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# Industrial furnaces and associated processing equipment — Safety —

# Part 1: **General requirements**

Fours industriels et équipements associés — Sécurité — Partie 1: Exigences générales





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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 13577-1 was prepared by Technical Committee ISO/TC 244, *Industrial furnaces and associated processing equipment.* 

ISO 13577 consists of the following parts, under the general title *Industrial furnaces and associated processing equipment* — *Safety*:

- Part 1: General requirements
- Part 2: Combustion and fuel handling systems

It is intended that generation and use of protective gases will form the subject of a part 3 and protective systems will form the subject of a part 4.

### Introduction

This document is a type-C standard as stated in ISO 12100.

The machinery concerned and the extent to which hazards, hazardous situations or hazardous events are covered are indicated in the Scope of this document.

When requirements of this type-C standard are different from those which are stated in type-A or -B standards, the requirements of this type-C standard take precedence over the requirements of the other standards for machines that have been designed and built according to the requirements of this type-C standard.

Industrial furnaces and associated processing equipment (TPE) generally consists of the following components:

- processing chambers (e.g. steel construction with lining or without lining);
- heating systems;
- protective system;
- control and instrumentation system/operator-control level.

This part of ISO 13577 gives additional requirements for TPE in certain countries or regions. When applying the requirements specific to a country or region, which are given in the relevant annexes, it is essential that a level of safety be ensured that is at least equivalent to that provided for by the requirements of the main body of this part of ISO 13577.