

Introduction

This leaflet explains the procedures which should be followed to ensure the safe use of portable posthole borers and rock drills in forestry and other tree work.

You can use this leaflet, along with the manufacturer's handbook, as part of the risk assessment process to help identify the controls to put in place when using borers and drills driven by a petrol motor or compressed air.

You must also assess the effect of the site and the weather as well as following this guidance.

Users of posthole borers and rock drills should be particularly aware of the potential hazards from exposure to noise and vibration.

All operators must have had appropriate training in how to operate the machine and how to carry out the tasks required (see AFAG leaflet 805 *Training and certification*).

Personal protective equipment (PPE)

- 1 Use the following PPE:
 - Hearing protection (complying with EN 352).
 - Eye protection (a mesh visor complying with EN 1731 or safety glasses/visor to EN 166).
 - Gloves.
 - Protective boots with good grip and ankle support (complying with BS EN 20345).
 - Non-s snag outer clothing appropriate to the prevailing weather conditions. The use of high-visibility clothing may also be appropriate.
- 2 Each person should carry a first-aid kit including a large wound dressing (see HSE leaflet INDG214 *First aid at work: Your questions answered*).
- 3 Hand-cleaning material such as waterless skin cleanser or soap, water and paper towels should be readily available.

Manual handling

- 4 Follow best practice when manual handling (see HSE leaflet INDG145 *Watch your back*).
- 5 Do not attempt to carry too much and adjust the load to suit the site conditions.
- 6 Lift the power tool using the leg and arm muscles. Keep the back straight.
- 7 Where equipment is designed to be operated by more than one person, work in a co-ordinated way and understand each role.

Hand-arm vibration

- 8 Be aware of the long-term effects of vibration when operating hand-held power tools.
- 9 Select equipment with reduced vibration levels and maintain equipment properly, eg motors, anti-vibration mounts and condition of cutters.
- 10 Minimise exposure to vibration by reducing the time individuals use the equipment, eg by job rotation.

Fuelling

- 11 Petrol vapour is invisible and can travel considerable distances from spillage or fuelling sites. Maintain a safe distance from all sources of ignition at all times.
- 12 Store fuel to avoid vapour ignition from any source such as fires, people smoking or the posthole borer. Select a site shaded from direct sunlight.
- 13 Use fuel containers that incorporate a non-spill spout. The containers must be clearly labelled and have caps which fit securely.
- 14 Move a safe distance (normally at least 4 m) from the fuelling point before starting the posthole borer.

Preparing to work

- 15 Select the correct auger for the type of operation and ground (see Figure 1).
- 16 Check the hydraulic pipes and the shear pins of the posthole borer for damage and wear.
- 17 Make sure all guards are maintained in position and in good order.
- 18 Where a compressor is required make sure it is in a secure position. Air lines must be kept free of tangles and away from sharp objects.
- 19 Check the work area to locate the position of any underground hazards and services, eg water and gas pipes, electric and other cables etc. Where present ensure they are clearly marked.
- 20 Inspect the work area thoroughly and remove any hazardous material.
- 21 Ensure the machine is in a safe working condition.

Operating the machine

- 22 Start the machine according to the manufacturer's instructions.
- 23 Ensure the auger is stationary when the engine is idling.
- 24 Maintain the correct auger speed and/or drilling pressure for the conditions encountered. Do not force the bit.
- 25 On sloping ground, adopt a safe comfortable stance at the site to be drilled, keeping the feet well clear.
- 26 Allow the auger or drill bit to rotate when removing from the hole. Maintain a comfortable stance.
- 27 Switch off the engine before clearing the auger of any unwanted material.

Routine maintenance

- 28 Check all nuts, bolts and screws for tightness at least twice daily.
- 29 Check tips and cutters for wear and damage daily.
- 30 Check the oil level in the reduction gearbox daily.
- 31 Ensure any defects are rectified before further use.

