where relevant, the presence of any dangerous goods, and the resources available
- P29 communicate the plan to all relevant people, and in sufficient time to meet operational needs, agreeing individual actions and responsibilities with all relevant people

Plan load storage within a port environment

You must be able to:

- P30 obtain all relevant information required to determine the amount and type of storage required for loads, including relevant details regarding the need for the load to be covered, any temperature and atmospheric controls, volume of space, height/weight restrictions, storage duration, proximity to transport, and security
- P31 identify and assess service requirements, relating to the loads to be stored
- P32 identify the characteristics of the required storage facility, and establish their availability
- P33 prepare load storage plans setting out the actions to be undertaken, resources required, and identifying potential areas of uncertainty and the contingencies designed to address these
- P34 identify any difficulties in preparing plans and address these, referring them where necessary to the relevant person
- P35 agree load storage plans with the appropriate person
- P36 confirm the availability of the required facilities and resources, referring any difficulties to the relevant person

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- P37 document required information, legibly and accurately, including load/discharge, delivery/receipt details, work schedules, labour costs and port manifests
- P38 communicate the agreed plan to all relevant parties, including statutory bodies where necessary, and in sufficient time to meet operational needs
- P39 ensure cargo storage operations comply with safe working procedures and health and safety requirements
- P40 prioritise work to make the best use of time and resources
- P41 recognise changes in circumstances and adjust plans and activities accordingly

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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 related to lifting and storage operations in ports
- K3 current industry guidance, relating to lifting operations in ports
- K4 own organisation's policies, procedures and working practices that relate to lifting and storage operations in ports including those relating to loading/unloading of dangerous goods, vessels, vehicles and rail
- K5 the principle types of hazard and risk associated with lifting and storage operations in ports
- K6 the precautions appropriate for minimising the risks associated with lifting and storage operations in ports
- K7 how to wear, use and maintain personal protective equipment, relevant to lifting and storage operations in ports
- K8 how to locate, use and maintain the principle types of safety and incident response equipment relevant lifting and storage operations in ports
- K9 the accident and emergency procedures of the organisation and individual roles and responsibilities, relevant to own area of operations, relating to lifting operations in ports
- 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 own responsibilities for reporting accidents and emergencies
- K14 the limits of own responsibilities when planning and managing lifting operations
- K15 roles and responsibilities of others in own area of operations, relating to lifting operations in ports
- K16 the operating procedures, capabilities and limitations, of the principal types of lifting plant found in ports, procedures for checking lubricants and other fluids, and the importance of reporting any faults and defects
- K17 the principal characteristics of the main types of loads, including their nature and weight, and whether they are hazardous or non-hazardous
- K18 the factors that can affect the stability and security of loads when being transferred, and how these can be affected by environmental conditions
- K19 the capabilities, including capacity and strength of the principal types of slinging and lashing materials and the implications of using defective or faulty materials
- K20 methods of safe slinging and unslinging loads, including angles of operations and what constitutes a safe working load
- K21 signalling procedures and techniques, including the interpretation of

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- hand signals in slinging operations
- K22 how to interpret coding systems, relating to lifting equipment
- K23 how to interpret the information found on load labels and documentation
- K24 the typical cargo problems including those relating to stability
- K25 the different classifications of dangerous goods
- K26 the principles of effective warehousing and storage
- K27 the measurement systems typically used in own organisation, including: metric, imperial, volume, capacity, weight, TEU (twenty-foot equivalent units)
- K28 the roles and responsibilities of the relevant statutory authorities
- K29 the organisation's working methods and systems for receiving, handling and despatching cargo
- K30 the sources of information and assistance on lifting operations and how to interpret and evaluate the information
- K31 how to identify and clarify customer requirements
- K32 the principal vessel types, terminology and characteristics

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Additional Information

External Links

This standard is applicable to planning and implementing a lifting plan, planning vessel loading and discharge and planning load storage within a port environment.

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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