

საქართველოს სტანდარტი

მანქანა-დანადგარების უსაფრთხოება - ადამიანის ფიზიკური
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მანქანა-დანადგარების კომპონენტის ნაწილები

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ეროვნული სააგენტო
თბილისი

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4 პირველად

5 რეგისტრირებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2019 წლის 6 დეკემბერი №268-1.3-016179

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English Version

Safety of machinery - Human physical performance - Part 2:
Manual handling of machinery and component parts of
machinery

Sécurité des machines - Performance physique humaine -
Partie 2: Manutention manuelle de machines et d'éléments
de machines

Sicherheit von Maschinen - Menschliche körperliche
Leistung - Teil 2: Manuelle Handhabung von Gegenständen
in Verbindung mit Maschinen und Maschinenteilen

This European Standard was approved by CEN on 13 February 2003 and includes Amendment 1 approved by CEN on 18 August 2008.

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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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საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.

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Foreword

This document (EN 1005-2:2003+A1:2008) 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of an identical text or by endorsement, at the latest by April 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2008-08-18.

This document supersedes EN 1005-2:2003.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** and **A1**.

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

A1 For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. **A1**

EN 1005 consists of the following parts, under the general title "Safety of machinery - Human physical performance":

- Part 1: Terms and definitions;
- Part 2: Manual handling of machinery and component parts of machinery;
- Part 3: Recommended force limits for machinery operation;
- Part 4¹⁾: Evaluation of working postures and movements in relation to machinery;
- Part 5¹⁾: Risk assessment for repetitive handling at high frequency.

Annexes A, B and C are for informative.

This document includes a Bibliography.

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.

1) This European Standard is under preparation by CEN/TC 122/WG 4 "Biomechanics".

Introduction

When designing and constructing machinery, the manufacturer should meet the essential requirements for safety and health set out in the Machinery Directive. The manufacturer should assess the hazards of the machine and consider these hazards related to the life cycle of the machine.

This European Standard is one of several ergonomic standards for the safety of machinery. EN 614-1 describes the principles to be applied by designers in order to accommodate ergonomic factors.

This standard has been prepared to be a harmonised standard in the sense of the Machinery Directive and associated EFTA regulations.

This European Standard is a type B standard as stated in EN 1070.

The provisions of this document can be supplemented or modified by a type C standard.

NOTE For machines which are covered by the scope of a type C standard and which have been designed and built according to the provisions of that standard, the provisions of that type C standard take precedence over the provisions of this type B standard.

Manual handling of loads can lead to a high risk of injury to the musculoskeletal system if the loads to be handled are too heavy, and/or handled at high frequencies for long durations and/or in awkward postures. Disorders of the musculoskeletal system are of a common occurrence throughout Europe. Manually applied effort is often required by operators working with machines for their intended purpose. Risks exist if the design of the machinery is not in accordance with ergonomic design principles. When designing and constructing machinery where manual handling is required, this standard provides relevant data for working posture, load, frequency and duration. The design criteria given in this standard can be used by the designer when making risk assessments.

This standard requires machinery designers to adopt a three stage approach to:

- a) avoid manual handling activities wherever possible;
- b) utilise technical aids;
- c) further reduce the inherent level of risk by optimising handling activities.

For machines and their component parts which cannot be moved or transported by hand, see 4.2 in EN 292-2:1991.

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