SLOVENSKI STANDARD
SIST EN ISO 20349-2:2017/oprA1:2020

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Osebna varovalna oprema - Obutev za zaščito pred tveganji v livarnah in pri varjenju - 2. del: Zahteve in preskusne metode za zaščito pred tveganji pri varjenju in sorodnih postopkih - Dopolnilo A1 (ISO 20349-2:2017/DAM 1:2020)

Personal protective equipment - Footwear protecting against risks in foundries and welding - Part 2: Requirements and test methods for protection against risks in welding and allied processes - Amendment 1 (ISO 20349-2:2017/DAM 1:2020)

Persönliche Schutzausrüstung - Schuhe zum Schutz gegen Risiken in Gießereien und beim Schweißen - Teil 2: Anforderungen und Prüfverfahren zum Schutz gegen Risiken beim Schweißen und verwandten Verfahren - ÄNDERUNG 1 (ISO 20349-2:2017/DAM 1:2020)

Équipement de protection individuelle - Chaussures de protection contre les risques dans les fonderies et lors d'opérations de soudage - Partie 2: Exigences et méthodes d'essai pour la protection contre les risques lors d'opérations de soudage et techniques connexes - Amendement 1 (ISO 20349-2:2017/DAM 1:2020)

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ICS:

13.340.50	Varovanje nog in stopal	Leg and foot protection

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DRAFT AMENDMENT

ISO 20349-2:2017/DAM 1

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Personal protective equipment — Footwear protecting against risks in foundries and welding —

Part 2:
Requirements and test methods for protection against risks in welding and allied processes

AMENDMENT 1

Équipement de protection individuelle — Chaussures de protection contre les risques dans les fonderies et lors d'opérations de soudage —

Partie 2: Exigences et méthodes d'essai pour la protection contre les risques lors d'opérations de soudage et techniques connexes

AMENDEMENT 1

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Foreword

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This document was prepared by Technical Committee ISO/TC 94 , Personal safety – Personal protective equipment, Subcommittee SC 3, Footwear protection.

A list of all parts in the ISO 20349 series can be found on the ISO website.

Personal protective equipment — Footwear protecting against risks in foundries and welding —

Part 2: Requirements and test methods for protection against risks in welding and allied processes

AMENDMENT 1

1 New annex A

Insert the following new annex A.

Annex A
(informative)

Heat protection

A.1 Introduction

PPE designed to protect all or a part of the body against the effects of heat and/or fire must possess thermal resistance and mechanical strength appropriate to the foreseeable conditions of use.

This informative annex provides the reader with information on heat and flame resistance in relation to footwear for welders and allied processes. When specifying and selecting footwear, heat and flame resistance should be given a high priority.

In this context heat and flame resistance are specific terms referring to the real work condition for welding or allied processes to prevent such risks like of spontaneous ignition and heat flux in contact with hot surfaces or molten metal splashes.

Even though the number of accidents at welding or allied processes caused by contact with hot surfaces or molten metal splashes is negligible, the personal costs of these accidents, the resultant injuries may bring about great financial costs and have life-threatening consequences for humans.

Footwear for welders and allied processes alone cannot protect against all risks as found in this special work place. It should be worn always in conjunction with heat and flame-resistant PPE (clothing, gloves, hoods, aprons, gaiters) according to the risk assessment of the work place.

Welder boots do not provide protection against defective equipment or incorrect use of equipment. They are not suitable in cases where safety footwear must be worn in accordance with EN 50321 "Live working - Footwear for electrical protection".

It is important that heat- and flame-resistant footwear for welding or allied processes is in use at all times when there is a potential risk of heat or flame or metal splashes; comfortable and specific designed footwear will encourage this.

A.2 Explanation of heat and flame-resistant properties

A.2.1 General

The standard ISO 20349-2 test conditions and performance requirements are considered basic requirements for footwear for welding or allied processes. This footwear is used for short-term in environments with high temperatures or molten metal splashes. Often it is found that this footwear in

combination with other suitable PPE can achieve a higher protection or longer remain time in hazardous environments.

A.2.2 Resistance to effects of molten metal splashes

During welding or allied processes many small metal splashes can occur, which may be very hot. If they get into the footwear, foot burns can occur. A footwear with at least ankle height upper and either trousers falling over them and made of flame-retardant material, aprons or at least gaiters must be worn at welding.

The footwear upper alone is resistant against at least 25 small molten metal splashes, before the temperature on the inside of the footwear increase by 40°C. This property is marked with the symbol "WG".

A.2.3 Resistance of upper to hot environment

Safety footwear upper for welders is flame resistant. The upper materials do not burn or glow longer than 2 s after a contact time of 10 s with a specified test flame.

A.2.4 Optional heat resistance properties

Depending on the real work situation and its existing risk for the user several optional properties may be added to minimize or prevent injuries of the humans. This may be:

Heat insulation (symbol HI):	The heat resistance of this footwear allows the wearer to stand 30 min on a floor at 150°C before reaching a temperature increase of 22°C on the inside of the footwear. The outsole of this footwear resist damage for 30 minutes on a floor of 150°C.
Heat resistant outsole (HRO):	The outsole material does not collapse after a contact time of 1 min at 300°C.

A.3 Additional protection

In addition to high temperatures or molten metal splashes, welding or allied processes also have mechanical hazards that require additional protection.

These may be among others e.g.:

— Perforation resistance (Symbol P)

— Energy absorption of seat region (Symbol E)

— Metatarsal protection (Symbol M)

— Cut resistance (Symbol CR)

2 Annex ZA

Delete the existing annex ZA and substitute the following.

Annex ZA
(informative)

Relationship between this European Standard and the essential requirements of Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment aimed to be covered

This European Standard has been prepared under a Commission's standardization request to provide one voluntary means of conforming to essential requirements of Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment.

Once this standard is cited in the Official Journal of the European Union under that Regulation, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Regulation, and associated EFTA-regulations.

Table ZA.1 — Correspondence between this European Standard and Annex II of Regulation (EU) 2016/425

Essential Requirements of Regulation (EU) 2016/425	Clause(s)/sub-clause(s) of EN ISO 20349-2:2017	Remarks/Notes
1.1.1 Ergonomics	6, 7.1, 7.2	By reference to EN ISO 20345:2011
1.2.1.1 Innocuousness of PPE	6, 7.5	By reference to EN ISO 20345:2011
1.3.2 Lightness and strength	6, 7.3, 7.4	By reference to EN ISO 20345:2011
1.4 Information supplied by the manufacturer	9, Annex A of EN ISO 20349-2 :2017	
2.4. PPE subject to ageing	9	
2.6 PPE for use in potentially explosive atmospheres	6	By reference to EN ISO 20345:2011
2.12 PPE bearing one or more identification or recognition marks directly or indirectly relating to health and safety	8	
3.1.2.1 Prevention of falls due to slipping	6	By reference to EN ISO 20345: 2011
3.2 Protection against static compression of a part of the body	6	By reference to EN ISO 20345: 2011
3.3 Protection against mechanical injuries	6	By reference to EN ISO 20345: 2011
3.6.1. PPE constituent materials and other components	7.4	No protection is foreseen for thermal effect of electrical arc
3.6.2. Complete PPE ready for use	7.3, 7.4	Including information given in Annex A of EN ISO 20349-2:2017
3.7 Protection against cold	6	By reference to EN ISO 20345:2011
3.8.1 Insulating equipment	6, 9	By reference to EN ISO 20345:2011