
**Building construction machinery
and equipment — Plants for the
preparation of concrete and mortar —**

**Part 1:
Terminology and commercial
specifications**

*Machines et matériels pour la construction des bâtiments — Usines de
préparation du béton et du mortier —*

Partie 1: Terminologie et spécifications commerciales

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Foreword

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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*.

A list of all parts in the ISO 19720 series can be found on the ISO website.

Building construction machinery and equipment — Plants for the preparation of concrete and mortar —

Part 1: Terminology and commercial specifications

1 Scope

This document specifies terms and definitions and commercial specifications for concrete mixing plants, concrete batching plants and dry mortar mixing plants used in the preparation of concrete and mortar.

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 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 terminological databases for use in standardization at the following addresses:

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

3.1

concrete

material formed by mixing cement, coarse and fine aggregates, and water, with or without the incorporation of admixtures, additives or fibres, which develops its properties by hydration

3.2

mortar

mixture of binder (cement, etc.), fine aggregates, water and optional additives, which hardens and which is normally used as a jointing material

3.3

dry mortar

mixture of binder (cement, plaster, etc.), fine aggregates and optional additives and when mixed with water, hardens

3.4

concrete mixing plant

combination of structures and devices used for proportioning aggregates, cement, water and possible additives, admixtures, and mixing them by means of the *concrete mixing unit* (3.7) to generate concrete (3.1)

3.4.1

batch-type concrete mixing plant

concrete mixing plant (3.4) which runs periodically following defined processes including materials supply, proportion, charging, mixing and discharging

3.4.2

continuous concrete mixing plant

concrete mixing plant (3.4) in which all the processes including materials-supply, proportion, charging, mixing, discharging are operated continuously

3.4.3

vertical concrete mixing plant

tower concrete mixing plant

configuration of *concrete mixing plant* (3.4) where the aggregate *storage bins* (3.9) are located above the *concrete mixing unit* (3.7)

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

3.4.4

horizontal concrete mixing plant

configuration of *concrete mixing plant* (3.4) where the aggregate *storage bins* (3.9) or an active storage are located to the side of the *concrete mixing unit* (3.7)

Note 1 to entry: An example of a horizontal concrete mixing plant where aggregates are loaded into bins with a wheel loader is shown in [Figure A.2](#).

Note 2 to entry: An example of a horizontal concrete mixing plant where aggregates are loaded into bins with a drag-line is shown in [Figure A.3](#).

3.4.5

stationary concrete mixing plant

concrete mixing plant (3.4) which remains fixed in place during operation and designed to stay permanently in its position (e.g. installed on permanent foundations) until its dismantling

3.4.6

transferable concrete mixing plant

concrete mixing plant (3.4) which remains fixed in place during operation and where components can be quickly assembled and disassembled for transport from one place to another

Note 1 to entry: See [Figure A.4](#).

3.4.7

mobile concrete mixing plant

concrete mixing plant (3.4) which remains fixed in place during operation and which is self-propelled or trailed to move from one place to another

Note 1 to entry: See [Figure A.5](#).

3.5

concrete batching plant

combination of structures and devices used for proportioning aggregates, cement, and/or water, admixtures so that they can be ready for transport

3.5.1

vertical concrete batching plant

configuration of *concrete batching plant* (3.5) where the aggregate *storage bins* (3.9) are located above the batcher and the vehicle being loaded

Note 1 to entry: See [Figure A.6](#).

3.5.2**horizontal concrete batching plant**

configuration of *concrete batching plant* (3.5) where the aggregate *storage bins* (3.9) are arranged at the side of the charging (feeding) hopper

Note 1 to entry: See [Figure A.7](#).

3.5.3**stationary concrete batching plant**

concrete batching plant (3.5) which remains fixed in place during operation and is designed to stay permanently in its position (e.g. installed on permanent foundations) until its dismantling

Note 1 to entry: See [Figure A.6](#).

3.5.4**transferable concrete batching plant**

concrete batching plant (3.5) which remains fixed in place during operation and where components can be quickly assembled and disassembled for transport from one place to another

Note 1 to entry: See [Figure A.7](#).

3.6**dry mortar mixing plant**

combination of structures and devices used for proportioning binder (cement, plaster, etc.), fine aggregates and possible additives, and mixing them by means of the *dry mortar mixing unit* (3.8) to generate *dry mortar* (3.3)

3.6.1**compact dry mortar mixing plant**

configuration of *dry mortar mixing plant* (3.6) where the aggregate *storage bins* (3.9) are arranged below the *dry mortar mixing unit* (3.8) and all the aggregates are lifted up beyond the mixing unit and then mass-dosed

Note 1 to entry: See [Figure A.8](#).

3.6.2**serial dry mortar mixing plant**

configuration of *dry mortar mixing plant* (3.6) where the aggregate *storage bins* (3.9) are arranged below the *dry mortar mixing unit* (3.8) and all the mass-dosed aggregates are lifted up beyond the mixing unit

Note 1 to entry: See [Figure A.9](#).

3.6.3**tower dry mortar mixing plant**

configuration of *dry mortar mixing plant* (3.6) where the aggregate *storage bins* (3.9) and *batcher* (3.15) are located above the *dry mortar mixing unit* (3.8)

Note 1 to entry: See [Figure A.10](#).

3.7**concrete mixing unit**

component of a *concrete mixing plant* (3.4) where measured (by mass or volume) proportions of water, cement, aggregate and possible additives, admixtures are mixed for a specified amount of time

3.8**dry mortar mixing unit**

component of a *dry mortar mixing plant* (3.6) where mass-measured proportions of binder (cement, plaster, etc.), fine aggregates and possible additives are mixed for a specified amount of time