

Ergonomic certification for products

Bringing and risks for the profession of ergonomists

16/06/2020

The Ergonomic certification for a product is something new in our domain. It is a service sold by some companies which seem to have a part of their turn over with it.

It may lead to :

- A strength for our profession
- A problem to our profession

This document analyses the stakes, the bringings and the risks. It ends by some proposals

III- Certification/normalization- definitions

Certification is a procedure by which a third party, the certification body, gives a written assurance that an organization system, process, person, product or service complies with requirements specified in a standard

CE marking is a mandatory European marking for all products subject to one or more of the 21 European "New Approach" directives.

if the CE marking indicates that the products meet the essential requirements of the directives (in terms of safety, public health, and consumer protection), it is not necessarily a mark of quality. This marking allows products to move freely throughout the European economic area

The standard is a reference document approved by a recognized standardization institute such as AFNOR. The standard is not a regulation, it is not mandatory. The fact of applying it demonstrates a recognized commitment to quality. This is the reason why a certification is based on a list of standards, either of means (test protocol = way of testing) or of results (level of requirement).

The regulations are created by administrative authorities (State, Senate, communities, etc.). It therefore comes from a law project, a regulation. Its application is mandatory.

A label brings together a set of requirements which the labeled products must meet. The technical guarantee is lower since a label can come from a public or private organization. It should also pay attention to the seriousness and reliability of this organization and what the members really commit to. A label is therefore much less framed than a certification.

IV- Certification/normalization- Law (french)

A product or service certification constitutes the activity by which a body, distinct from the manufacturer, importer, seller, service provider or customer, attests that a product, service or a combination of products and services conforms to the characteristics described in a certification reference system.

Art. L433-3- The certification reference system is a technical document defining the characteristics that a product, service or combination of products and services must have, and the procedures for checking compliance with these characteristics. The development of the certification reference system is the responsibility of the certification body that collects the views of interested parties

Art. L. 115-28. -Only can proceed to the certification of products or services organizations which benefit from an accreditation issued by the national accreditation body, or the national accreditation body of another Member State of the European Union, member of European Cooperation for Accreditation and having signed multilateral mutual recognition agreements covering the certification in question.

Art. 433-2- When reference is made to certification in advertising, labeling or the presentation of any product or service, as well as on all related commercial documents, the following information is made known consumer or user:

- 1 ° The name or business name of the certification body or the guarantee mark;
- 2 ° The name of the certification reference system used;
- 3 ° The methods according to which the certification reference system can be consulted or obtained

Art. L433-7- Any reference to certification in advertising, labeling or the presentation of any product or service, as well as on related commercial documents, is accompanied **by clear information allowing the consumer or the user to easily access to certified features.**

The consultation of the certification reference systems is carried out either free of charge from the certification body, or by the delivery of copies at the applicant's expense

V- The possible bringings to the profession

New category of services : checking the compliance of processes, services or products to standards. It is an inspection logic

Raise of the contribution to the design of products by ergonomists : A possibility is that manufacturers call specialists for their design processes, in order to fit the requirements as soon as possible, and avoid retiterations in the design.

But this supposes that the checking involves the standards **AND** the professional skills of an ergonomist. The professional skills woul create accurate test proctols, assess the compliance to the guidelines with user groups, prove that the product meet the standards by quilitative and quanditative data, le reproducible experiments. This approach needs a consistent budget, and always leads to a vision of strong and weak points for the considered product.

The result may be a need fo change the product, and this raises the design costs. So this may lead to a better incorporation of spécialistes in design processes.

A condition for this is the possibility that the certification organism uses only the tests protocols and results given by the specialist associated to the design, and reduces the cost of the certification.

VI- The possible risks to the profession

There is no constant ergonomic property for a product

- The adaptation of a tool to the human factor requirement depends on the situation in which it is used (in our professional terms, the system and its variability)
- For a single situation, this certification may lead to the presence of products all ergonomically certified, but not compliant with each other, of even to the task to be performed

Among the different countries or users, the design criteria or product choice, all respecting the guidelines, may change

- A product may be assessed as user friendly by the tests, intuitive, and so on. But the previous skills of a user have to be taken into account, and training will not overcome human properties such as the Rasmussen model : Routines, Rules, Knowledge. So, depending on the Human system interface, the product may be considered as anti-ergonomic, and lead to accidents
- Among the different countries, the technical systems change, their use as well, and the human properties need adaptations for products

First of all, Ergonomics is a profession, carried on by specialists. When considers a product sold as « ergonomic », and assesses that it is not adapted to him or to the situation, his conclusion will be that Ergonomics is useless

VII- Recommendations

Definitions from Cofrac (France)

Accreditation concerns a certificate issued by a third party to a conformity assessment body (CAB). It constitutes formal recognition of the CAB's competence for conducting specific conformity assessment activities.

Certification refers to a certificate delivered by a third party relating to products, processes, systems or persons.

Accreditation and certification, therefore, do not operate at the same level. While the latter is delivered by inspection bodies that are commonly called certification bodies, the former is the remit of accreditation bodies, whose mission is to inspect the inspection bodies.

Accreditation and certification therefore constitute two distinct links in the conformity assessment chain

Example

Let us consider an example to illustrate the complementarity of accreditation and certification. This is, moreover, why accreditation requires the involvement of both quality assessors and technical experts.

The management system of a laboratory may be certified according to standard ISO 9001, but this certification only guarantees that this system is continuously improved. Accreditation, for its part, is aimed at recognising not only that the candidate is well-organised but also that it exercises its activity according **to an ethical code and best practices that are internationally accepted.**

This is, moreover, why accreditation requires the involvement of **both quality assessors and experts in their particular technical field.**

Accreditation is only valid for a specific field of competence. Hence, an inspection body that is recognised as competent for inspecting lifting machinery will not necessarily be so for pressure devices. It may however apply for the global certification of its quality assurance system.

Accreditation therefore goes further by providing not only recognition of the conformity of the management system, but also recognition of the competence of the personnel - the men and women - of the site concerned. By contributing to the continuous improvement of inspections and the quality of the products and services released to the market, it underpins confidence.

<https://www.cofrac.fr/en/what-is-accreditation/certification-and-accreditation-what-is-the-difference/>

VII- Recommendations

0- check the compliance of the « ergonomic accreditation » to the law

- The accreditation organism must have Ergonomic domain specialists in order to check the skills of the candidate. Who are they? Who says that they are experts domain? Who says that they are still experts? (see CREE arguments)
- A clear information to the consumer is required. Who checks that the information is clear to the consumer? By which way? What actually means « ergonomics » for a consumer? Is a consumer able to understand the standards used?

1- Create an accreditation/control organism for the companies

Our network is in capacity to manage the limits of the « Ergonomic certificate », and to control the accuracy and the results of the methods.

⇒ We have to think about a recognized and international accreditation organism. This could be done through IEA/FEES/CREE

2- Add limitation mentions to the certificates

- For products, a mention such as « The working situation in which the products is put in place may alter its ergonomic properties; the whole situation has to be settled »
- For working situations (processes and workplaces) : a mention such as « The variability of the working situation and its changes all along time may alter the ergonomic certification »