

საქართველოს სტანდარტი

მანქანა-დანადგარების უსაფრთხოება - მანქანა-დანადგარებიდან რადიაციული გამოსხივების რისკების წარმოქმნის შეფასება და შემცირება - ნაწილი 2:
რადიაციული ემისიის გაზომვის პროცედურა

საქართველოს სტანდარტებისა და მეტროლოგიის
ეროვნული სააგენტო
თბილისი

სსტ ენ 12198-2:2002+A1:2008/2019

საინფორმაციო მონაცემები

1 შემუშავებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს სტანდარტების დეპარტამენტის მიერ

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4 პირველად

5 რეგისტრირებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2019 წლის 6 დეკემბერი №268-1.3-016545

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

English Version

Safety of machinery - Assessment and reduction of risks arising
from radiation emitted by machinery - Part 2: Radiation emission
measurement procedure

Sécurité des machines - Estimation et réduction des
risques engendrés par les rayonnements émis par les
machines - Partie 2: Procédures de mesurage des
émissions de rayonnement

Sicherheit von Maschinen - Bewertung und Verminderung
des Risikos der von Maschinen emittierten Strahlung - Teil
2: Messverfahren für die Strahlenemission

This European Standard was approved by CEN on 16 October 2002 and includes Amendment 1 approved by CEN on 27 July 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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საინფორმაციო ნაწილი. სრული ტექსტის სახსრად შეიძინეთ სტანდარტი.

Foreword

This document (EN 12198-2:2002+A1:2008) has been prepared by Technical Committee CEN/TC 114 "Safety of machinery", 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 March 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2008-07-27.

This document supersedes EN 12198-2:2002.

The start and finish of text introduced or altered by amendment is indicated in the text by tags $\boxed{A_1}$ $\boxed{A_1}$.

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 EC Directive(s).

$\boxed{A_1}$ For relationship with EC Directives, see informative Annexes ZA and ZB, which are integral parts of this document. $\boxed{A_1}$

This European Standard deals with the essential requirement "Radiation" (see EN 292-2:1991, annex A, paragraph 1.5.10).

Annex A is 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.

Introduction

Machinery supplied by electrical power or containing radiation sources may emit radiation or generate electric and/or magnetic fields. The radiation emissions will vary in frequency and magnitude.

EN 12198-1 contains the general principles of risk assessment of radiation emission by machinery.

EN 12198-3 contains details of protective measures for avoiding or reducing radiation exposure of persons by reducing emissions and requiring the provision of information.

Designers should identify the radiation hazards arising from machinery in accordance with the general principles set out in EN 12198-1. In order to assess the risks and categorize the radiation emissions, designers need to quantify the hazards.

Measurements are made in accordance with the following clauses in order to:

- check the level of safety integration in the design of machinery;
- give a basis for the categorization according to 7.1 of EN 12198-1:2000;
- assess the ability of machinery to be operated, set and maintained without any hazard to persons when setting and maintenance operations are carried out under the conditions specified by the manufacturer;
- detect and measure, any radiation leakage;
- determine areas where radiation emissions may create a health and safety hazard;
- enable potential users to make comparisons of the radiation emission from different machines.

In case of particular difficulties, measurements can be supplemented by duly justified calculations.

Annex A gives information about the techniques of measurement of the different types of radiations. The standard techniques will be specified in other standards as they are developed. Other methods and detectors can be developed, their omission from this annex does not exclude their use.

If no standard measurement techniques exist, then an accepted scientific procedure should be applied and appropriate details given.

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

The provisions of this document may 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.

1 Scope

This European Standard defines basic technology and specifies general procedures for making and reporting measurements of quantities related to radiation emitted by machinery. It covers the different radiation emissions as defined in EN 12198-1.

This standard applies to machinery as defined in 3.1 of EN 292-1:1991.