

**Isikukaitsevahendid. Termiliste riskide ja
sulametalli pritsmete eest kaitsvad jalatsid. Nõuded
ja katsemeetodid (ISO 20349:2010)**

Personal protective equipment - Footwear protecting
against thermal risks and molten metal splashes as
found in foundries and welding - Requirements and test
method (ISO 20349:2010)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 20349:2010 sisaldab Euroopa standardi EN ISO 20349:2010 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 31.12.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 01.12.2010.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 20349:2010 consists of the English text of the European standard EN ISO 20349:2010.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 31.12.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 01.12.2010.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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English Version

Personal protective equipment - Footwear protecting against thermal risks and molten metal splashes as found in foundries and welding - Requirements and test method (ISO 20349:2010)

Équipement de protection individuelle - Chaussures de protection contre les risques thermiques et les projections de métal fondu comme rencontrés dans les fonderies et lors d'opérations de soudage - Exigences et méthode d'essai (ISO 20349:2010)

Persönliche Schutzausrüstung - Schuhe zum Schutz gegen thermische Risiken und Spritzer geschmolzenen Metalls - Anforderungen und Prüfverfahren (ISO 20349:2010)

This European Standard was approved by CEN on 30 October 2010.

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

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Foreword

This document (EN ISO 20349:2010) has been prepared by Technical Committee CEN/TC 161 "Foot and leg protectors", the secretariat of which is held by BSI, in collaboration with Technical Committee ISO/TC 94 "Personal safety - Protective clothing and equipment".

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 June 2011, and conflicting national standards shall be withdrawn at the latest by June 2011.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 20349:2010 has been approved by CEN as a EN ISO 20349:2010 without any modification.

Annex ZA (informative)

Relationship between this European Standard and the Essential Requirements of EU Directive 89/686/EEC Personal protective equipment

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 89/686/EEC Personal protective equipment.

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 clauses of this standard given in table ZA confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and Directive 89/686/EEC Personal protective equipment

Clause(s)/sub-clause(s) of this EN	Essential Requirements (ERs) of Directive 89/686/EEC	Qualifying remarks/Notes
5.2	1.1.1 Ergonomics	
5.2	1.1.2.1 Highest level of protection possible	
5.1	1.2.1 Absence of risks and other inherent nuisance factors	
5.2	1.2.1.2 Satisfactory surface condition of all PPE parts in contact with the user	
5.2	1.2.1.3 Maximum user impediment	
7	1.4 Information supplied by the manufacturer	
6	2.12 PPE bearing one or more identification or recognition marks directly or indirectly relating to health and safety	
5.3, 5.4, 5.5, 5.6 and 5.7	3.6 Protection against heat and/or fire	This ER should be considered partially verified, at least in regard to molten metal (Fe/Al) splashes. Temperature increase (related to thermal capacity) inside the footwear is not determined

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

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Requirements	2
5 Specific requirements	6
5.1 Footwear design	6
5.2 Ergonomic performance and compatibility	6
5.3 Resistance to the effects of molten metal	6
5.4 Small molten metal splash test	6
5.5 Resistance of upper to contact heat transmission	7
5.6 Burning behaviour of upper material	7
5.7 Heat insulation of sole complex	7
5.8 Surface shrinkage of leather	7
6 Marking	7
7 Information to be supplied by the manufacturer	8
Annex A (normative) Test method for the resistance of footwear to the effects of large quantities of molten metal	10
Annex B (normative) Assessment of ergonomic performance and compatibility of footwear	13
Annex C (normative) Method for determination of burning behaviour of footwear upper	15
Bibliography	16

Personal protective equipment — Footwear protecting against thermal risks and molten metal splashes as found in foundries and welding — Requirements and test method

WARNING — This International Standard calls for the use of substances and/or procedures that may be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage.

1 Scope

This International Standard specifies requirements and test methods for footwear protecting users against thermal risks and molten iron or aluminium metal splashes such as those encountered in foundries, welding and allied process.

Footwear complying with this International Standard also offers other protection as defined in ISO 20345.

NOTE Gaiters, over boot and clothing intended to provide protection to the feet and legs against molten metal are addressed by ISO 11611 and ISO 11612.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 7000:2004, *Graphical symbols for use on equipment — Index and synopsis*

ISO 9185:2007, *Protective clothing — Assessment of resistance of materials to molten metal splash*

ISO 15025:2000, *Protective clothing — Protection against heat and flame — Method of test for limited flame spread*

ISO 17227:2002, *Leather — Physical and mechanical tests — Determination of dry heat resistance of leather*

ISO 20344:2004/Amd.1:2007, *Personal protective equipment — Test methods for footwear — Amendment 1*

ISO 20345:2004/Amd.1:2007, *Personal protective equipment — Safety footwear — Amendment 1*

EN 348, *Protective clothing — Test method: Determination of behaviour of materials on impact of small splashes of molten metal*

EN 702, *Protective clothing — Protection against heat and flame — Test method: Determination of the contact heat transmission through protective clothing or its materials*