

## Recover Heavy Vehicles Using Advanced Winching Techniques

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### Overview

This standard is about recovering vehicles using advanced winching techniques. For the purpose of this standard heavy vehicles are vehicles of 3500kgs gross vehicle mass (GVM) and above.

## Performance criteria

You must be able to:

1. keep accurate and up-to-date records as required by relevant legislation
2. identify and wear suitable Personal Protective Equipment (PPE) which complies with legislation and industry codes of practice
3. safeguard and maintain your own health and safety and that of those likely to be affected by your work in accordance with current legislation in relation to preparing a winching operation
4. meet relevant legislative, organisational and environmental requirements relevant to preparing the winching operation
5. comply with any existing site risk assessments and carry out a dynamic risk assessment
6. maintain the security of machinery and equipment on site
7. gain access to the equipment safely and get into a secure working position when carrying out off-the-ground activities
8. carry out routine operator maintenance on the winch unit to include power unit, drive system (shaft, chain, hydraulic, electrical or direct drive), braking system, other moving parts and guarding, as appropriate to machine used, following manufacturer's recommendations
9. carry out pre-start checks, deploy the winch cable a distance and carry out a practical check on all operating functions of the equipment including safety devices, winch controls, clutches and brakes, as appropriate, prior to winching
10. agree the signaling system with the winch operator and banksman as appropriate
11. deploy winch cable avoiding obstacles to the winching process
12. assess the operational and environmental requirements for the site and plan safe and efficient winch route
13. identify (and calculate) the different resistances to winching when recovering a vehicle

## Knowledge and understanding

You need to know and understand:

1. your own role in company working practices and industry good practice relevant to preparing a winching operation
2. how and why to initiate and maintain effective communication when preparing a winching operation
3. the implications of working at height in relation to routine operator checks and basic maintenance
4. how to identify hazards and comply with the control procedures of risk assessments in relation to preparing a winching operation
5. emergency planning and procedures for the site
6. the principles of winch theory, resistances to winching a casualty and stabilisation of the recovery vehicle
7. the methods used to change direction of pull or increasing the pull of the winch
8. causes of, and how to prevent potential pollution and environmental damage when preparing a winching operation
9. the function of all operating controls for a winch
10. the principles of powered winch operation and the loads to be applied, including the multiplication of forces when pulleys, snatch blocks, strops and anchor points are used
11. the points to inspect on the cable and terminal fixings, the range and signs of possible cable damage and the limits to cable wear and tear that are acceptable for winching
12. the bearing capacity of pulley anchor strops in various configurations
13. the safety clearance/safety zone from the cable that should be respected
14. the capabilities, limitations and methods of operating the winch on steep ground
15. the types of winch used to recover heavy vehicles
16. the types of winch ropes used to recover heavy vehicles
17. the ancillary equipment used when winching a heavy vehicle

**Scope/range**

**Scope of this standard**

1. Ancillary equipment:

- a) shackles
- b) snatch blocks
- c) chains
- d) strops
- e) capston

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