Operate and control operations of road plant, machinery or equipment for laying slurry micro-surfacing

Overview

This standard is about interpreting information, adopting safe, healthy and environmentally responsible work practices, selecting and using materials, components and tools, preparing, setting up and completing pre-use checks and operating plant, machinery or equipment for preparing, laying and finishing slurry micro-surfacing.

This standard is for people working independently or as part of a team in the occupational area of pavement construction and maintenance and can be used by operatives, technicians, supervisors, managers.
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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 request resources to sustain plant or machinery operations to complete the programme of work
P5 select plant or machinery resources for the methods of work and operations to be carried out
P6 comply with organisational procedures to minimise the risk of damage to the work and surrounding area
P7 comply with the given contract information to carry out the work efficiently to the required specification
P8 complete the work within the allocated time, in accordance with the programme of work
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Knowledge and understanding

You need to know and understand:

Performance Criteria 1

Interpretation of information

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

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

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 the types of fire extinguishers and how and when they are used
K9 how emergencies should be responded to and who should respond
K10 the organisational security procedures for plant and/or machinery, tools, equipment and personal belongings
K11 what the accident reporting procedures are and who is responsible for making the report
K12 why, when and how health and safety control equipment should be used
K13 how to comply with environmentally responsible work practices to meet the requirements of current legislation and official guidance
Performance Criteria 4

Request resources

K14 the organisational procedures for requisitioning consumables and other resources

Performance Criteria 5

Selection of resources

K15 the characteristics, quality, uses, sustainability, limitations and defects associated with plant resources and how defects should be rectified
K16 how the resources should be used and how any problems associated with the resources are reported
K17 the organisational procedures to select resources, why they have been developed and how they are used
K18 the hazards associated with the resources and methods of work and how they are overcome

Performance Criteria 6

Minimise the risk of damage

K19 how to protect work from damage and the purpose of protection
K20 why disposal of waste should be carried out safely and how it is achieved

Performance Criteria 7

Meet the contract specification

K21 how methods of work, to meet the specification, are carried out and problems reported
K22 how maintenance of plant and/or machinery, tools and equipment is carried out
Performance Criteria 8

Allocated time

K23 what the programme is for the work to be carried out in the estimated, allocated time and why deadlines should be kept
Scope/range

Performance Criteria 1

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

Performance Criteria 3

4 avoidance of risk by complying with the given safety information relating to the following
   4.1 methods of work
   4.2 safe use of health and safety control equipment
   4.3 safe use, storage and handling of plant, machinery, equipment and tools
   4.4 safe use, storage and handling of materials
   4.5 specific risks to health

Performance Criteria 4

5 follow organisational procedures for the requisition of consumables, materials and other resources

Performance Criteria 5

6 selection of resources associated with own work
   6.1 tools and ancillary equipment and/or accessories

Performance Criteria 6
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7 protection of the work and its surrounding area from damage
8 maintain a clear and tidy work space
9 disposal of waste in accordance with current legislation

Performance Criteria 7

10 demonstration of work skills to check, set up, adjust, align, communicate, operate and control
11 use and maintain hand tools, ancillary equipment and accessories
12 prepare, operate, or control the operations of at least one of the following items of plant, machinery or equipment to given working instructions
   12.1 applicator steersman reacting to signals to maintain speed, direction and line
   12.2 applicator operator maintaining feed, spread of materials and communicating with steersman
   12.3 slurry supply tanker operator collecting and delivering materials to the applicator
   12.4 tipper grab operator collecting and delivering materials to the applicator
   12.5 roller operator ensuring embedment of mix and continuity of joints
13 shut down and secure plant, machinery or equipment

Performance Criteria 8

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

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<thead>
<tr>
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<th>Communication</th>
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<td>discussions, sketches electronic information and briefings</td>
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<th>Disposal of waste</th>
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<tr>
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<td>fires, spillages, injuries</td>
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<td>3.2</td>
<td>emergencies relating to occupational activities</td>
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<tr>
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<td>water, CO2, foam, powder and their uses</td>
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<td>those identified by methods of work, risk and Control of Substances Hazardous to Health (COSHH) assessments, manufacturers' technical information, statutory regulations and official guidance</td>
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<td>identified by the principles of prevention for occupational use, types and purpose of each type, work situations and general work environment</td>
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assessments, manufacturers' information, verbal, written and graphical instructions, current regulations and official guidance governing the operation of plant, machinery, equipment and accessories for slurry micro-surfacing

**Legislation, Approved Codes of Practice and official guidance**

8 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 and storage of materials and by manual handling and mechanical lifting

**Maintenance**

9 operative care of plant or machinery, hand tools, ancillary equipment and/or accessories

**Methods of work**

10 application of knowledge for safe and healthy work practices, procedures and skills relating to the method and area of work and materials used to
10.1 identify installation requirements
10.2 conform to agreed specifications
10.3 confirm the area and location of work, the operations, safety and security requirements including temporary traffic management and immediate area protection
10.4 identify the workability of slurry micro-surfacing materials
10.5 prepare, set up and carry out pre-start and running checks of the plant, machinery and equipment
10.6 check and monitor ambient conditions and adjust work in relation to prevailing weather conditions
10.7 recognise the test criteria for slurry micro-surfacing materials
10.8 screed slurry micro-surfacing materials to finished level
10.9 protect and work around street furniture and ironwork
10.10 carry out and control operations according to your role and the required performance of plant, machinery and equipment
10.11 recognise the duties of other operatives, applicator steersman, applicator operator, slurry supply tanker operator, tipper grab operator and roller operator to ensure cohesive operations
10.12 recognise, monitor and control processes e.g. treatment and preparation of joints, line, level, thickness, embedment and finishes
10.13 return infrastructure to operational status
10.14 recognise and determine when specialist skills and knowledge are required and report accordingly
10.15 record and report, machine operation factors, work progress and completions
10.16 shut down and secure plant, machinery and equipment
10.17 use hand tools, ancillary equipment and accessories
11 team work and communication
12 needs of other occupations associated with operating plant, machinery and equipment for laying slurry micro-surfacing

Problems
13 those arising from information, resources and methods of work
13.1 own authority to rectify
13.2 organisational reporting procedures

Programme
14 types of productivity targets and time scales
15 how times are estimated
16 organisational procedures for reporting circumstances which will affect the work programme

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

Resources
18 materials, components and equipment relating to types, quantity, quality, sizes and the sustainability of standard and/or specialist
18.1 consumables, lubricants and fuels
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18.2 attachments
18.3 slurry micro-surfacing materials
18.4 hand tools, ancillary equipment and accessories
19 identify weight, pressure, quantity, length and area associated with the method and procedure to operate plant, machinery and equipment for laying slurry micro-surfacing
20 how to confirm resources and materials conform with agreed specification

Security procedures

21 site, workplace, company and operative

Skills

22 own occupation and occupations related to the work
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