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**Quality control for batching and  
mixing steel fibre-reinforced  
concretes**

*Contrôle qualité pour le dosage et le mélange des bétons armés de  
fibres d'acier*



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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 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](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. 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](http://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](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 71, *Concrete, reinforced concrete and pre-stressed concrete*, Subcommittee SC 6, *Non-traditional reinforcing materials for concrete structures*.

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](http://www.iso.org/members.html).

# Quality control for batching and mixing steel fibre-reinforced concretes

## 1 Scope

This document specifies the principles and procedures to secure quality control of steel fibre-reinforced concretes (SFRC) during batching and mixing procedures to deliver to a purchaser with the ingredients uniformly mixed, and that can be sampled and tested at the point of delivery.

## 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 13270, *Steel fibres for concrete — Definitions and specifications*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 13270 and the following apply.

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

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

### 3.1

#### **slump**

distance from the top of the slumped concrete to the level of the top of the slump cone.

### 3.2

#### **workability**

property measure of the ease of moulding or shaping an unshaped concrete.

### 3.3

#### **segregation**

separation of aggregate and fines during fabrication of a concrete to leave a honeycomb appearance and/or a layer of excess fines.

### 3.4

#### **fibre balling**

bunch of fibres sticking together during fibre integration in the concrete mix.

### 3.5

#### **steel fibres**

straight or deformed pieces of cold-drawn steel wire, straight or deformed cut sheet fibres, melt extracted fibres, shaved cold-drawn wire fibres and fibres milled from steel blocks which are suitable to be homogeneously mixed into concrete or mortar.