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

**Part 1:
Terminology and commercial
specifications**

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

Partie 1: Terminologie et spécifications commerciales

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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

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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. www.iso.org/directives

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is 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 21573-1:2006), of which it constitutes a minor revision. The main changes are:

- editorial correction of numbering of table/figure references;
- addition of electric motor as drive power for concrete pump;
- editorial corrections in figures to clarify part names and callout.

ISO 21573 consists of the following parts, under the general title *Building construction machinery and equipment — Concrete pumps*:

- *Part 1: Terminology and commercial specifications*
- *Part 2: Procedure for examination of technical parameters*

Introduction

This part of ISO 21573 deals with concrete pumps used on building sites for concrete-mix delivery. It provides definitions and technical characteristics of the relevant machines. The figures in [Annex A](#) give examples of current structures of concrete pumps and their principles of operation.

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Building construction machinery and equipment — Concrete pumps —

Part 1: Terminology and commercial specifications

1 Scope

This part of ISO 21573 establishes terminology and commercial-literature specifications for concrete pumps which are used on building sites for concrete-mix delivery.

2 Normative references

The following referenced documents are indispensable for the application 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 11375:1998, *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.

3.1

piston-type concrete pump

pump in which a piston is used to impart energy to the concrete mix, with the intent of transporting the mix to and through the conveying pipe and/or hose

Note 1 to entry: See [Figure A.1](#).

3.2

rotary-type concrete pump

pump in which a peristaltic action is used to impart energy to the concrete mix with the intent of transporting the mix to and through the conveying pipe and/or hose

Note 1 to entry: See [Figures A.6, A.7, A.8 and A.9](#).

3.3

stationary-type concrete pump

skid, rail or wheeled-chassis mounted concrete pump intended for long-term operation on one building site

Note 1 to entry: See [Figure A.13](#).

3.4

piston-type concrete pump valve system

system composed of cut-off valves successively locking and opening concrete mix flow from the hopper to the concrete cylinder and from the latter to the conveying pipe

Note 1 to entry: See [Figures A.2, A.3, A.4 and A.5](#).

Note 2 to entry: The operation of the valves is synchronised so that, when the concrete-mix flow from the hopper to the concrete cylinder is opened, the flow to the conveying pipe is closed. Various types of valve systems are identified.