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Cold-reduced steel wire for the reinforcement of concrete and the manufacture of welded fabric

Fils en acier à béton transformés à froid pour armatures passives et la fabrication des treillis soudés

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Foreword

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This document was prepared by Technical Committee ISO/TC 17, *Steel*, Subcommittee SC 16, *Steels for the reinforcement and prestressing of concrete*.

This second edition cancels and replaces the first edition (ISO 10544:1992), which has been technically revised.

The main changes are as follows:

— normative references have been revised;

— terms and definitions have been revised;

— diameters have been extended to 18 mm;

— geometry of ribbed and indented wires have been revised;

— steel grade and chemical composition have been revised;

— example of identification of manufacturer on ribbed wire and indented wire have been added.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Cold-reduced steel wire for the reinforcement of concrete and the manufacture of welded fabric

1 Scope

This document specifies technical requirements for cold-reduced steel wire designed for the reinforcement of concrete or for use in welded fabric.

Two steel grades, CRB500 and CRB540H are defined as examples. Other grades can be used.

This document is applicable to wire made from rod by working through dies or rollers. The production process is at the discretion of the manufacturer.

For wire supplied in coil form, this document is applicable to the straightened product.

Wires produced from finished products, such as plates and railway rails, are outside the scope of this document.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 404, *Steel and steel products — General technical delivery requirements*

ISO 6892-1, *Metallic materials — Tensile testing — Part 1: Method of test at room temperature*

ISO 15630-1, *Steel for the reinforcement and prestressing of concrete — Test methods — Part 1: Reinforcing bars, rods and wire*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
cast analysis
chemical analysis of a sample of the molten steel during casting

3.2
characteristic value
value having a prescribed probability of not being attained in a hypothetical unlimited test series

Note 1 to entry: Equivalent to fractile, which is defined in ISO 3534-1:2006.

[SOURCE: ISO 16020:2005, 2.4.10]

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