INTERNATIONAL STANDARD

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Heat-treatable and alloy steels — Surface quality classes for hot-rolled round bars and wire rods — Technical delivery conditions

Aciers pour traitements thermiques et aciers alliés — Classes de qualité de surface des ronds et fils-machine laminés à chaud — Conditions techniques de livraison

Reference number
ISO 9443:1991(E)

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.

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.

International Standard ISO 9443 was prepared by Technical Committee ISO/TC 17, *Steel*, Sub-Committee SC 4, *Heat treatable and alloy steels.*

Annex A of this International Standard is for information only.

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Heat-treatable and alloy steels — Surface quality classes for hot-rolled round bars and wire rods — Technical delivery conditions

1 Scope

1.1 This International Standard specifies delivery conditions which apply to the surface quality on the basis of the characteristics given in clause 4, for bars and wire rods with round section ordered in the hot-rolled surface condition.

NOTES

1 By agreement between manufacturer and purchaser, this International Standard might also be applied to other symmetrical shapes of cross-sections.

2 When agreed at the time of enquiry and order, this International Standard may also be applied to cold-drawn material, in particular the surface quality classes 5 to 7.

1.2 This International Standard applies particularly to steels for engineering applications, but may, by agreement, also be applied to structural steels or tool steels.

1.3 This International Standard does not include any requirements for the permissible depth of surface decarburization.

1.4 The material standards for steel bars and wire rods may exclude the application of one or other of the surface quality classes of this International Standard. They may also cover requirements for surface quality which deviate from this International Standard. In these cases the requirements of the material standard shall prevail.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 404:1981, *Steel and steel products — General technical delivery requirements.*

ISO 6929:1987, *Steel products — Definitions and classification.*

ISO 7800:1984, *Metallic materials — Wire — Simple torsion test.*

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1 delivery lot: Unless otherwise specified in the order or product standard, a quantity of steel of the same type and the same diameter ordered with the same requirements for the surface quality and delivered at the same time.

3.2 Product forms

The definitions given in ISO 6929 apply.

3.3 Imperfections and defects

3.3.1 imperfections: Discontinuities with a depth smaller than or equal to the specified limiting value which may be left without repair.

3.3.2 defects: Discontinuities with a depth greater than the specified limiting value.