



**International
Standard**

ISO 18651

**Building construction machinery
and equipment — Internal vibrators
for concrete — Vocabulary and
commercial specifications**

*Machines et matériels pour la construction des bâtiments —
Vibrateurs internes pour le béton — Vocabulaire et spécifications
commerciales*

**First edition
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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 document 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).

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This document was prepared by Technical Committee ISO/TC 195, *Building construction machinery and equipment*, Subcommittee SC 1, *Machinery and equipment for concrete work*.

This first edition of ISO 18651 cancels and replaces ISO 18651-1:2011, which has been technically revised.

The main changes are as follows:

- revised ISO 18651-1 to ISO 18651 and eliminated “Part 1”;
- revised a few term definitions and added terms to [Clause 3](#);
- changed term [3.7](#) “vibration head” to “vibrator assembly” and designated respective component in [Figures A.1](#) to [A.9](#);
- changed term [3.10](#) “flexible drive shaft” to “flexible shaft”;
- removed Clause 4 “Structure”;
- removed 5.2 “Complementary data for all types of immersion vibrator”;
- removed “(c) length of the hose-handle m” in 5.3.2;
- modified [Figure A.1](#) a) to replace the section by correct one without electric motor;
- modified the title of [Figure A.1](#) and subfigures a), b);
- deleted Figure A.10 which was not mentioned in the body.

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.

Building construction machinery and equipment — Internal vibrators for concrete — Vocabulary and commercial specifications

1 Scope

This document defines vocabulary and provides commercial specifications for internal vibrators used for compacting uncured concrete mix.

2 Normative references

The following documents referred to in this text in such a way that some or all of their content constitutes requirements for 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 11375, *Building construction machinery and equipment — Terms and definitions*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 11375 and the following 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

internal vibrator

immersion vibrator

straight bar-shaped equipment with extended hose or handle used to compact uncured concrete mix by generating or transmitting vibration

Note 1 to entry: The *vibrator assembly* (3.7) is immersed into uncured concrete mix, so it is called an internal vibrator or immersion vibrator.

3.2

internal vibrator with flexible drive

vibrator with drive transmission from prime mover to *vibrator assembly* (3.7) in the form of a flexible shaft

Note 1 to entry: The *flexible shaft* (3.10) can be enclosed within an outer sheath to permit handling during use.

3.2.1

electric internal vibrator

vibrator in which the drive for the vibration generator is composed of an electric motor with a flexible shaft to the *vibrator assembly* (3.7)

Note 1 to entry: The *flexible shaft* (3.10) can be enclosed within an outer sheath to permit handling during use.

Note 2 to entry: For an example, see [Annex A, Figure A.8](#).