

# Regulations concerning the construction, design and production of work equipment and chemicals (the Producer Responsibility Regulations)

**Amendment Regulations incorporated in this text:** Regulation 19 December 2012 No. 1374, Regulation 30 December 2013 No. 1717, Regulation 14 January 2016 No. 97, Regulation 30 December 2013 No. 1717 as amended by Regulation 22 December 2014 No. 1898, Regulation 21 June 2016 No. 762, Regulation 22 December 2016 No. 1837, Regulation 19 June 2020 No. 1272.

## Chapter 1. Introductory provisions

### Section 1-1. Purpose

The purpose of these regulations is to ensure that work equipment and other products are constructed, designed and produced in a way that ensures that employees are protected from harm to life or health in connection with their use.

### Section 1-2. Scope

Chapter 2 applies to work equipment not covered by the Regulations of 20 May 2009 No 544 on machinery and that is used or is expected to be used in undertakings that fall within the scope of the Working Environment Act.

Chapter 3 applies to tractors that were delivered before 1 September 1964.

Chapter 4 applies to scaffolds, ladders and structures on roofs and facades. The chapter does not apply to offshore petroleum activities and activities on onshore facilities as mentioned in Section 6(e) of the Framework Regulations.

Chapter 5 applies to simple pressure vessels.

### Section 1-3. To whom the regulations apply

The regulations apply to anyone who designs, produces, imports, markets, sells, rents out, lends out or puts into production products covered by the regulations.

The regulations also apply to undertakings with no employees.

### Section 1-4. Definitions

For the purpose of these regulations, the following definitions shall apply:

1. *work equipment*: technical installations etc. such as machinery, lifting equipment, safety components, containers, means of transport, appliances, installations, tools and any other object used in connection with the production of a product or the performance of work;
2. *tractor*: self-propelled vehicle on wheels or tracks, with at least two axles, designed to tow trailers etc., to carry, tow, push or actuate certain interchangeable equipment.

## Section 1-5. Exemption

The Labour Inspection Authority may grant exemption from the regulations if warranted on special grounds, if justified from a health and safety perspective and not in breach of the EEA Agreement.

# Chapter 2. Requirements for work equipment etc.

## Section 2-1. General provisions

The work equipment shall be designed so that it can be transported, arranged, used and maintained without a risk of harm to life or health, and without exposing employees to adverse strain. If necessary, the work equipment shall be equipped with special protective devices. Where necessary in order to meet the requirements for safety in the first paragraph, the instructions for use must provide clear instructions on how the work equipment can be transported, arranged, used and maintained without a risk of harm to life or health; see Section 2-26.

## Section 2-2. Adaptation of the man/machine interface

The work equipment shall be designed and arranged in a way that ensures that work positions and work movements do not entail a risk of accidents, unfortunate strain or harm to life or health.

## Section 2-3. Functional safety

The work equipment must be of adequate strength, of suitable material and be designed to withstand expected loads, without such loads leading to changes that can entail a risk of harm to life or health.

If there is a risk that the condition of the work equipment can change so that a risk of harm to life or health arises, it must be effectively secured against this. If necessary, the work equipment shall be provided with appropriate warning devices.

Work equipment used in extreme environments or under extreme operating conditions shall be provided with devices that ensure that it works without entailing a risk of harm to life or health.

## Section 2-4. Design

Insofar as it is possible, the work equipment shall be designed in a way that ensures that it does not entail a risk of harm to life or health or unfortunate strain for employees. As far as possible, accessible parts of the work equipment must be free of sharp angles, edges and narrow recesses that can be harmful to life or health.

## Section 2-5. Stability

The work equipment must be designed or fastened so as to prevent it from tilting or unintentionally shifting in a way that can entail a risk of injury.

## Section 2-6. Special safety considerations

Special emphasis shall be placed on providing the work equipment with safeguards to prevent:

- a. parts being ejected from tools, workpieces etc.;
- b. hazardous flows or releases of powder products, liquids, vapours, gases and cold or heat;
- c. accidental contact with moving parts or hot/cold parts or hazardous substances where such contact can entail a risk of harm to life or health.

## Section 2-7. Operation

It must be possible to operate switch functions, including start and stop, and to operate work equipment controls without any risk of harm to life or health.

Movements to operate switches and controls must, as far as possible, be in accordance with the movements of the work equipment.

## Section 2-8. Control devices

Control devices shall be designed and positioned in a way that ensures that they cannot be operated unintentionally and thereby entail a risk of harm to life or health.

Control devices shall be positioned so that they can be reached without difficulty. Control devices that are used continuously shall be positioned so as to prevent static body stresses and unnecessary stretching and twisting of the body in a way that can be hazardous to health.

Control devices shall normally be positioned so that the operator has a full overview of any danger zones from the operator's seat.

Where no overview is afforded of the work equipment as a whole, a warning signal must be activated automatically in due time before a work operation is initiated. If necessary, it must be possible to lock switches with individual locks.

## Section 2-9. Work pace

As far as possible, work equipment that involves repetitive work shall be arranged in a way that allows the operator to vary the pace of the work.

## Section 2-10. Operating state

When safety depends on the operating state, the work equipment shall, if necessary, be provided with equipment for monitoring, controlling and managing this.

## Section 2-11. Automatically monitored work equipment

If necessary, automatically operated, controlled or monitored work equipment shall be provided

with equipment for safe shutdown of the process, disconnection of automatic control, manual operation and emergency stop.

If failure of the automatic control system or other conditions can entail a risk of harm to life or health, instructions for necessary protective measures shall be available next to the work equipment.

## Section 2-12. Information about processes

Measuring devices and signals required for control and management of the work process must be reliable and easy to understand. The following applies in particular:

- a.information of importance to safety must stand out clearly from other information;
- b.it must be possible to perceive acoustic or optical signals without difficulty;
- c.instruments etc. that provide information about the work process must be appropriately positioned, be clearly readable and not give grounds for misinterpretation.

## Section 2-13. Emergency stop and braking devices

Where necessary in order to meet the requirements for safety in Section 2-1 first paragraph, the work equipment shall be provided with an emergency stop function. The emergency stop device shall be marked in red and be located in a clearly visible and easily accessible place. Use of the emergency stop device must not lead to hazardous conditions. Following a stop initiated by an emergency stop or protective device, it must only be possible to restart the equipment using the normal start mechanism.

Work equipment that can continue to run after the power supply has been cut off and thereby cause danger shall be equipped with an appropriate braking device.

## Section 2-14. Work in and occupancy of danger zones

Work equipment that regularly requires work movements into the danger zone must have special control devices and/or protective devices that are connected to the work equipment's control system in a way that ensures that the protective function is automatically triggered.

When it is necessary to occupy a danger zone in connection with tool assembly, maintenance, repair etc., the work equipment must have devices to safeguard against accidental movement or activation.

## Section 2-15. Energy

Equipment for energy supply and removal of combustion products shall be arranged, designed and installed so that there is no risk of harm to health.

## Section 2-16. Electrical equipment

Electrical equipment on work equipment must meet the provisions of the Regulations of 14 January 2011 No 36 on electrical equipment.

Unambiguous information shall be provided in the instructions for use or elsewhere about connection and use of the work equipment.

## Section 2-17. Pneumatic and hydraulic equipment

In the case of pneumatic and hydraulic work equipment, particular consideration shall be given to ensuring:

- a.that the permitted pressure is not exceeded;
- b.that any drop in pressure does not entail danger;
- c.that the flow of gas or liquid under pressure does not entail danger;
- d.that the equipment is protected from harmful exposure.

## Section 2-18. Equipment for safe operation and maintenance

Work equipment shall be provided with platforms, walkways, stairs/ladders and guard rails as necessary to ensure safe operation and maintenance.

## Section 2-19. Transport

Work equipment must be capable of being transported safely. If necessary, it shall be equipped with lifting lugs that have sufficient load-bearing capacity and that are placed so as to keep the work equipment in balance.

## Section 2-20. Installation, maintenance and repair

Work equipment must be possible to install, maintain and repair without any risk of harm to life or health and, if possible, without unfortunate strain. Maintenance and repair of work equipment shall be carried out according to need and based on user manuals.

As a rule, the work shall be carried out when the energy supply has been disconnected and the work equipment is idle.

Special emphasis shall be placed on ensuring that:

- a.parts that may move accidentally are blocked if necessary;
- b.fire and explosion cannot arise;
- c.pressurised systems have been relieved of pressure and emptied;
- d.tanks and pipes that have contained hazardous substances have been properly closed and, if necessary, cleaned;
- e.employees use the requisite personal protective equipment.

## Section 2-21. Maintenance or repair during operation

If maintenance or repair must be performed while the work equipment or parts of it are in operation, under pressure etc., the instructions for use must describe necessary measures to ensure that this can be done safely.

## Section 2-22. Design of machinery components

The design and colour of machinery components that move in the field of vision must be such as to prevent eye fatigue.

Pieces of machinery that give off cuttings, dust, smoke, vapour or gas shall be designed as to prevent hazardous spreading of these substances. If a closed process cannot be used, the machinery shall be designed so as to allow for the connection of suction heads and pipes. Suppliers of machinery shall be able to deliver appropriate suction heads for fume extraction and specify fume extraction fan capacity where such a fan is not included in the machinery. On machinery where fume extraction is always needed during production, the suction heads shall be provided as part of the machinery.

## Section 2-23. Radiation

Pieces of machinery that rely on the use of radioactive substances or that are designed to produce ionising or other hazardous radiation shall be isolated and designed so as to ensure that no harm to life or health is caused when they are used correctly. The radiation intensity must not exceed the limit values stipulated by the competent authorities. The machinery shall be provided with appropriate warning signs.

## Section 2-24. Machinery posing a fire and explosion risk

Pieces of machinery that pose a risk of fire and explosion must meet the following requirements:

- a. The machinery shall be made of non-flammable material.
- b. The machinery shall be arranged so as to prevent the formation of dangerous static electricity.
- c. Explosion relief devices shall be designed so that they do not entail a risk when they open.
- d. If necessary, the machinery shall be provided with automatic fire extinguishing equipment. A warning signal shall be given before the use of fire extinguishing systems with extinguishing agents that can entail a risk of poisoning.

## Section 2-25. Marking

Work equipment not subject to a requirement for CE marking shall be marked with the manufacturer's, or, for imported work equipment, the importer's name and address, or have other marking that makes it easy to identify the manufacturer or importer. If there is no room for marking on the work equipment, the marking shall be affixed to the packaging.

Insofar as it is important with a view to safety, the following information shall be marked indelibly and legibly on the work equipment, in Norwegian:

- a.type, model number and production year;
- b.weight;
- c.function and warning symbols;
- d.maximum permitted load;
- e.maximum permitted pressure for hydraulic and pneumatic devices;
- f.data for energy supply, rpm etc.;
- g.necessary designation of lifting points for transport, see Section 2-19;
- h.warning of explosion hazard, contact hazard, toxic gases etc.

## Section 2-26. Instructions for use

Work equipment must be accompanied by necessary and easily understandable instructions for use in Norwegian. The instructions for use must include information about transport, assembly, installation, use and maintenance.

## Section 2-27. Compliance procedures

Manufacturers, importers and suppliers of work equipment and chemicals shall have procedures in place that ensure that the products have correct and complete marking, technical documentation and safety data sheets in compliance with legal or regulatory requirements.

# Chapter 3. Protective structures on old tractors

## Section 3-1. Driver protection – type approval

Importers, manufacturers and suppliers may only sell protective structures that protect the driver if the tractor should roll over or rear, and they shall ensure that such protective structures are type approved by the Labour Inspection Authority before they are delivered for use on tractors or displayed for sale or marketing purposes in Norway.

## Section 3-2. Protective structures where the upper part can be removed or folded down

Protective structures may be designed so that they can be removed or folded down. It must be possible to install and remove or fold up and fold down these structures in a simple and safe manner.

## Section 3-3. Applications for type approval

Applications for type approval shall be submitted to the Labour Inspection Authority and must contain the following information:

- a.The applicant's name and address;

- b.The name and type of tractor;
- c.The name and type of protective structure, and the manufacturer's name and address;
- d.Report from an approved institution on the assessment, calculation or testing of the strength of the protective structure;
- e.Material specifications with reference to a standard, or confirmation from the manufacturer of the protective structure that the structure is made of semi-killed or killed steel;
- f.A dimensioned drawing of the protective structure and its attachment points to the tractor.

### Section 3-4. Material quality

The material used in the welded structure of the protective structure must be suitable for welding and be made of killed or semi-killed steel.

### Section 3-5. Adaptation to tools etc.

The protective structure shall be designed in a way that allows for the use or connection of interchangeable equipment etc. that is normally used together with a tractor.

### Section 3-6. Access and operational factors

The protective structure shall be designed so that access to the tractor and operation from the driver's cab can take place in a safe manner.

### Section 3-7. Marking

The protective structure shall be marked with the type approval number, production number, name and type designation.

The marking shall be durable and clearly visible.

### Section 3-8. Installation instructions

Necessary and clearly easily understandable installation instructions in Norwegian shall accompany the delivery of protective structures.

## Chapter 4. Scaffolds and ladders

### Section 4-1. Technical requirements

Scaffolds, ladders and temporary equipment for access to and work on roofs and facades with pertaining components shall meet the technical requirements in the relevant NS-EN standards or have a corresponding safety level.

### Section 4-2. Load classes



Scaffolding shall be classified in the following six classes:

Class	<i>Uniformly distributed load</i>	<i>Concentrated load on an area of 500 mm x 500 mm</i>	<i>Load of one person on an area of 200 mm x 200 mm</i>	<i>Load on partial area</i>	
	<i>kN/m<sup>2</sup> (kg/m<sup>2</sup>)</i>	<i>kN (kg)</i>	<i>kN (kg)</i>	<i>kN/m<sup>2</sup> (kg/m<sup>2</sup>)</i>	<i>Partial area m<sup>2</sup></i>
1	0.75 (75)	1.50 (150)	1.0 (100)	Not permitted	
2	1.50 (150)	1.50 (150)	1.0 (100)	Not permitted	
3	2.00 (200)	1.50 (150)	1.0 (100)	Not permitted	
4	3.00 (300)	3.00 (300)	1.0 (100)	5.00 (500)	0.4 A
5	4.50 (450)	3.00 (300)	1.0 (100)	7.50 (750)	0.4 A
6	6.00 (600)	3.00 (300)	1.0 (100)	10.00 (1000)	0.5 A

A = area between two pairs of posts.

### Section 4-3. Marking

Work equipment certified pursuant to Section 4-5 shall be durably and clearly marked with the name of the issuer of the certificate, certificate number, name of the manufacturer or registered trademark and production year.

### Section 4-4. Installation instructions and instructions for use

Manufacturers or vendors of work equipment pursuant to Section 4-1 shall provide installation instructions and instructions for use. The instructions must be in Norwegian and contain information about load class, foundations, assembly and erection, use, inspection, removal, maintenance, repair and scrapping criteria.

Upon sale, the product shall be accompanied by installation instructions and instructions for use. The installation instructions must specify how the different components are to be assembled, reinforced and anchored.

If a scaffold system can be installed in different ways to meet the requirements of different load classes, this must be clearly described in the installation instructions

### Section 4-5. Certificate

Compliance with the requirements in Sections 4-1 to 4-4 shall be documented by a certificate issued by an EEA certification body accredited for this task. This does not apply if the product is sold in quantities below 10.

The certificate shall be in Norwegian and contain information about the issuer of the certificate,

certificate number, name of manufacturer, name of supplier, product name, product type, type of material in load-carrying components and confirmation that the requirements in Sections 4-1 to 4-4 have been met and that any relevant standards have been complied with. The certificate is valid for maximum 10 years.

Upon sale, the product must be accompanied by the certificate.

The Norwegian Labour Inspection Authority may request to see the certificate and test report.

## Section 4-6. Inspection

An annual inspection must be conducted of products with certificates pursuant to Section 4-5. Such inspection must be conducted by the certification body that issued the certificate or by a competent body which pursuant to an agreement is authorised to perform the inspection on behalf of the certification body. If the certification body no longer exists, the inspection can be conducted by another certification body.

The inspection must comprise a selection of the product's fundamental qualities and functional requirements. These must be checked against the product information provided on the certificate. Furthermore, the inspection must verify that the instructions for marking, installation and use are in line with Sections 4-3 and 4-4. The inspection must be documented in a written report.

## Section 4-7. Transitional arrangement

Products that have been type approved by the Norwegian Labour Inspection Authority can be sold until the date specified in the type approval. After the type approval has expired, a certificate in accordance with Section 4-5 is required to continue selling the product in the Norwegian market.

# Chapter 5. Simple pressure vessels

## Section 5-1. Hydrostatic pressure test and marking

Manufacturers of compressed air cylinders for breathing air shall perform hydrostatic pressure tests of the compressed air cylinders. The month and year of the hydrostatic pressure test shall be marked on the compressed air cylinder.

# Chapter 6. Final provisions

## Section 6-1. Penal sanctions

Wilful or negligent violation of these regulations or decisions made pursuant to these regulations, or aiding and abetting thereto, is a criminal offence pursuant to Chapter 19 of the Working Environment Act.

## Section 6-2. Administrative fine

If anybody acting on behalf of the undertaking violates provisions in these regulations or decisions made pursuant to these regulations, the undertaking may be fined pursuant to Section 18-10 of the Working Environment Act.

### Section 6-3. Entry into force

These regulations enter into force on 1 January 2013.