

INTERNATIONAL STANDARD

ISO
6934-5

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Steel for the prestressing of concrete —

Part 5:

Hot-rolled steel bars with or without subsequent processing

Acier pour armatures de précontrainte —

Partie 5: Barres en acier laminées à chaud avec ou sans transformation ultérieure



Reference number
ISO 6934-5:1991(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 6934-5 was prepared by Technical Committee ISO/TC 17, *Steel*, Sub-Committee SC 16, *Steels for the reinforcement and prestressing of concrete*.

ISO 6934 consists of the following parts, under the general title *Steel for the prestressing of concrete*:

- *Part 1: General requirements*
- *Part 2: Cold-drawn wire*
- *Part 3: Quenched and tempered wire*
- *Part 4: Strand*
- *Part 5: Hot-rolled steel bars with or without subsequent processing*

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Steel for the prestressing of concrete —

Part 5:

Hot-rolled steel bars with or without subsequent processing

1 Scope

This part of ISO 6934 specifies requirements for round high tensile steel bars. The bars may be supplied either hot-rolled or in a hot-rolled and processed condition, according to the general requirements specified in ISO 6934-1. The surface may be plain or ribbed.

The bars are delivered in straight lengths.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 6934. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 6934 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 6934-1:1991, *Steel for the prestressing of concrete — Part 1: General requirements.*

ISO 10065:1990, *Steel bars for reinforcement of concrete — Bend and rebend tests.*

3 Definitions

For the purposes of this part of ISO 6934, the definitions given in ISO 6934-1 apply.

4 Conditions of manufacture

4.1 Steel

The bars shall be manufactured from steel in accordance with ISO 6934-1.

The steel shall be hot rolled into bars and, if required, subsequently processed to give the specified mechanical properties.

Longitudinal cracks which do not impair the specified properties of the bar shall not be considered as defects.

4.2 Welds

There shall be no welds or other joints in the bar supplied to the purchaser.

4.3 Threads

Where the bars have threaded ends, the threads shall be cold rolled to a profile agreed upon by the purchaser and manufacturer.

5 Surface configuration

The surface configuration may be either plain or ribbed.

In the case of ribbed bars, the ribs shall be transversal with a relatively uniform spacing not greater than $0,8 \times$ nominal diameter of the bar. This condition applies to continuous or discontinuous helical ribs. The ribs may be formed as threads.