



SLOVENSKI STANDARD
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Health and safety in welding and allied processes - Sampling of airborne particles and gases in the operator's breathing zone - Part 1: Sampling of airborne particles (ISO/DIS 10882-1:2009)

iTeh STANDARD PREVIEW

Arbeits- und Gesundheitsschutz beim Schweißen und bei verwandten Verfahren - Probenahme von partikelförmigen Stoffen und Gasen im Atembereich des Schweißers - Teil 1: Probenahme von partikelförmigen Stoffen (ISO/DIS 10882-1:2009)

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Hygiène et sécurité en soudage et techniques connexes - Échantillonnage des particules en suspension et des gaz dans la zone respiratoire des opérateurs - Partie 1 : Échantillonnage des particules en suspension (ISO/DIS 10882-1:2009)

Ta slovenski standard je istoveten z: prEN ISO 10882-1

ICS:

13.040.30	Kakovost zraka na delovnem mestu	Workplace atmospheres
25.160.01	Varjenje, trdo in mehko spajkanje na splošno	Welding, brazing and soldering in general

oSIST prEN ISO 10882-1:2010

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NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN ISO 10882-1

December 2009

ICS 13.040.30; 25.160.01

Will supersede EN ISO 10882-1:2001

English Version

Health and safety in welding and allied processes - Sampling of airborne particles and gases in the operator's breathing zone - Part 1: Sampling of airborne particles (ISO/DIS 10882-1:2009)

Hygiène et sécurité en soudage et techniques connexes -
Échantillonnage des particules en suspension et des gaz
dans la zone respiratoire des opérateurs - Partie 1 :
Échantillonnage des particules en suspension (ISO/DIS
10882-1:2009)

Arbeits- und Gesundheitsschutz beim Schweißen und bei
verwandten Verfahren - Probenahme von partikelförmigen
Stoffen und Gasen im Atembereich des Schweißers - Teil
1: Probenahme von partikelförmigen Stoffen (ISO/DIS
10882-1:2009)

This draft European Standard is submitted to CEN members for parallel enquiry. It has been drawn up by the Technical Committee CEN/TC 121.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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Contents	Page
Foreword.....	3

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Foreword

This document (prEN ISO 10882-1:2009) has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" in collaboration with Technical Committee CEN/TC 121 "Welding", the secretariat of which is held by DIN.

This document is currently submitted to the parallel Enquiry.

This document will supersede EN ISO 10882-1:2001.

Endorsement notice

The text of ISO/DIS 10882-1:2009 has been approved by CEN as a prEN ISO 10882-1:2009 without any modification.

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DRAFT INTERNATIONAL STANDARD ISO/DIS 10882-1

ISO/TC 44/SC 9

Secretariat: BSI

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2010-05-17

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Health and safety in welding and allied processes — Sampling of airborne particles and gases in the operator's breathing zone —

Part 1:

Sampling of airborne particles

Hygiène et sécurité en soudage et techniques connexes — Échantillonnage des particules en suspension et des gaz dans la zone respiratoire des opérateurs —

Partie 1: Échantillonnage des particules en suspension

[Revision of first edition (ISO 10882-1:2001)]

ICS 13.100; 25.160.01

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ISO/CEN PARALLEL PROCESSING

This draft has been developed within the International Organization for Standardization (ISO), and processed under the **ISO-lead** mode of collaboration as defined in the Vienna Agreement.

This draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel five-month enquiry.

Should this draft be accepted, a final draft, established on the basis of comments received, will be submitted to a parallel two-month approval vote in ISO and formal vote in CEN.

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.

Pour accélérer la distribution, le présent document est distribué tel qu'il est parvenu du secrétariat du comité. Le travail de rédaction et de composition de texte sera effectué au Secrétariat central de l'ISO au stade de publication.

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ISO/DIS 10882-1

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Contents

Page

1	Scope	1
2	Normative references	1
3	Terms and definitions	1
3.1	General definitions	1
3.2	Sampling definitions	3
3.3	Welding terms	5
3.4	Statistical terms	7
4	Principle	8
5	Requirement	8
6	Equipment	8
6.1	Sampling equipment	8
6.2	Weighing equipment, if required	10
7	Assessment strategy	10
8	Measurement strategy	10
8.1	General	10
8.2	Personal exposure measurement	11
8.3	Fixed point measurements	11
8.4	Selection of measurement conditions and measurement pattern	11
9	Procedure	12
9.1	Preliminary considerations	12
9.2	Preparation for sampling	13
9.3	Sampling position	14
9.4	Sampling	15
9.5	Transportation	15
9.6	Analysis	16
9.7	Expression of results	16
10	Exposure assessment	17
11	Recording of sampling data and presentation of results	17
	Annex A (normative) Gravimetric analysis	18
	Annex B (informative) Examples of arrangements for mounting samplers behind welder's face shields	20
	Annex C (informative) An example of a report	27
	Annex D (informative) Blank report form	30
	Bibliography	33

ISO/DIS 10882-1

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 10882-1 was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 9 and by Technical Committee CEN/TC 121, *Welding* in collaboration.

This second edition cancels and replaces the first edition (ISO 10882-1:2001, which has been technically revised).

ISO 10882 consists of the following parts, under the general title *Health and safety in welding and allied processes — Sampling of airborne particles and gases in the operator's breathing zone*:

- *Part 1: Sampling of airborne particles*
- *Part 2: Sampling of gases*

Introduction

This Part of ISO 10882 gives details of relevant standards which specify required characteristics, performance requirements and test methods; augments guidance provided in EN 689 on assessment strategy and measurement strategy; specifies a procedure for gravimetric determination of personal exposure to airborne particles in the operator's breathing zone and provides references to other standards that cover the use of chemical analysis to determine personal exposure to specific chemical agents.

A person who performs welding and allied processes (the operator) can be exposed to welding fume and to other airborne particles generated by welding-related operations, e.g. grinding. In some instances exposure to other airborne particles will be higher than exposure to welding fume.

It has been assumed in the drafting of this standard that the execution of its provisions, and the interpretation of the results obtained, is entrusted to appropriately qualified and experienced people.

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Health and safety in welding and allied processes — Sampling of airborne particles and gases in the operator's breathing zone —

Part 1:

Sampling of airborne particles

1 Scope

This Part of ISO 10882 specifies a procedure for personal sampling of airborne particles from welding and allied processes. It also specifies a procedure for gravimetric determination of personal exposure to airborne particles in the operator's breathing zone and provides references to suitable methods, described in other standards, on the use of chemical analysis to determine personal exposure to specific chemical agents present in welding fume and other airborne particles generated by welding related operations.

The general background level of airborne particles in the workplace atmosphere influences personal exposure and therefore the role of fixed point sampling is also considered.

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.

EN 482, *Workplace atmospheres — General requirements for the performance of procedures for the measurement of chemical agents*

EN 689, *Workplace atmospheres — Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy*

EN 13205, *Workplace atmospheres — Assessment of performance of instruments for measurement of airborne particle concentrations*

ISO 7708:1995, *Air quality — Particle size fraction definitions for health-related sampling*

ISO 15767, *Workplace atmosphere — Controlling and characterizing errors in weighing collected aerosols*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply:

3.1 General definitions

3.1.1

chemical agent

any chemical element or compound, on its own or admixed as it occurs in the natural state or as produced, used, or released, including release as waste, by any work activity, whether or not produced intentionally and whether or not placed on the market

NOTE Adapted from EN 1540:1998^[1].