



PUWER 98: How the Regulations apply to agriculture and forestry

Agriculture Information Sheet No 27

Introduction

This information sheet gives advice to employers, the self-employed and contractors in agriculture and forestry on the requirements of the Provision and Use of Work Equipment Regulations 1998 (PUWER 98). It relates in particular to:

- regulation 6, which deals with the inspection of work equipment. It came into force for both new and existing work equipment on 5 December 1998;
- regulation 9, with guidance for the training of drivers of self-propelled machinery and for those who use chainsaws on or in trees, who should now hold a certificate;
- regulations 25 to 30, which deal with aspects of mobile work equipment. New mobile work equipment taken into use from 5 December 1998 needs to comply immediately.

The requirements of PUWER 98 apply to employers, the self-employed and people in control of work equipment.

This information sheet **does not** cover all of the Regulations or Approved Code of Practice (ACOP). It aims to provide guidance on those new parts which apply to general agricultural and forestry operations and for which explanation is needed. Details of the complete PUWER 98 Regulations, ACOP and Guidance can be found in the 'References' section.¹

Regulation 6: Inspection of work equipment

Where significant risk could result from incorrect installation, work equipment should be inspected after it is installed.

Inspection at suitable intervals will also be needed where deterioration during use could lead to significant risk (ie people being killed or seriously injured). Such inspections would not include items covered by an operator's daily pre-use checks or items already covered in a routine maintenance programme, eg inspection of safety cab or roll bar structures for weakening due to rust.

Work equipment should also be inspected following exceptional circumstances such as accident damage or major modifications, which could lead to significant risk to the operator, eg a damaged tractor roll bar and/or damage to anchorage points following overturning.

Regulation 9: Training

Driver training

Self-propelled work equipment, including any attachments or towed equipment, should only be driven by workers who have been trained to drive it safely.

In agriculture and forestry this covers a vast range of equipment in daily use. Keeping records of training can help to show you are meeting your duties under this requirement. Contractors in particular should take advantage of competence assessment schemes such as the forestry machine operator certification scheme to show competence when engaged to work in someone else's business.

Chainsaws

Adequate training of the operator is essential to enable any work involving chainsaws to be carried out safely.

From 5 December 1998 anyone working with chainsaws **on or in trees** is expected to hold a certificate of competence or national competence award relevant to the work they undertake, with one exception.

The exception is on agricultural holdings where the work is done as part of agricultural operations (eg hedging, clearing fallen trees, pruning trees to maintain clearance for machines etc) **and** is done by the occupier or an employee **and** they have used a chainsaw before 5 December 1998. So:

- contractors working with chainsaws on or in trees as part of agricultural operations (eg hedging etc) should hold a certificate/award; and
- anyone involved in commercial forestry and woodland operations (including farm forestry schemes and woodland restoration) that take place on an agricultural holding should hold a certificate/award.

Regulations 25-30: Mobile work equipment

These regulations cover certain aspects of safety relating mainly to risks arising from mobile work equipment when it is travelling.

Remember that for existing equipment (in use before 5 December 1998), the requirements came into force on **5 December 2002**.

Regulation 25: People carried on mobile work equipment

Nobody should be carried on mobile work equipment unless it is suitable for carrying people.

- People should only be carried in a tractor or self-propelled machine where there is enough space for them to be carried safely and not hinder the driver's operations, eg where there is a proprietary passenger seat.
- Nobody should ride on a tractor linkage, or drawbar or steps of any mobile machine.
- No passengers should be carried on an ATV quad bike. Passengers can be carried on other all-terrain vehicles where a conventional seat and seat belts are provided.

People riding on mobile equipment, including the driver, should be protected from falling out and from unexpected movement while being carried.

Under exceptional circumstances, mobile work equipment such as trailers may be used to carry people although they are not specifically designed to do so. Only carry people on trailers where:

- the sides are high enough to stop them falling out; and
- they can mount and dismount safely.

Trailers carrying passengers for planned purposes such as farm tours will need to comply with higher standards, eg have seating, mounting points and safe containment. For more detailed advice consult your local HSE inspector and Agriculture Information Sheet AIS36.²

Regulation 26: Rolling over of mobile work equipment

If mobile equipment can roll over in use, rollover protective structures (ROPS) are required to protect the people carried from being crushed, should rollover occur. Seat restraints are also required where there is a risk of being crushed during rollover. However there are certain situations where this regulation need not apply.

You should assess the risk to your employees from any mobile work equipment rolling over. Depending on the level of risk identified, you should apply whichever of the following is necessary to minimise that risk:

- stabilising the work equipment, eg by extending wheel widths and/or fitting counterbalance weights;
- fitting a structure which ensures that work equipment does no more than tip onto its side, eg a mast or roll bar;

- fitting a structure which gives enough clearance to safeguard anyone carried if the mobile equipment is likely to overturn more than 90°, eg a roll bar, safety frame or protective cab; or
- fitting an alternative device giving comparable protection.

In most situations a combine harvester is unlikely to overturn so extra protection will not be needed, but a ride-on mower used on slopes might need extra protection. Any vehicle used on steep land or banks could be subject to this requirement.

In agriculture and forestry if you have a tractor which complies with the Agriculture (Tractor Cabs) Regulations 1974, this will be enough to comply with this requirement, except that seat belts may be needed where it is reasonably practicable to fit them and there is a risk of crushing between the machine and the ground. See AIS37 for more information on seat belts.³

Any such structure or device must be strong enough for the purpose, for example, forestry tree harvesters converted from tracked excavators need to have a cab to protect the operator from being crushed if the excavator were to overturn onto its side.

Protective structures will not be needed if:

- the device would increase the overall risk to safety. For example this would be the case with a motorbike or an ATV quad bike and could be the case with an amphibious vehicle. However, you will need to make a specific risk assessment to establish this and also need to address the risks by some other means, eg using a different vehicle or formal training and wearing helmets; or
- it would not be reasonably practicable to operate the mobile work equipment with such a device fitted. This could include the use of a tractor in and around a low building such as a glasshouse, or in orchards or hop gardens, and going to and from such use where no safer machine or method can be used; or
- it is not reasonably practicable to fit any such device on a particular item of work equipment (usually for structural strength reasons) and that item was purchased for use in the business before 5 December 1998.

Regulation 26 means that if you own an existing machine (eg a tractor) with no cab or rollover protective structure, you could need to fit some sort of protective structure where there is a risk of rolling over and where it is reasonably practicable to do so on equipment that was in use before 5 December 1998.

A seat restraint should be provided on mobile work equipment where there is a risk of workers being crushed between any part of the work equipment and the ground should a rollover occur, or where there is a risk of injury should the equipment roll over by more than 90°. This does not apply where it is not reasonably practicable to fit a restraint on equipment that was in use before 5 December 1998, or where the equipment cannot be fitted with a protective structure.

Effectively, any mobile machine fitted with a protective roll bar or safety frame could pose a risk of crush injuries to operators if it were to roll over, particularly if they were thrown from their seats, so seat belts, lap straps or the equivalent are likely to be needed.

If you have a fork-lift truck with a fixed mast or rollover protective structure this regulation does not apply, but see regulation 27 below.

Regulation 27: Overturning of fork-lift trucks

Any fork-lift truck which has a mast or rollover protective structure may need to be adapted or equipped to reduce to as low as reasonably practicable the risk of rollover. This could mean fitting a seat belt or lap strap or, if the fork-lift truck cannot roll over by more than 90°, infilling the sides if it has an open cab.

Regulation 28: Self-propelled work equipment

All self-propelled machines should have:

- a means to prevent them being started by an unauthorised person, eg a removable key;
- an efficient braking system which allows them to be driven and parked in safety.

Where a driver's field of vision is inadequate to ensure safety, devices such as concave mirrors, closed-circuit TV etc should be fitted to improve it as far as it is reasonably practicable to do so.

All self-propelled machines operated at night or in dark places should have appropriate lighting fitted.

If people cannot escape easily and quickly from self-propelled work equipment in the event of a fire, appropriate fire-fighting appliances should be carried on that machine.

Regulation 29: Remote-controlled self-propelled work equipment

Where remote-controlled self-propelled equipment involves a risk to safety when in motion, it should be equipped to stop automatically when it leaves its control range and bring to a halt any hazardous moving parts, eg a remotely controlled combine harvester would need to comply with this.

Machines which are not strictly 'self-propelled' but are operated from a point away from the driver's position, eg some vegetable harvesting rigs, should meet more detailed criteria which can be obtained from your local HSE inspector.

Regulation 30: Drive shafts

Machines which are driven by a power take-off (PTO) shaft and which could present risks as a result of overload due to seizure or blockage should have a device fitted to prevent overload, for example a PTO clutch, shear bolt or other suitable device. Such devices will need to be maintained and not be overridden to comply with this requirement.

PTO-driven machines should have a device fitted to secure the PTO shaft when it is not in use, eg a bracket on the machine's drawbar. (Using the PTO guard restraining device is not acceptable.)

References

- 1 *Safe use of work equipment. Provision and Use of Work Equipment Regulations 1998. Approved Code of Practice and guidance* L22 HSE Books 1998 ISBN 0 7176 1626 6
- 2 *Carriage of passengers on farm trailers* Agriculture Information Sheet AIS36 HSE Books 2000
- 3 *Operator seat restraints for mobile work equipment in agriculture and forestry* Agriculture Information Sheet AIS37 HSE Books 2000

Further information

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This leaflet contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

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