

საქართველოს სტანდარტი

მანქანა-დანადგარების უსაფრთხოება-ლაზერული დამუშავების მანქანა-დანადგარები-ნაწილი 3: მეთოდები ხმაურის შემცირებისა და გაზომვის ლაზერული მანქანებისა და ხელის დამმუშავებელი მოწყობილობების და ასოცირებული დამხმარე მოწყობილობების (სიზუსტის კლასი 2)
(ისო 11553-3: 2013)

საქართველოს სტანდარტებისა და მეტროლოგიის
ეროვნული სააგენტო
თბილისი

სსტ ენ ისო 11553-3:2013/2019

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 20 დეკემბრის № 102 განკარგულებით

3 მიღებულია გარეკანის თარგმნის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ ისო 11553-3:2013 “მანქანა-დანადგარების უსაფრთხოება-ლაზერული დამუშავების მანქანა-დანადგარები-ნაწილი 3: მეთოდები ხმაურის შემცირებისა და გაზომვის ლაზერული მანქანებისა და ხელის დამმუშავებელი მოწყობილობების და ასოცირებული დამხმარე მოწყობილობების (სიზუსტის კლასი 2) (ისო 11553-3: 2013)”

4 პირველად

5 რეგისტრირებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2019 წლის 20 დეკემბერი №268-1.3-016732

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

ICS 31.260; 13.110

English Version

Safety of machinery - Laser processing machines - Part 3: Noise reduction and noise measurement methods for laser processing machines and hand-held processing devices and associated auxiliary equipment (accuracy grade 2) (ISO 11553-3:2013)

Sécurité des machines - Machines à laser - Partie 3:
Méthodes de mesure et de réduction du bruit des machines
à laser, des dispositifs de traitement portatifs et des
équipements auxiliaires connexes (classe de précision 2)
(ISO 11553-3:2013)

Sicherheit von Maschinen - Laserbearbeitungsmaschinen -
Teil 3: Lärminderungs- und Geräuschmessverfahren für
Laserbearbeitungsmaschinen und handgeführte
Laserbearbeitungsgeräte sowie zugehörige
Hilfseinrichtungen (Genauigkeitsklasse 2) (ISO 11553-
3:2013)

This European Standard was approved by CEN on 1 March 2013.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....	3
---------------	---

საინფორმაციო ნაწილი. სრული ტექსტის სახასიათოდ შეიძინეთ სტანდარტი.

Foreword

This document (EN ISO 11553-3:2013) has been prepared by Technical Committee ISO/TC 172 "Optics and photonics" in collaboration with Technical Committee CEN/TC 123 "Lasers and photonics" 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 September 2013, and conflicting national standards shall be withdrawn at the latest by September 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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.

For relationship with EU Directive, see informative Annex ZA, which is an integral part of this document.

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 11553-3:2013 has been approved by CEN as EN ISO 11553-3:2013 without any modification.

Annex ZA
(informative)

Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 2006/42/EC on machinery.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard confers, within the limits of the scope of this standard, a presumption of conformity with the Essential Requirement on noise of that Directive and associated EFTA regulations.

WARNING — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

საინფორმაციო ნაწილი. სრული ტექსტის სახსრავად შეიძინეთ სტანდარტი.

**Safety of machinery — Laser
processing machines —**

**Part 3:
Noise reduction and noise
measurement methods for laser
processing machines and hand-held
processing devices and associated
auxiliary equipment (accuracy grade 2)**

Sécurité des machines — Machines à laser —

Partie 3: Méthodes de mesure et de réduction du bruit des machines à laser, des dispositifs de traitement portatifs et des équipements auxiliaires connexes (classe de précision 2)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2013

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Noise hazards	2
4 Safety requirements and measures	2
4.1 General requirements for noise reduction.....	2
4.2 Noise reduction measures.....	2
5 Verification of safety requirements for noise emission reduction and/or protection measures	3
6 Information for the user	3
Annex A (normative) Noise test code (accuracy grade 2)	5
Bibliography	12

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 11553-3 was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee SC 9, *Electro-optical systems*, in collaboration with IEC/TC 76, *Optical radiation safety and laser equipment*.

ISO/IEC 11553 consists of the following parts, under the general title *Safety of machinery — Laser processing machines*:

- *Part 1: General safety requirements*
- *Part 2: Safety requirements for hand-held laser processing devices*
- *Part 3: Noise reduction and noise measurement methods for laser processing machines and hand-held processing devices and associated auxiliary equipment (accuracy grade 2)*

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.

Introduction

The Machinery Safety Directive issued by the Council of the EU outlines essential and mandatory requirements that must be met in order to ensure that machinery is safe. In response, CEN/CENELEC initiated a programme to produce safety standards for machines and their applications. This part of ISO/IEC 11553 is one in that series. It has been prepared as a harmonized standard to provide a means of conforming with the essential safety requirements of the Machinery Directive and associated EFTA Regulations.

This document is a type B standard as stated in ISO 12100. The provision of this document may be supplemented or modified by a type C standard.

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

It is applicable to machines using laser radiation to process materials. The purpose of this part of ISO/IEC 11553 is to prevent injuries to persons by

- listing potential hazards generated by machines containing lasers,
- specifying safety measures and verifications necessary for reducing the risk caused by specific hazardous conditions,
- providing references to pertinent standards, and
- specifying the information which is to be supplied to the users so that they can establish proper procedures and precautions.