

MANDATORY REQUIREMENTS FOR WOOD PROCESSING IN THE FIELDS OF CERTIFICATION, LABELLING, MARKING AND STANDARDISATION

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ABSTRACT

Most countries in the European Union have their own institute or 'centre' for the Wood & Wood Products Industry. Most of these were originally supported and often founded by government or regional states and have over time developed their own test facilities. A number of Centres now offer their own Quality Marks for national and international recognition. Certification, product and material testing, accreditation and quality criteria are a feature of trading within the EU and the EEA. They can be mandatory, as from the EC, or opportunistic, as from trade and business intent on meeting perceived consumer demands. Both routes result in commercial success.

Standardisation or standardization, in the context related to technologies and industries, is the process of establishing a technical standard among competing entities in a market, where this will bring benefits without hurting competition. In the context of business information exchanges, standardization refers to the process of developing data exchange standards for specific business processes using specific syntaxes. These standards are usually developed in voluntary consensus standards bodies such as the United Nations Center for Trade Facilitation and Electronic Business (UN/CEFACT), the World Wide Web Consortium W3C, and the Organization for the Advancement of Structured Information Standards (OASIS).

This article presents short information about role of certification, labelling, marking and standardisation for wood processing in EU countries and importance of this issue for wood processing industry in B&H with regard to EU market access requirements.

Key words: wood processing, certification, labelling, marking, standardisation.

1. INTRODUCTION

Certification, product and material testing, accreditation and quality criteria are a feature of trading within the EU and the EEA. They can be mandatory, as from the EC, or opportunistic, as from trade and business intent on meeting perceived consumer demands. Both routes result in commercial success. Most countries in the European Union have their own institute or 'centre' for the Wood & Wood Products Industry. A number of international test centres now offer their own Quality Marks for national and international recognition. Much work and activity is now driven by the need for conformity within the EU and the EEA (European Economic Area) as well as international (ISO) moves over the last 30 years. This conformity could have been seen as a Trade Barrier, but the wide scope and availability of methods and facilities able to carry out tests to meet the standards has ensured this need not be the case [1].

It is however vital that developing and emerging countries become fully aware of these conformity needs for wood and wood products and are able to respond to the requisite standards that apply in each country. This article presents short information about role of certification, labelling, marking and

standardisation for wood processing in EU countries and importance of this issue for wood processing industry in B&H with regard to EU market access requirements [2].

2. EU MARKET ACCESS REQUIREMENTS AND DIRECTIVES

In essence 2 prime directives (Construction Products Directive-CPD and General Product Safety Directive-GPS) have been issued by the European Commission for activation across all 27 EU countries. These apply to wood & wood products as with any other goods and products within their confines. It is worth understanding the comprehensive nature of these directives. The aim of the Construction Products Directive (CPD) is to abolish the great number of technical barriers to trade that currently exist between the highly regulated construction markets across the EU Member States in order to create a single European market for construction products. The CPD Directive is for construction and GPS Directive is for consumer goods. The CE Mark, shown within the first directive is also used for Nursery Furniture [3].

The manufacturers must put on the market products that comply with the general safety requirement. In addition, they must provide consumers with the necessary information in order to assess a product's inherent threat, particularly when this is not directly obvious, and take the necessary measures to avoid such threats (e.g. withdraw products from the market, inform consumers, recall products which have already been supplied to consumers, etc.). Distributors are also obliged to supply products which comply with the general safety requirement, to monitor the safety of products on the market and to provide the necessary documents ensuring that the products can be traced.

If the manufacturers or the distributors discover that a product is dangerous, they must notify the competent authorities and, if necessary, cooperate with them.

3. CE MARKING

The Directive prescribes that construction products put on the market shall be of such nature that they enable the construction in which they are incorporated to comply with the following six essential requirements: Mechanical Resistance and Stability; Safety in Case of Fire; Hygiene, Health and the Environment; Safety in Use; Protection against Noise and; Energy Economy and Heat Retention [4]. Compliance with these requirements will have to be demonstrated by means of the CE-mark. This CE marking will show that the product complies with all the legal requirements and will, in principle, allow the product to be placed on the entire EU 27 country construction market, as well as in Iceland, Liechtenstein, Norway, Switzerland and progressively into the next set of accession countries. The EU Member States will not be allowed to require any other marks by law. On the other hand, the manufacturer will still have the possibility to put additional quality marks on his product, provided these do not hamper the legibility of the CE marking and do not confuse the user. The exact requirements for the CE marking are defined in so-called 'harmonised standards', adopted by CEN, on 'mandates' given by the European Commission after consultation of the Standing Committee on Construction, a body of representatives of the EU Member States that is responsible for the implementation of the CPD. Wood and wood-based products are covered by the following mandates:

- M 101 "Doors, windows and related products"
- M 108 "Curtain walling systems"
- M 112 "Structural timber products and ancillaries"
- M 113 "Wood-based panels"
- M 119 "Flooring"

These mandates determine which (parts of) the standards developed in the CEN technical committee will become mandatory under the CPD. Once a reference to a harmonized standard is published in the official journal, manufacturers can start putting CE-marked products on the market. So far, only one harmonized standard, EN 13986 on wood-based panels has been officially approved and the reference published. It implies that, as from 1 April 2004, only CE-marked particleboard, MDF, OSB, plywood, fibreboards ... will be allowed on the EU market for construction purposes. Non CE-marked products can still be sold, but then only for other purposes (non-constructional applications such as e.g. furniture) [5].

4. IMPORTANT TEST MARKS

There are a lot of test marks for wood processing sector. This article presents several worldwide known test marks for wood processing industry.

The LGA and its brand name stand for a modern group of companies providing testing and other services. The Geprüfte Sicherheit ("Tested Safety") or GS mark is a voluntary certification mark for technical equipment. It indicates that the equipment meets German and, if available, European safety requirements for such devices. The main difference between GS and CE mark is that the compliance with the European safety requirements has been tested and inspected by a state-approved (but independent) body. The mark is based on the German Equipment and Product Safety Act ("Geräte- und Produktsicherheitsgesetz", or "GPSG") [6].

The "Golden M" is an indicator of German Furniture Quality Association (DGM). Furniture with this RAL seal of approval is subject to stringent limit values for pollutants. Technical tests in order to receive the certification mark "Golden M" includes: Durability tests; Material quality tests; Long life cycle tests; Safety tests and; Health safety tests.

All tests are carried out by independent institutions. The "Golden M" is the only in Germany official accepted mark for furniture and the most demanding mark for furniture quality- and safety in Europe.



Figure 1. Important test marks [7].

ÖkoControl is a pool of about 55 furniture traders that pay high attention to ecological aspects. Their clients are persons that pay attention to ecological clean products and a healthy living environment. ÖkoControl is member of the „European Association for ecological building arrangements (Einrichtungshäuser) and aims to test their furniture as much as possible by independent test institutions before giving the ÖkoControl label. Products have to be as much as possible free of pollutants. Ökocontrol, Gessellschaft für Qualitätsstandards ökologischer Einrichtungshäuser mbH, Germany (Ecolabel, Germany) included are: Furniture made of massive wood; Furniture containing padding and; Mattresses.

The Giscode label is voluntary and spread mostly within the construction trade and related fields. Emissions controlled products regarding very Volatile Organic Compounds must be made without any additions of solvents. In Germany they are labelled with the appropriate GISCODE, as far as they fall within the area of application of this labeling system.

The most well-known and wide spread ISO type I label in Germany is the Blue Angel which is available for different kinds of consumer and professional goods and services. The German Environmental Label "Blue Angel" is for emission-minimised products made of wood and wooden materials. This Environmental Label combines health and ecological criteria. For example, it lays down limit values for the release of pollutants like solvents, formaldehyde and plasticisers. The

German Federal Environmental Agency has awarded the “Blue Angel” to a series of living-room, bedroom and office furniture which is produced in eco-friendly processes, does not constitute a health hazard, and whose wood comes predominantly from sustainable forestry operations.

5. RESEARCH FINDINGS

In 2009, the Author conducted a special survey of wood processing companies in Bosnia and Herzegovina. A database of companies from wood processing and furniture industry developed by the Consultant was used in constructing the sample. Based on criteria for evaluation of companies for certification, labelling, marking and standardization, the sample included a higher percentage of companies involved in final wood processing. The selection of this sample of 27 companies was neither stratified nor random.

Some BiH companies have been certified by recognized agencies according requirements of ISO 9001 standard. Only 22,2 % are preparing or have completed preparation for QMS certification, and 55,6% are not pursuing QMS certification. Quality control is a never-ending process, which must always be improved on. There is no official EU quality standard for domestic furniture. However, the CEN, the European Committee for Standardization, published through its technical committee the CEN/TC 207. This includes some voluntary quality standards and test methods still apply in many cases. Therefore, a large majority of surveyed companies were interested in satisfying QMS according requirement of following standards: ISO 9001, ISO 14001, CE mark (for Construction Joinery and Wooden Toys) and Test certificates for specific products. The percentage of companies with quality certification is higher among companies with over 100 employees than among companies with a small number of employees.

6. CONCLUSION

A brief overview of the European market access requirements and directives for wood processing industry was given in this article. Current situation in BH wood processing sector shows high potential for introduction of market access requirements within BH wood value chain in future [8].

7. REFERENCES

- [1] Alagić I.: Market Survey and Identification of high impact ICTs in BH Wood processing Industry, 14th International Research/Export Conference “Trends in the Development of Machinery and Associated Technology”, University of Zenica, UPC Barcelona, Bahçeşehir Üniversitesi İstanbul, TMT 2010, Mediterranean Cruise, 11-18. September 2010.
- [2] Alagić I.: Final report on the results of GAP Analysis of the wood processing sector in Bosnia and Herzegovina, Swiss Import Promotion Programme, SIPPO, Zurich, Switzerland, January 2009.
- [3] Alagić I.: Final report on the results of Evaluation of market and production potential in the wood processing sector in BiH and Evaluation of BiH companies for participation in SIPPO match making activities 2009-2011, Swiss Import Promotion Programme, SIPPO, Zurich, Switzerland, July 2008.
- [4] Alagić I., Korjenić I., Identification of High Impact ICTs as e-BIZ Center Core Offerings: Wood Sector, Briefing Paper, Excellence in Innovation Project, USAID/BiH Excellence in Innovation dot-ORG Cooperative Agreement Award No. 168-A-00-07-00101-00 and Royal Ministry of Foreign Affairs, Norway Grant Project number 2070065, Boston, USA, June 6, 2008.
- [5] Alagić I., Petković D., Stautmeister T., Wuthrich K., Some word about Wood Excellence Center as top-priority project of Central BiH, 11th International Research/Export Conference “Trends in the Development of Machinery and Associated Technology”, University of Zenica, UPC Barcelona, Bahçeşehir Üniversitesi İstanbul, TMT 2007, Hammamet, Tunisia, 05-09. September 2007.
- [6] Alagić I., Certification, Labelling, Marking and Standardization-Wood Excellence Center, Manual, University of Applied Sciences Berne, School of Architecture, Civil and Wood Engineering HSB, Biel, Switzerland, 2007.
- [7] Prof.Dr-Ing. T. Stautmeister, M.Bieri: ”Prozessreorganisation am Beispiel der automatisierten Fenstermontage und -verlebung“, Internationale Konferenz zur „Automation in der Holzwirtschaft“, Proceeding, pages 1-9, Berner Fachhochschule, Hochschule für Architektur, Bau und Holz HSB, Burgdorf, Biel, Switzerland, 12.und 13.October 2006.
- [8] Alagić I., Analysis of the existing production technologies level in wood processing industry and specification of needs, USAID CCA, REZ Agency, Zenica, Bosnia and Herzegovina, 2006.