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Second edition
2011-10-01

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



Reference number
ISO 10882-1:2011(E)

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Published in Switzerland

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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.

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, *Health and safety*.

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*

Requests for official interpretations of any aspect of this part of ISO 10882 should be directed to the Secretariat of ISO/TC 44/SC 9 via your national standards body. A complete listing of these bodies can be found at www.iso.org.

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Introduction

The health of workers in many industries is at risk through exposure by inhalation to airborne particles generated by welding and allied processes (welding fume) and other airborne particles generated by welding-related operations, e.g. grinding. Industrial hygienists and other public health professionals need to determine the effectiveness of measures taken to control workers' exposure to these harmful substances and this is generally achieved by making personal exposure measurements.

This part of ISO 10882 specifies a sampling method for welding fume and airborne particles generated by welding-related operations for the purpose of making personal exposure measurements in the operator's breathing zone. It is intended to be of benefit to: agencies concerned with health and safety at work, industrial hygienists and other public health professionals, industrial users of welding and allied processes and their workers, and analytical laboratories.

It has been assumed in the drafting of this part of ISO 10882 that the execution of its provisions, and the interpretation of the results obtained, is entrusted to appropriately qualified and experienced people.