
**Building construction machinery and
equipment — Concrete mixers —**

**Part 1:
Commercial specifications**

*Machines et matériels pour la construction des bâtiments —
Malaxeurs à béton —*

Partie 1: Spécifications commerciales



This document is a preview generated by EKO



COPYRIGHT PROTECTED DOCUMENT

© ISO 2021

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Description of the basic structures of concrete mixers	6
4.1 Basic structure of gravity concrete mixers.....	6
4.1.1 General.....	6
4.1.2 Basic structure of self-loading mobile concrete mixer.....	6
4.2 Basic structure of compulsory concrete mixers.....	6
5 Commercial specifications	6
5.1 Basic characteristics of a concrete mixer.....	6
5.1.1 General data.....	6
5.1.2 Detailed data for the concrete mixer components.....	7
5.2 Dimensional characteristics of concrete mixers.....	8
5.3 Other specifications for particular types of concrete mixers.....	9
5.3.1 General.....	9
5.3.2 Tipping drum gravity concrete mixer.....	9
5.3.3 Reversing-drum concrete mixer.....	9
5.3.4 Discharging-chute concrete mixer.....	10
5.3.5 Pan-type concrete mixers.....	10
5.3.6 Paddle concrete mixer.....	12
5.3.7 Continuous-type concrete mixer.....	12
5.3.8 Self-loading mobile concrete mixer.....	12
Annex A (informative) Examples of concrete mixer structures and dimensional characteristics	14
Bibliography	35

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 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).

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 195, *Building construction machinery and equipment*, Subcommittee SC 1, *Machinery and equipment for concrete work*.

This second edition cancels and replaces the first edition (ISO 18650-1:2004), which has been technically revised.

The main changes compared to the previous edition are as follows:

- added definition for "self-loading mobile concrete mixer" in [3.1.3.4](#) and also added reference to [Figures A.23](#) and [A.24](#);
- added commercial specifications for discharging-chute concrete mixer in [5.3.4](#) and self-loading mobile concrete mixer in [5.3.8](#);
- added [Figures A.17](#) to [A.22](#) for clarification of classification.

A list of all parts in the ISO 18650 series can be found on the ISO website.

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 — Concrete mixers —

Part 1: Commercial specifications

1 Scope

This document establishes the content for commercial literature for concrete mixers used either as individual machines on building sites or as components of batching plants.

Definitions refer to whole machines, their structure and parameters.

The commercial specifications establish technical characteristics of the whole machines and their components.

Truck mixers, as defined in ISO 19711-1, are excluded from this document.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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

concrete mixer

machine designed for the production of concrete by mixing of measured (by mass or volume) proportions of water, cement, aggregate and possibly chemical additives, within a certain time limit

Note 1 to entry: A concrete mixer can be furnished with the following accessories: charging skip hoist, fixed or wheeled, or self-propelled supporting frame, mechanical shovel, water dosing equipment, and a skip weighing system.

3.1.1

batch-type concrete mixer

concrete mixer (3.1) in which charging with concrete constituents and discharging of the drum are carried out periodically, in batches

3.1.2

continuous-type concrete mixer

concrete mixer (3.1) in which charging with concrete constituents and discharging of the drum are carried out continuously as an uninterrupted flow

Note 1 to entry: See [Figures A.15](#) and [A.16](#) for examples.