

The revised Machinery Directive

–

More information on noise for purchasers

Bernd MERZ



European Commission
Enterprise and Industry

Aims of the Machinery Directive

- **to ensure free circulation of machinery on the internal market**
- **to ensure a high level of protection of users and other exposed persons against the risks**
- **to ensure safety by design**
- **it promotes harmonisation through a combination of mandatory health and safety requirements and voluntary harmonised standards.**
- **Directive 2006/42/EC was published on 9th June 2006 and it is applicable from 29th December 2009, replacing the Machinery Directive 98/37/EC.**

Machinery Directive

1.1.2 Principles of safety integration

(b) In selecting the most appropriate methods, the manufacturer or his authorised representative must apply the following principles, in the order given:

eliminate or reduce risks as far as possible (inherently safe machinery design and construction),

take the necessary protective measures in relation to risks that cannot be eliminated,

inform users of the residual risks due to any shortcomings of the protective measures adopted, indicate whether any particular training is required and specify any need to provide personal protective equipment.

Machinery Directive

1.5.8 Noise

Machinery must be designed and constructed in such a way that risks resulting from the emission of airborne noise are reduced to the lowest level, taking into account of technical progress and the availability of means of reducing noise at source.

The requirement deals with risks associated with the exposure of machinery operators and other persons to noise generated by machinery.

The lower the noise emission from machinery, the easier it is for users to respect the exposure limits set by Directive 2003/10/EC [Directive on minimum health + safety requirements regarding the exposure of workers to the risks arising from physical agents (noise)]

No limits set by the Machinery Directive, but certain categories of machinery are subject to noise emission limits set by the Noise Directive 2000/14/EC

Machinery Directive

1.7.4.1. General principles for the drafting of instructions

- (a) The instructions must be drafted in one or more official Community languages. The words 'Original instructions' must appear on the language version(s) verified by the manufacturer or his authorised representative.
- (b) Where no 'Original instructions' exist in the official language(s) of the country where the machinery is to be used, a translation into that/those language(s) must be provided by the manufacturer or his authorised representative or by the person bringing the machinery into the language area in question. The translations must bear the words 'Translation of the original instructions'.
- (c) The contents of the instructions must cover not only the intended use of the machinery but also take into account any reasonably foreseeable misuse thereof.
- (d) In the case of machinery intended for use by non-professional operators, the wording and layout of the instructions for use must take into account the level of general education and acumen that can reasonably be expected from such operators.



1.7.4.2. Contents of the instructions

Each instruction manual must contain, where applicable, at least the following information:

(u) the following information on airborne noise emissions:

- the A-weighted emission sound pressure level at workstations, where this exceeds 70 dB(A); where this level does not exceed 70 dB(A), this fact must be indicated,
- the peak C-weighted instantaneous sound pressure value at workstations, where this exceeds 63 Pa (130 dB in relation to 20 μ Pa),
- the A-weighted sound power level emitted by the machinery, where the A-weighted emission sound pressure level at workstations exceeds 80 dB(A).

These values must be either those actually measured for the machinery in question or those established on the basis of measurements taken for technically comparable machinery which is representative of the machinery to be produced.

In the case of very large machinery, instead of the A-weighted sound power level, the A-weighted emission sound pressure levels at specified positions around the machinery may be indicated.

Where the harmonised standards are not applied, sound levels must be measured using the most appropriate method for the machinery. Whenever sound emission values are indicated the uncertainties surrounding these values must be specified. The operating conditions of the machinery during measurement and the measuring methods used must be described.

Where the workstation(s) are undefined or cannot be defined, A-weighted sound pressure levels must be measured at a distance of 1 metre from the surface of the machinery and at a height of 1,6 metres from the floor or access platform. The position and value of the maximum sound pressure must be indicated.

Where specific Community Directives lay down other requirements for the measurement of sound pressure levels or sound power levels, those Directives must be applied and the corresponding provisions of this section shall not apply;

Machinery Directive

[2nd Edition of the Guide to application of the Machinery Directive 2006/42/EC](#)

1.7.4.3 Sales literature

Sales literature describing the machinery must not contradict the instructions as regards health and safety aspects. Sales literature describing the performance characteristics of machinery must contain the same information on emissions as is contained in the instructions.

§275 Sales literature

While the instructions provided with the machinery are primarily intended to ensure safe use of the machinery, sales literature has a principally commercial function. However section 1.7.4.3 requires that the instructions and commercial documents relating to the machinery be consistent. This is particularly important with respect to the intended use of the machinery referred to in section 1.7.4.2 (g), since users are likely to choose machinery for their purposes on the basis of sales literature.

The second sentence of section 1.7.4.3 is intended to help users to choose machinery with reduced levels of emissions of noise, vibrations, harmful radiation or hazardous substances. In particular, the values included in the noise emission declaration required by section 1.7.4.2 (u) and the information on vibrations required by sections 2.2.1.1 and 3.6.3.1 must be included in commercial documents giving the performance characteristics of the machinery. Many sales brochures or catalogues include a section or table giving the principal performance characteristics of the machinery such as power, speed, capacity, production rate and so on, to enable potential customers to choose machinery appropriate to their needs. This section is the appropriate place to include the required information on emissions.

1.7.4.3 *Sales literature*

Sales literature describing the machinery must not contradict the instructions as regards health and safety aspects. Sales literature describing the performance characteristics of machinery must contain the same information on emissions as is contained in the instructions.

Literature [From Wikipedia, the free encyclopedia]

(from Latin litterae (plural); letter) is the art of written works...Literally translated, the word literature means "acquaintance with letters" (as in the "arts and letters").

Sales Literature [literature research]

Printed materials (booklets, brochures, catalogs, charts, manuals, material safety data sheets, price list, technical data sheets, testimonials from satisfied customers etc. to be used as selling aids.

Material written by a person, organisation, institution etc. selling a product, which informs potential buyers of the product and its benefits, which is designed to help to sell a product or service.

The term sales literature includes **any communication** (whether in writing, by radio, or by television) used by any person to offer to sell or induce the sale of a products or service.

risk-assessment-cycle-EU-OSHA

