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Building construction machinery and equipment — Machinery for concrete surface floating and finishing —

Part 1: Commercial specifications

Machines et matériels pour la construction des bâtiments — Talocheuses-lisseuses de mortier —

Partie 1: 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*.

This second edition cancels and replaces the first edition (ISO 13105-1:2014), which has been technically revised.

The main changes are as follows:

— updated normative references.

A list of all parts in the ISO 13105 series can be found on the ISO website.

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Building construction machinery and equipment — Machinery for concrete surface floating and finishing —

Part 1: Commercial specifications

1 Scope

This document establishes the content for commercial specifications for machines used for concrete surface floating and finishing (also known as power trowels). This includes pedestrian-controlled equipment and ride-on equipment.

This document does not address strike-off type machines, commonly known as screeds.

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 13105-2, *Building construction machinery and equipment — Machinery for concrete surface floating and finishing — Part 2: Safety requirements and verification*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 13105-2 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
power trowel
motor-powered machine with rotating tools for floating and finishing freshly placed concrete

3.2
rotor
rotating assembly including the *blades* (3.3) and means to pitch blades

3.3
blade
working tool which contacts with the concrete surface

3.4
handle
pole
device on pedestrian-controlled *power trowel* (3.1) to enable the operator to hold and manoeuvre the machine

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3.5
retardant
liquid finishing aid

3.6
pitch
angle between the surface of the *blade* (3.3) and the concrete surface

Note 1 to entry: This can be fixed or adjustable.

3.7
operating mass
mass of the base machine, with equipment and empty attachment in the most usual configuration as specified by the manufacturer, and with the operator (75 kg), full fuel tank and all fluid systems (i.e. hydraulic oil, transmission oil, engine oil, engine coolant) at the levels specified by the manufacturer and, when applicable, with sprinkler water tank(s) half full

Note 1 to entry: The mass of an operator is not included for non-riding machines.

Note 2 to entry: Ballast mass at delivery can be included if specified by the manufacturer.

[SOURCE: ISO 6016:2008, 3.2.1, modified — The abbreviated term "OM" has been removed.]

3.8
nominal mass
mass of the machine equipped with all its parts, the attached tank(s) being empty (dismountable dry mass)

4 Commercial specifications

4.1 General

The following general data shall be presented.

a) model and type

b) manufacturer

c) serial number

d) prime mover (internal combustion engine or electric, pneumatic or hydraulic motor)

   1) if internal combustion engine:

      — type (spark ignition or compression ignition)

      — model

      — manufacturer

      — operating speed min^{-1}

      — engine net power as certified kW

      — fuel type

      — fuel tank capacity l

   2) if electric motor:

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