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Second edition
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Health and safety in welding and allied processes — Equipment for capture and separation of welding fume —

Part 1: Requirements for testing and marking of separation efficiency

*Hygiène et sécurité en soudage et techniques connexes —
Équipements de captage et de filtration des fumées de soudage —*

Partie 1: Exigences pour les essais et marquage relatifs à l'efficacité de la séparation



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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 15012-1 was prepared by the European Committee for Standardization (CEN), in collaboration with ISO Technical Committee TC 44, *Welding and allied processes*, Subcommittee SC 9, , in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 15012-1:2004), which has been technically revised.

ISO 15012 consists of the following parts, under the general title *Health and safety in welding and allied processes — Equipment for capture and separation of welding fume*:

- *Part 1: Requirements for and testing and marking of separation efficiency*
- *Part 2: Determination of the minimum air volume flow rate of captor hoods and nozzles*

The following part is under preparation:

- *Part 4: Design requirements*

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Introduction

It is common practice in the fabrication industry to control exposure to welding fume using local exhaust ventilation equipment that, following capture and separation of the fume, returns the extracted air to the workplace or exhausts it to the atmosphere. It is important that such equipment has high separation efficiency so that as little fume as possible is recirculated or exhausted. This part of ISO 15012 has therefore been promulgated to specify requirements and a test method for determining the efficiency of welding fume separation equipment.