

2023-05-2607-25

ISO/FDIS 6935-3:2023(E)

ISO/TC 17/SC 16/WG 15

Secretariat: SN

Steel for the reinforcement of concrete — Part 3: Welded fabric

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

ISO 6935-3

<https://standards.iteh.ai/catalog/standards/sist/f7217c57-0d7b-43ba-af68-12c53e127c8a/iso-6935-3>

~~Edited DIS —~~
~~MUST BE USED —~~
~~FOR FINAL —~~
~~DRAFT~~

Copyright notice

This ISO document is a working draft or committee draft and is copyright-protected by ISO. While the reproduction of working drafts or committee drafts in any form for use by participants in the ISO standards development process is permitted without prior permission from ISO, neither this document nor any extract from it may be reproduced, stored or transmitted in any form for any other purpose without prior written permission from ISO.

Requests for permission to reproduce this document for the purpose of selling it should be addressed as shown below or to ISO's member body in the country of the requester:

[Indicate :

the full address

telephone number

fax number

telex number

and electronic mail address

as appropriate, of the Copyright Manager of the ISO member body responsible for the secretariat of the TC or SC within the framework of which the draft has been prepared]

Reproduction for sales purposes may be subject to royalty payments or a licensing agreement.

Violators may be prosecuted.

ISO 6935-3

<https://standards.iteh.ai/catalog/standards/sist/f7217c57-0d7b-43ba-af68-12c53e127c8a/iso-6935-3>

~~Edited DIS~~
~~MUST BE USED~~
~~FOR FINAL~~
~~DRAFT~~

ISO/FDIS 6935-3:2023(E)

iTeh Standards
(<https://standards.itih.ai>)
Document Preview

ISO 6935-3

<https://standards.itih.ai/catalog/standards/sist/f7217c57-0d7b-43ba-af68-12c53e127c8a/iso-6935-3>

Contents	Page
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Form and dimensions.....	3
5 Chemical composition.....	4
6 Mechanical properties.....	4
7 Testing of mechanical properties.....	5
8 Designation.....	6
9 Marking.....	7
10 Certification and inspection.....	7

1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Form and dimensions.....	3
5 Chemical composition.....	4
6 Mechanical properties.....	4
7 Testing of mechanical properties.....	5
8 Designation.....	6
9 Marking.....	7
10 Certification and inspection.....	7

iTeh Standards
(<https://standards.itih.ai>)
Document Preview

ISO 6935-3

<https://standards.itih.ai/catalog/standards/sist/17217c57-0d7b-43ba-af68-12c53e127c8a/iso-6935-3>

~~Edited DIS~~
~~MUST BE USED~~
~~FOR FINAL~~
~~DRAFT~~

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 procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

~~Attention is drawn~~ **ISO draws attention** to the possibility that ~~some of the elements~~ **implementation** of this document may ~~be involve~~ **the subject use of (a) patent(s)**. ~~ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).~~

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

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 6935-3:1992), which has been technically revised. It also incorporates the Technical Corrigendum ISO 6935-3:1992/Cor 1:2000.

The main changes are as follows:

- ~~Clause 1, 2, 3, 4~~ have been revised;
- ~~Figure 1~~ **has** been ~~newly added~~ **replaced with a new figure**.

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.

Steel for the reinforcement of concrete — Part 3: Welded fabric

1 Scope

This document specifies technical requirements for factory made sheets or rolls of welded fabric, manufactured from steel wires or bars with diameters from 4 mm to 18 mm and designed for the reinforcement of concrete structures and the ordinary reinforcement of prestressed concrete structures.

~~For the purpose of this document the term “wire” also includes bars.~~

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 6935-1, *Steel for the reinforcement of concrete — Part 1: Plain bars*

ISO 6935-2, *Steel for the reinforcement of concrete — Part 2: Ribbed bars*

ISO 15630-2, *Steel for the reinforcement and prestressing of concrete — Test methods — Part 2: Welded fabric and lattice girders*

ISO 10544, *Cold-reduced steel wire for the reinforcement of concrete and the manufacture of welded fabric*

~~ISO 11082, *Certification scheme for welded fabric for the reinforcement of concrete structures*~~

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

~~conformity assessment scheme~~

~~conformity assessment system related to specific objects of conformity assessment, to which the same specified requirements, specific rules and procedures apply~~

~~Note 1 to entry: Conformity assessment schemes may be operated at an international, national or sub-national level.~~

~~Note 2 to entry: Certification, i.e. third-party attestation related to products, processes, systems or persons, is applicable to all objects of conformity assessment except for conformity assessment bodies themselves, to which accreditation is applicable.~~

3.2

ISO/FDIS 6935-3:2023(E)

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.

Note 2 to entry: A nominal value is used as the characteristic value in some circumstances.

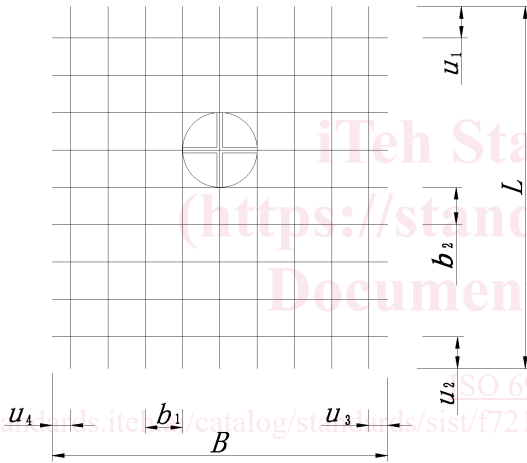
[SOURCE: ISO 16020:2005, 2.4.10, modified —Note 2 to entry has been added.]

3.32

fabric

geometrical arrangement of longitudinal and transverse wires that are arranged substantially at right angles to each other and welded together at all points of intersection

Note 1 to entry: See Figure 1.



iTeh Standards
(<https://standards.itih.ai>)
Document Preview

<https://standards.itih.ai/catalog/standards/sist/f7217c57-0d7b-43ba-af68-12c53e127c8a/iso-6935-3>

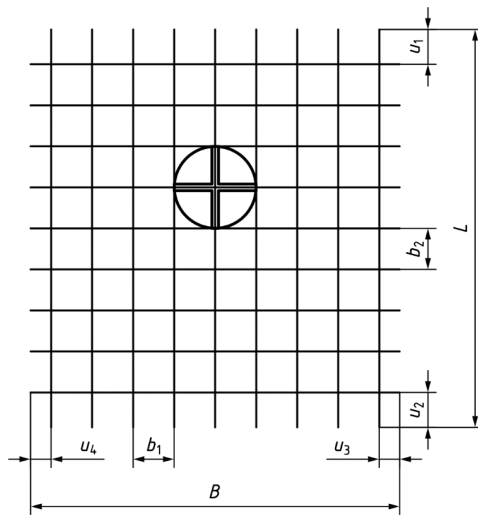


Figure 1 — Geometric characteristics of fabric

3.4.3 inspection

activities such as measuring, examining, testing, gauging one or more characteristics of a product or service and comparing these with specified requirements to determine conformity

[SOURCE: ISO 9000:2015, 3.11.7, modified]

3.5

3.4 length of fabric

longest side of the fabric, irrespective of the manufacturing direction

3.6.5

longitudinal wire

wire in the manufacturing direction of the fabric

3.7.6

nominal cross-sectional area

cross-sectional area equivalent to the area of a circular plain bar of the same nominal diameter

[SOURCE: ISO 16020:2005, 2.2.15, modified — “wire” has been removed from the definition.]

3.8.7

overhang

length of longitudinal or transverse wires beyond the centre of the outer crossing wire in a fabric

Note 1 to entry: For twin wire fabric, the overhang is measured from the tangent line of the adjacent wires, see Figure 2.

ISO/FDIS 6935-3:2023(E)

3.98

spacing

centre-to-centre distance of wires in a fabric

Note 1 to entry: For twin wire fabric, the spacing is measured between the tangents of the adjacent wires, see Figure 2.

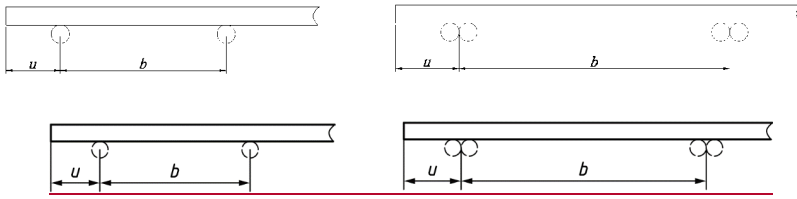


Figure 2 — Wire spacing, b , and overhang, u

3.109

transverse wire

wire perpendicular to the manufacturing direction of the fabric

3.110

twin wires

two wires of the same type and size placed adjacently and in contact with each other as a pair

3.121

width of fabric

shortest side of the fabric, irrespective of the manufacturing direction

3.132

wire

material from which the fabric is welded

ISO 6935-3

<https://standards.iteh.ai/catalog/standards/sist/f7217c57-0d7b-43ba-af68-12c53e127c8a/iso-6935-3>

Note 1 to entry: For the purposes of this document, the term “wire” also includes bars within the size range specified in 4.1.1.

4 Form and dimensions

4.1 General requirements

4.1.1 The fabric shall be made of either

- cold-reduced wires with nominal diameters in the range from 4 mm to 18 mm and with mass and geometry **complying in accordance** with ISO 10544,
- plain bars with nominal diameters of 6 mm to 18 mm (recommended: 6 mm, 8 mm, 10 mm and 12 mm, 18 mm plain bars may be used by agreement between the manufacturer and purchaser) and with mass **complying in accordance** with ISO 6935-1, or