

TECHNICAL REPORT

ISO TR 6306

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Chemical analysis of steel — Order of listing elements

Analyse chimique des aciers — Ordre de report des éléments



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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 main task of ISO technical committees is to prepare International Standards. In exceptional circumstances a technical committee may propose the publication of a technical report of one of the following types:

- type 1, when the necessary support within the technical committee cannot be obtained for the publication of an International Standard, despite repeated efforts;
- type 2, when the subject is still under technical development requiring wider exposure;
- type 3, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example).

Technical reports are accepted for publication directly by ISO Council. Technical reports of types 1 and 2 are subject to review within three years of publication, to decide whether they can be transformed into International Standards. Technical reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

ISO/TR 6306, which is a technical report of type 3, was prepared by Technical Committee ISO/TC 17, *Steel*.

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Introduction

The sequence in which elements are listed in steel specifications and analysis reports has never been standardized and varies considerably between different organizations. Although this has always been a potential source of confusion, the cost and temporary inconvenience of standardizing the order has not been considered worthwhile.

The modern tendency towards international standardization and the use of computers for storing, processing and retrieving information has greatly increased the case for standardizing the order of listing elements. This is particularly so when data from several sources are processed by a single computer. Consequently, there is a growing awareness of the long-term advantages of national and international standardization.

Some measure of international agreement has already been achieved in steel specifications developed by ISO/TC 17/SC 4 (Heat treatable and alloy steels) for the first five elements and this has been incorporated into the recommendations given in this Technical Report.