



Attention!

How to safely adapt your machine

Are you going to adapt a machine?

There's a big chance that you yourself will become responsible for the machine. The original manufacturer will no longer be liable for the safety of the product.

You can read here:

- the mandatory safety requirements for machines;
- how you can adapt your machine or have it adapted;
- what you have to do if you alter your machine yourself.

Why adapt a machine?

There are all sorts of reasons why you may want to adapt your machine. For example, you may want to give the machine an extra functionality, or increase its performance. When you adapt your machine, you change the manufacturer's original design. This can affect the product safety. That's why you can't adapt your machine any way you like.

Regulations

The product requirements for machines that came on the market in the European Economic Area (EEA) **after 31 December 1994** can be found in the Machines (Commodities Act) Decree of the Netherlands. These requirements apply to both new machines and secondhand machines that have been imported from outside the EEA.

The goal of these requirements is:

- to protect the public safety, health and environmental quality;
- to promote the free traffic in goods within Europe and safeguard fair commercial relations. (level playing field).

The essential safety requirements are included in Annex 1 of the European Directive on Machinery 2006/42/EC.

The manufacturer is responsible and liable for his product.

The safety requirements of the Working Conditions Act and the Working Conditions Decree of the Netherlands apply to machinery that was brought on the EEA market **before**

1 January 1995. These laws include the European Directive on work equipment.

Responsibility and liability for machinery lie with the employer. The employer must ensure that his employees are only working with safe machines.

Manufacturer's obligations

Manufacturers of new and secondhand machines that have been brought on the European market **after 31 December 1994** must go through the so-called conformity procedure. This consists of the following steps:

- Assess the machine's risks.
- Record the risk assessment in a Technical Dossier.
- Control the risks by meeting the essential safety requirements. Examples of how to meet these requirements can be found (partly and/or for a number of products) in the harmonised European standards.
- Draw up a Declaration of Conformity (*Verklaring van Overeenstemming*, VVO) in which the manufacturer states that the machine is safe and that he commits himself to this statement.
- Draft a user manual (in the language of the country).
- Affix a CE marking on the machine. This marking confirms that the machine meets the requirements of the European Directive on Machinery.

Robust design

The manufacturer is required to take note of the possible misuse of his machine, as much as can reasonably be foreseen.

Not everyone uses a machine the way it's supposed to be used. Possible misuse can give rise to all sorts of hazards. That's why the design of the machine has to be robust.

- mechanical adaptations (such as making a crane higher);
- adding new functions (for example: adding a clamping device, lifting device or hoist to a forklift or excavating machine).

Example: substantial alteration to forklifts

Forklifts can be used for more purposes than lifting products. They can also be converted to hoisting equipment. And with clamping devices products can also be clamped. These are substantial alterations.

What is a substantial alteration?

If the way you've adapted your machine has no impact on safety, you do not need to do anything more. However, if there is a *substantial* alteration, it cannot be taken for granted that the safety has been maintained. In that case the conformity procedure has to be conducted (again).

The possibilities for adapting machines are unlimited. Therefore we unfortunately cannot tell you exactly how to determine that an alteration is substantial.

Examples of alterations that quite probably are substantial:

- changing the function (for example: different controls, different circuit diagram, lifting non-guided loads instead of guided loads);
- changing the performance (power, dimensions and/or transfers);
- changing the operating system (such as replacing the emergency stop circuit or relay controls by a PLC);

What should you do if you want to adapt your machine?

Machines that entered the European market after 31 December 1994

- We advise you to discuss the adaptation with the original manufacturer. He can decide whether your alteration will be substantial.
- If that is the case, the best approach is to let the original manufacturer carry out the substantial alteration. The manufacturer knows the machine well because he has already made a risk assessment of the machine. He can implement adaptations quickly and professionally. He remains responsible and liable for his product.
- Is the original manufacturer no longer in business and you're not sure whether your adaptation is substantial? You should then get in touch with the Inspectorate SZW, the market surveillance authority.

- If you do substantially alter your machine yourself, you have to conduct the conformity procedure for the adapted machine. You may use the technical information of the original manufacturer for the parts of the machine that you are not adapting. You are responsible and liable for the adapted machine.
- You do not have to conduct the conformity procedure if you only want to adapt your machine to meet the requirements of Annex 1 of the Directive on Machinery according to the current productspecific, harmonised type C-standards.
- If the adaptation is **substantial**, you become the ‘new manufacturer’. This means that the legal responsibility and liability for the altered product lie with you. If you want to adapt your machine yourself, remove the type plate and conduct the conformity procedure as manufacturer.
- If the adaptation is **not substantial**, then you do not need to conduct this procedure. You can simply adapt your machine or have it adapted.

Machines that entered the European market before 1 January 1995

- If the alteration is **substantial**, these machines that were already in the EEA before **1 January 1995** fall under the regulations of the Directive on Machinery. This means that these machines must also be submitted to the conformity procedure.
- Is the original manufacturer of these older machines no longer in business, or has he refused to cooperate (after all the machine does not fall under the Directive on Machinery)? Then get in touch with the Inspectorate SZW, the market surveillance authority, if you are unsure whether your adaptation is substantial.

This brochure is a publication of:

Inspectorate SZW

The Inspectorate SZW is a part of the Ministry of Social Affairs and Employment

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Who carries responsibility and liability?

- Original manufacturer adapts machine
>> manufacturer is and remains responsible and liable.
- You carry out a substantial alteration
>> you are responsible and liable.
- You adapt the machine, but do not adapt it substantially:
>> for machines that entered the European market after 31 December 1994, the manufacturer remains responsible and liable on the basis of the Machines (Commodities Act) Decree of the Netherlands;
>> for machines that were present in the EEA before 1 January 1995, the employer remains responsible for making only safe machines available for his employees based on the Working Conditions Act and the Working Conditions Decree.