

FRANCE international scientific-online conference: "SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM" PART 14, 5th APRIL

BENEFITS AND IMPORTANT ASPECTS OF THE OEKO – TEX INTERNATIONAL STANDARD FOR SILK AND TEXTILE INDUSTRIES AND CONSUMERS

Qaxramonov Muhammadali

Doctoral Student, Namangan Engineering Technology Institute

Abstract: in this acticle, textile production is extremely complex and involves a multitude of mechanical and physico-chemical processes. It is often very demanding in terms of energy, water and chemicals, in relation both to the environment and the employees in the production processes. OEKOTEX® (the International Association for Research and Testing in the field of textile and leather ecology) is the most widespread and best known label for textiles tested for harmful substances on a global level. OEKO-TEX Standard 100 focused on the development of methods for testing of pH, dangerous substances like heavy metals, toxic dyes, crop protection substances and carcinogenic substances like formaldehyde, phenols or pesticide in testing articles.

Key words: Textile, Oeko-Tex Standard, certification, step, testing, product, international, certification.

The oldest sector of consumer goods production is the textile business. It is a varied and heterogeneous industry that includes the complete production process of turning natural and synthetic fibers (like cotton, wool, and oil, silk) into end – user products, such as clothing, furniture, and industrial textiles. Environmental concerns are now prevalent in every aspect of production. Consumer safety and environmental protection are now widely considered when buying textiles as a result of the textile industry's recent emphasis on ecology. Production of textile is incredibly intricate and includes numerous mechanical and physio – chemical processes. It frequently requires a lot of energy, water, and chemicals, both in terms of the environment and the workers involved in the manufacturing processes (including noise, dust, moisture, chemicals and others). There are many research institutions working on textile ecology applications all over the world right now, which has led to a variety of ecologically friendly textile manfucaturing solutions. Manufacturers of textile, clothing and other products, especially those who want their products placed on the EU market, are increasingly faced with the demands that guarantee environmental friendliness of its products. In the future such requests will probably be more stringent so in recent times and the level of established the European Union criteria for textile products will be stringent too.

In addition, test methods must also be in accordance with the requirements of these standards. If all components of a textile comply with the requirements of the Oeko-Tex criteria catalogue without exception, the textile manufacturer receives certification and is entitled to use the Oeko-Tex label to mark the products in the shops.

Textile standards provide the specifications and test methods for the mechanical, physical, and chemical properties of textiles, fabrics and cloths, as well as the natural and artificial fibres that constitute them. The textiles covered by these standards are commonly



FRANCE international scientific-online conference: "SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM" PART 14, 5th APRIL

formed by weaving, knitting, or spinning together fibres. such as glass fibre strands, wool and other animal fibres, cotton and other plant-derived fibres, sewing threads, yarn and mohair. These textile standards help fabric and cloth designers and manufacturers in testing textiles to ensure acceptable characteristics towards end-use.

The benefits of OEKO - TEX certification in line with STANDARD are crucial for marketing in the textile sector. OEKO - TEX and OEKO - TEX 100 stnadard are useful marketing tools that allow businesses to clearly demonstrate their accountability for the product safety of their goods for customers and the environment along the textile. Customers expect goods to be of certain quality as well as to be safe for their health and produced in accordance with environmental standard. Systems created to OEKO - TEX standards offer customer safe, environmentally friendly goods. Ceritified products with eco - labels suggest consumer safety. Consumer preference for goods that are seen as environmentally friendly is becoming more and more evident, according to surveys of consumers. While consumers place a high priority on criteria production (such as the removal of toxic materials from products, packaging, etc), a significant percentage of consumers choose "green" products and pay a high price for them. The success of an ecolabelling scheme depends on consumer acceptance and demand. It is challenging to maintain industry confidence without proof that the program supports its activities and licensees, as well as customer recognition and trust in the ecolabel. Making ensuring that consumers receive information about the ecolabel and the certified products is a crucial task. Consequently, monitoring consumer recognition and confidence of the ecolabelling program if they think the product they choose will harm the environment less than its alternatives. OEKO -TEX standard acceptance and purchases of ecolabelled goods are the factors used as "guidance tools" and a crucial indicator of the growth and sustainability of the textile industry. One of the most crucial elements is the participation of the institutions in the OEKO - TEX certification process. Based on their expertise and competence, testing and compliance statement, the customer is able to gain insight into the quality of the product due to the impact on human health and the conditions of production including the environment. The most frequently used labels are the OEKOTEX standard of which the OEKO-TEX 100 is one of the most often used in EU countries. The OEKO-TEX standard 100 was developed in co-operation between German and Austrian textile research institutes.

In laboratories of the institutes, testing products on harmful substances and the elimination of unsatisfactory samples resulted with the smaller impact of textile products on human health (allergies, carcinogenic and mutagenic effects, etc.), which ultimately reduces the global health problems so as the high cost of medical treatment. The benefit of such testing is multi-disciplinary with regard to health, environmental and economic outcomes to both sides – users and producers.

OEKO-TEX was precursor of STeP. Its modular and independent certification provides targeted support for brands, manufacturers and retailers on their way to more sustainability and creates even a high degree of transparency and reliability for consumers. 68 Certification by STep includes management of chemicals, environmental management



FRANCE international scientific-online conference: "SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM" PART 14, 5th APRIL

and performance, occupational health and safety, social responsibility and quality management. STeP certification allows a reliable analysis of the sustainable management provided by a production. Companies that operate on sustainable principles must develop modes of product-related environmental communication which can be utilised in global market with a high profit. Eco-design certified by STeP has significant positive effect on the four types of outcomes: environmental outcomes, economic outcomes, cost reduction and intangible outcomes. Hence, manufacturers are increasingly giving importance to sustainable development through environmental and social standards that comply with the requirements of a certification scheme of sustainable textile production (STeP). With the globalization of markets increasing and the requirements for OEKO-TEX and STeP programs and certification, with objective to expand their effort for market and beyond domestic borders, is increasing. Companies which want to participate in a certification by OEKO-TEX or STeP program submit their products to independent institutes on testing or verification and must comply with other requirements of this standard. By offering products that reduce stress on the environment and take into account the social aspects, the companies can establish a better market and positive corporate image. In developed countries where there is a high level of consumer awareness, certification by STeP provides information on the environmental impacts of products in the marketplace and it can promote the selection of certified products. In countries where consumers are at low level awareness and are not motivated by environmental concerns, certification can be used to promote environmentally beneficial actions. By the joint efforts of manufacturers and institutions that promote, support and implement ecocertifications sustainable development of the textile industry will be provided.

Conclusion: Textile labels are in general of high importance for consumer worldwide. Almost every second consumer worldwide states that seals are of high relevance when buying clothes and textiles. Worldwide product quality and health safety are considered the most important factors when purchasing textiles and clothes. OEKO-TEX is the best worldwide known textile seal. A textile that has successfully passed the test may be marked with the OEKO-TEX label. The motto "Confidence in Textiles" has become a synonym worldwide for environmentally-friendly manufacture as well as for responsible textile production. OEKO-TEX standards provide safety and transparency in textile production. Certification procedures are connecting best practice, actual practice and requirements of standards. The certification including very important decisions considering reducing risk, differentiating products from competitors, finding new cost saving, ensuring long-term supply, reputational gains and realizing a price premium for the product.

REFERENCES:

[1] Retail forum for sustainability, Sustainability of textiles, ISSUE PAPER Nº11 (2013) [2]http://www.dystar.com/wpcontent/uploads/2014/12/Oeko_Tex_Standard_100_ed01 20 14 09 0051-00 1408.pdf downloaded 20.01.2017



FRANCE international scientific-online conference: "SCIENTIFIC APPROACH TO THE MODERN EDUCATION SYSTEM" PART 14, 5th APRIL

- [3] Kirin S, Čunko R: Oeko-Tex Standard 100-sustav certificiranja ekološke pouzdanosti tekstilija, Tekstil 48(1999.) 6, 299-306
- [4] Goel B.: Eco-Labels and Standards for textile products to save environment, Manmade Textiles in India, October 2012, 337-3
- [5] Vermeer D., Clemen B., michalko A., Nguyen D., Noyes C., Akella A., Bunting J.: An Overview of Ecolabels and Sustainability Certifications in the Global Marketplace (2010)
 - [6] Global ecolabelling network (GEN), Introduction to ecolabelling (2004)