



**International  
Standard**

**ISO 8025**

**Ergonomics of the thermal  
environment — Management  
of working conditions in hot  
environments**

*Ergonomie de l'environnement thermique — Gestion des  
conditions de travail dans les environnements chauds*

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 159, *Ergonomics*, Subcommittee SC 5, *Ergonomics of the physical environment*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

This document belongs to a group of thermal standards intended for use in the assessment and management of work in hot environments.

Several outdoor and indoor lines of industries, commerce and occupations involve substantial exposure, where individuals can be exposed to high temperatures, humidity and/or thermal radiation. Working in such hot environments can lead to several adverse effects on human performance and health, such as thermal discomfort, increased strain, decreased performance and heat-related disorders. Heat can also interfere with several other factors in the workplace, modifying or aggravating the risk of common hazards and increasing the risk of heat-associated disorders. In addition, skin contact with hot surfaces can lead to burns.

Due to the negative impact of heat on human health and performance, as well as on work productivity, quality and safety, it is necessary to consider a comprehensive strategy of risk assessment and management practices.

While other standards have described specific indices to be used to assess the hot work environment and the potential physiological consequences, this document describes the methods and practices for organizing the management of these work environments and the supervision of the exposed persons.

The choice of when to use the methods described in this document is at the discretion of the persons responsible for occupational safety and/or health.



# Ergonomics of the thermal environment — Management of working conditions in hot environments

## 1 Scope

This document adopts an approach where actions, particularly control measures and medical supervision, are specified as a function of the class of severity of the potential effects. It provides instructions for appropriate management practices for hot workplaces and describes:

- a procedure for managing work in hot environments;
- guidelines on how to apply the different International Standards in the field of thermal environments when assessing heat-related risks;
- guidelines to organize the medical supervision of the people working in hot environments;
- information for instructing the persons working in hot environments;
- an example of assessment of a hot working situation.

The procedure described in this document aims to anticipate the problems related to work in warm to hot environments by classifying the different work situations according to their potential health effects, informing the persons concerned (workers and management) of the seriousness of these effects, planning appropriate measures to be implemented to prevent these effects and providing medical surveillance of exposed persons.

This document supports good occupational safety and health practices and is applicable to both indoor and outdoor work situations.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 15265:2004, *Ergonomics of the thermal environment — Risk assessment strategy for the prevention of stress or discomfort in thermal working conditions*

## 3 Terms, definitions and symbols

### 3.1 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>