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## Steel names based on letter symbols

*Désignations des aciers fondées sur des lettres symboles*



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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.

In other circumstances, particularly when there is an urgent market requirement for such documents, a technical committee may decide to publish other types of normative document:

- an ISO Publicly Available Specification (ISO/PAS) represents an agreement between technical experts in an ISO working group and is accepted for publication if it is approved by more than 50 % of the members of the parent committee casting a vote;
- an ISO Technical Specification (ISO/TS) represents an agreement between the members of a technical committee and is accepted for publication if it is approved by 2/3 of the members of the committee casting a vote.

An ISO/PAS or ISO/TS is reviewed after three years in order to decide whether it will be confirmed for a further three years, revised to become an International Standard, or withdrawn. If the ISO/PAS or ISO/TS is confirmed, it is reviewed again after a further three years, at which time it must either be transformed into an International Standard or be withdrawn.

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/TS 4949 was prepared by Technical Committee ISO/TC 17, *Steel*.

This first edition cancels and replaces the Technical Report (ISO/TR 4949:1989), which has been technically revised and upgraded.

# Steel names based on letter symbols

## 1 Scope

This Technical Specification sets out rules for the designation of internationally standardized steel grades by means of symbolic letters and numbers to express application and principal characteristics (e.g. mechanical, physical, chemical) so as to provide an abbreviated identification of steel grades.

NOTE 1 In order to avoid ambiguity, it may be necessary to supplement the principal symbols established according to this Technical Specification by additional symbols identifying additional characteristics of the steel or steel product, e.g. suitability for use at high or low temperatures, surface condition, treatment condition, deoxidation.

NOTE 2 These rules may also be applied to nationally or regionally standardized steels.

## 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.

ISO 4948-1, *Steels — Classification — Part 1: Classification of steels into unalloyed and alloy steels based on chemical composition*

ISO 4948-2, *Steels — Classification — Part 2: Classification of unalloyed and alloy steels according to main quality classes and main property or application characteristics*

ISO 6929, *Steel products — Definitions and classification*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions in ISO 4948-1, ISO 4948-2 and ISO 6929 apply.

## 4 Principles

### 4.1 A unique steel name

There shall be one unique steel name for each steel.

### 4.2 Formulation of steel names

Unless otherwise specified in this Technical Specification, the symbols used in the steel name shall be written without spaces.