

საქართველოს სტანდარტი

მანქანა-დანადგარების უსაფრთხოება - ერგონომიული დიზაინის
პრინციპები - ნაწილი 1: ტერმინოლოგია და ზოგადი პრინციპები

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საქართველოს სტანდარტებისა და მეტროლოგიის
ეროვნული სააგენტო
თბილისი

სსტ ენ 614-1:2006+A1:2009/2019

საინფორმაციო მონაცემები

1 შემუშავებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს სტანდარტების დეპარტამენტის მიერ

2 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს 2019 წლის 6 დეკემბრის № 98 განკარგულებით

3 მიღებულია გარეკანის თარგმნის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ 614-1:2006+A1:2009 „მანქანა-დანადგარების უსაფრთხოება - ერგონომიული დიზაინის პრინციპები - ნაწილი 1: ტერმინოლოგია და ზოგადი პრინციპები”

4 პირველად

5 რეგისტრირებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2019 წლის 6 დეკემბერი №268-1.3-016171

დაუშვებელია წინამდებარე სტანდარტის სრული ან ნაწილობრივი კვლავწარმოება, ტირაჟირება და გავრცელება სსიპ საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს ნებართვის გარეშე

ICS 13.110; 13.180

English Version

Safety of machinery - Ergonomic design principles - Part 1:
Terminology and general principles

Sécurité des machines - Principes ergonomiques de
conception - Partie 1: Terminologie et principes généraux

Sicherheit von Maschinen - Ergonomische
Gestaltungsgrundsätze - Teil 1: Begriffe und allgemeine
Leitsätze

This European Standard was approved by CEN on 13 December 2008.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

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Foreword

This document (EN 614-1:2006+A1:2009) has been prepared by Technical Committee CEN/TC 122 “Ergonomics”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by July 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2008-12-13.

This European Standard supersedes \square_{A1} EN 614-1:2006 \square_{A1} .

The start and finish of text introduced or altered by amendment is indicated in the text by tags \square_{A1} \square_{A1} .

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EC Directive(s).

\square_{A1} For relationship with EC Directive(s), see informative Annexes ZA and ZB, which are integral parts of this European Standard.

EN 614 consists of the following Parts, under the general title Safety of machinery – Ergonomic design principles:

- Part 1: Terminology and general principles
- Part 2: Interactions between the design of machinery and work tasks. \square_{A1}

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

Ergonomically designed work systems enhance safety, improve human working and living conditions and counteract adverse effects on human health. Also they usually improve the operator-machine system performance and reliability. In this European Standard the term "ergonomics" refers to a multidisciplinary field of science and its application. Applying ergonomics to the design of work systems, especially where the design of machinery is concerned, ensures that human capabilities, skills, limitations and needs are taken into account.

The work system includes operators, job design, work equipment (e.g. machinery), work space, work environment, work process and the interactions between them. It can vary in complexity from a workshop with a single operator using hand held equipment to a process plant and its operators. Good design takes into account how the operator is expected to interact with the work equipment and how the work equipment fits into the system as a whole. This is particularly important the more the work equipment is interdependent on other components of the system. In its whole complexity, the working system is described in generic standards (e.g. EN ISO 6385).

Compliance with harmonised standards prepared by CEN/CENELEC enables manufacturers and suppliers to meet requirements of European legislation. EN ISO 12100-1 and EN ISO 12100-2 contain the concepts and general principles to guide designers in achieving safety for machinery for occupational and private purposes. Ergonomic principles can be incorporated into the design process by following this standard. In this way both the technical design and ergonomic principles are considered at the same time. The aim to enhance the health, safety and well-being of workers is reached by systematically minimising the risks according to **A1** EN ISO 12100 **A1**. EN 13861 provides information concerning applicable ergonomic B-type standards related to specific hazards.

This standard is one of the European Standards covering specific topics identified in EN ISO 12100-1 and EN ISO 12100-2 as important to the safety of machinery.

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