
Overview

This standard is about interpreting information, adopting safe, healthy and environmentally responsible work practices and selecting components and equipment, preparing lifting accessories for slinging, attaching and securing loads and signalling the movement of suspended loads to guide them to an agreed destination and leaving the load in a safe condition

This standard is for people working independently or in a team to prepare and sling loads and signal movement to operators of plant or machinery that lift and transfer suspended loads. This standard can be used by operatives, supervisors and managers.

Performance criteria

- You must be able to:
- P1 interpret the given operating information relating to the use of plant or machinery and confirm its relevance
 - P2 organise with others the sequence in which the work is to be carried out
 - P3 comply with the relevant, current legislation, special legal status documents, official guidance and organisational procedures to maintain safe and healthy work practices
 - P4 select plant or machinery resources for the methods of work and operations to be carried out
 - P5 comply with organisational procedures to minimise the risk of damage to the work and surrounding area
 - P6 comply with the given contract information to carry out the work efficiently to the required specification
 - P7 complete the work within the allocated time, in accordance with the programme of work

Knowledge and understanding

Performance Criteria 1

Interpretation of information

You need to know and understand:

- K1 the organisational procedures developed to report and rectify inappropriate **information** and unsuitable **resources**, and how they are implemented
- K2 the types of **information**, their source and how they are interpreted
- K3 the organisational procedures to solve **problems** with the **information** and why it is important they are followed

Performance Criteria 2

Organise with others

You need to know and understand:

- K4 **communication** of ideas between team members
- K5 organisation of **resources** in conjunction with the progress of work
- K6 the **skills** required to carry out the work

Performance Criteria 3

Safe work practices

You need to know and understand:

- K7 the level of understanding operatives must have of **information** for relevant, current **legislation, Approved Codes of Practice and official guidance** and how it is applied
- K8 how **emergencies** should be responded to and who should respond
- K9 the organisational **security procedures** for plant and/or machinery, tools, equipment and personal belongings
- K10 what the accident reporting procedures are and who is responsible for making the report
- K11 why, when and how **health and safety control equipment** should be used
- K12 how to comply with environmentally responsible work practices to meet the requirements of current **legislation and official guidance**

Performance Criteria 4

Selection of resources

You need to know and understand:

- K13 the characteristics, quality, uses, sustainability, limitations and defects associated with plant **resources** and how defects should be rectified
- K14 how the **resources** should be used and how any **problems** associated with the **resources** are reported
- K15 the organisational procedures to select **resources**, why they have been developed and how they are used
- K16 the **hazards** associated with the **resources** and **methods of work** and how they are overcome

Performance Criteria 5

Minimise the risk of damage

You need to know and understand:

- K17 how to **protect work** from damage and the purpose of protection
- K18 why **disposal of waste** should be carried out safely and how it is achieved

Performance Criteria 6

Meet the contract specification

You need to know and understand:

- K19 how **methods of work**, to meet the specification, are carried out and **problems** reported
- K20 how **maintenance** of plant and/or machinery, tools and equipment is carried out

Performance Criteria 7

Allocated time

You need to know and understand:

- K21 what the **programme** is for the work to be carried out in the estimated, allocated time and why deadlines should be kept

Additional Information

Scope/range related to performance criteria

Performance Criteria 1

- 1 interpretation of drawings, specifications, schedules, risk assessments, method statements (lift plans), and manufacturers' information related to the plant or machinery operations and the work to be carried out

Performance Criteria 2

- 2 organisation of own work
- 3 communication with team members and other associated occupations about the plant or machinery operation and the work to be carried out

Performance Criteria 3

- 4 avoidance of risk by complying with the given safety information relating to at least five of the following
 - 4.1 methods of work
 - 4.2 safe use of health and safety control measures
 - 4.3 safe use and storage of tools and equipment
 - 4.4 safe use, storage and handling of lifting accessories
 - 4.5 safe use of access equipment
 - 4.6 specific risks to health

Performance Criteria 4

- 5 selection of resources associated with own work
 - 5.1 lifting accessories, lifting aids, hand tools and ancillary equipment
 - 5.2 signalling and communication equipment

Performance Criteria 5

- 6 protection of the work and its surrounding area from damage
- 7 prevent damage and maintain a clean work space
- 8 disposal of waste in accordance with current legislation

Performance Criteria 6

- 9 demonstration of work skills to measure, gauge, estimate, calculate, fit, fix, test, balance, interpret, inspect, judge, explain, prepare, indicate, inform, instruct, sign, position, adjust, configure, move, secure, signal and relay
- 10 use and maintain lifting accessories, lifting aids and signalling and communication equipment
- 11 inspect and prepare lifting accessories prior to slinging
- 12 sling and signal for the lifting and movement of loads by plant or machinery operations to given working instruction, either by occupation specific slinging and signalling – at least three of the following, or by slinging and signalling as an occupation – all of the following
 - 12.1 balance
 - 12.2 unbalanced
 - 12.3 loose
 - 12.4 bundled
 - 12.5 container
 - 12.6 drum
 - 12.7 a load where the machine operator cannot observe its full movement path
- 13 guide, move and place suspended loads to agreed destinations to given working instructions using hand signals, plus, for slinging and signalling as an occupation, the following methods
 - 13.1 hand signalling equipment
 - 13.2 electronic communication equipment

Performance Criteria 7

- 14 completion of own work within the estimated, allocated time to meet the needs of other occupations and/or client

Scope/range related to knowledge and understanding

Communication

- 1 discussions, sketches, electronic data and briefings, signalling and radio communication

Disposal of waste

- 2 environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance

Emergencies

- 3 operative's response to situations in accordance with organisational authorisation and personal skills when involved with
 - 3.1 fires, spillages, injuries
 - 3.2 emergencies relating to occupational activities

Hazards

- 4 those identified by risk/COSHH assessments, method of work, manufacturers' technical information, statutory regulations and official guidance

Health and safety control equipment

- 5 identified by the principles of prevention for occupational use, types and purpose of each type, work situations and general work environment
 - 5.1 collective protective measures
 - 5.2 local exhaust ventilation (LEV)
 - 5.3 personal protective equipment (PPE)
 - 5.4 respiratory protective equipment (RPE)

Information

- 6 drawings, specifications, schedules, method statements, risk assessments, lift plans, work instructions, manufacturers' information, approved procedures and Codes of Practice

Legislation, Approved Codes of Practice and official guidance

- 7 this relates to the operative's responsibilities regarding potential accidents, health hazards and the environment whilst working in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting

Maintenance

- 8 operative care of lifting accessories, lifting aids and signalling and communication equipment

Methods of work

- 9 application of knowledge for safe and healthy work practices, procedures and skills relating to the method/area of work and materials used to
 - 9.1 identify the differences between: slinging and signalling, directing and guiding movement of vehicles, plant and machinery; and directing and guiding operations of plant and machinery not being used for lifting operations
 - 9.2 confirm the authority, duties and responsibilities allocated
 - 9.3 identify characteristics of lifting equipment and lifting accessories
 - 9.4 identify and interpret valid certification for maintenance, inspection and thorough examination
 - 9.5 lift and transfer people
 - 9.6 sling, balanced, unbalanced, loose, live, bundled, container drum loads and loads that are blind to the equipment operator
 - 9.7 communicate using hand signals, hand signalling equipment (lights, wands, fluorescent gloves, flags) and electronic communication equipment (loud hailers, radios)
 - 9.8 confirm methods of communication
 - 9.9 recognise blind-spots, potential crush zones and other limitations to driver visibility
 - 9.10 consider the load characteristics including centre of gravity and lifting points to determine the method of slinging
 - 9.11 determine and check the route of the load before and during the lift including distances, clearances and landing position
 - 9.12 select, handle, inspect and use (assemble, set up and adjust) lifting accessories and aids
 - 9.13 identify rejection criteria for removing lifting accessories from service
 - 9.14 recognise and determine when specific skills and knowledge are required and report accordingly
 - 9.15 attach lifting accessories and sling loads securely
 - 9.16 ensure balance and stability of loads
 - 9.17 attach and use load guidance equipment (tag lines)
 - 9.18 guide and place suspended loads by recognised methods of communication and agreed operational procedures
 - 9.19 land and position loads safely and securely

9.20 remove, disassemble and store lifting accessories

9.21 use hand tools and ancillary equipment

10 team work and communication

11 needs of other occupations associated with slinging and signalling the movement of suspended loads

Problems

12 those arising from information, resources and methods of work

12.1 own authority to rectify

12.2 organisational reporting procedures

Programme

13 types of progress charts, timetables and estimated times

14 organisational procedures for reporting circumstances which will affect the work programme

Protect work

15 protect work against damage from general workplace activities, other occupations and adverse weather conditions

Resources

16 materials, components and equipment relating to types, quantity, quality, sizes and the sustainability of standard and specialist

16.1 lifting accessories

16.2 signalling and communication equipment

16.3 hand tools and ancillary equipment

17 identify weight, quantity, length and area associated with the method/procedure for slinging and signalling the movement of suspended loads

Security procedures

18 site, workplace, company and operative

Skills

19 own occupation and occupations related to the work

COSVR402 – SQA Unit Code HN2C 04

Slinging and signalling the movement of suspended loads

Developed by ConstructionSkills

Version number 2

Date approved July 2014

Indicative review date July 2019

Validity Current

Status Original

Originating organisation ConstructionSkills

Original URN VR402

Relevant occupations Mobile Machine Drivers and Operatives

Suite Controlling Lifting Operations; Accessing Operations and Rigging (Construction); Cladding Occupations (Construction); Construction Diving Operations; Construction Operations and Civil Engineering Services; Demolition; Drilling Operations; Erection of Precast Concrete (Construction); Formwork (Construction); Innovative/Modern Methods of Construction; Mastic Asphaltting (Construction); Piling Operations (Construction); Plant Installation (Construction); Plant Operations (Construction); Removal of Hazardous and Non-hazardous waste (Construction); Site Logistics (Construction); Specialist Concrete Operations (Construction); Specialist Installation Occupations (Construction); Steelfixing (Construction); Stonemasonry (Construction); Sub-structure Work Occupations (Construction); Super-structure Work Occupations (Construction); Temporary Traffic Management (Construction); Thermal Insulation (Construction); Tunnelling Operations (Construction); Wall and Floor Tiling (Construction); Wood Occupations (Construction)

Key words Radio communication; Lifting equipment; Lifting aids, Signalling and communication equipment; Hand signalling equipment
