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

*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*



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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.

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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 20349 was prepared by the European Committee for Standardization (CEN) Technical Committee ISO/TC 161, *Foot and leg protectors in equipment*, in collaboration with ISO Technical Committee ISO/TC 94 *Personal safety — Protective clothing and equipment*, Subcommittee SC 3, *Foot protection*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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*