

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY

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भारतीय मानक मसौदा

**भवन निर्माण मशीनरी एवं उपकरण — कंक्रीट सरफेस फ्लोटिंग और
फ़िनिशिंग के लिए मशीनरी**

भाग 2 सुरक्षा अपेक्षाएँ एवं सत्यापन

(ISO 13105-2 का अधिग्रहण)

DRAFT Indian Standard

**BUILDING CONSTRUCTION MACHINERY AND EQUIPMENT —
MACHINERY FOR CONCRETE SURFACE FLOATING AND FINISHING
PART 2 SAFETY REQUIREMENTS AND VERIFICATION**

(Adoption of ISO 13105-2)

ICS 91.220; 13.110

Construction Plant and Machinery
Sectional Committee, MED 18

Last data for receipt of comments:
27 June 2025

NATIONAL FOREWORD

(Adoption clause will be added later)

The Indian Standard supersedes IS/ISO 13105-2 : 2014 ‘Building construction machinery and equipment — Machinery for concrete surface floating and finishing: Part 2 Safety and requirements and verification’ which has been technically revised.

The following major modifications have been incorporated in this revision of the standard:

- a) Updated normative references;
- b) Updated general requirements in **4.2**;
- c) Added NOTE in **4.2.11**;
- d) Updated **A.1** and **A.5**;
- e) Added Annex C.

- f) Incorporates the amendment ISO 13105-2:2014/Amd 1:2017.

Under the general title ‘Building construction machinery and equipment — Machinery for concrete surface floating and finishing’, the standard is in two parts, other part are as following:

Part 1 Commercial Specifications

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain terminologies and conventions are, however, not identical to those used in Indian Standard. Attention is particularly drawn to the following:

- a) Wherever the words ‘International Standard’ appear, referring to this standard, they should be read as ‘Indian Standard’.
- b) Comma (,) has been used as a decimal marker, while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standard for which Indian Standard also exist. The corresponding Indian Standard, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 2631-1 Mechanical vibration and shock — Evaluation of human exposure to whole-body vibration — Part 1: General requirements	IS 13276 (Part 1) : 2000/ISO 2631-1 : 1997 Mechanical vibration and shock — Evaluation of human exposure to whole body vibration: Part 1 General requirements (<i>first revision</i>)	Identical
ISO 4413 Hydraulic fluid power — General rules and safety requirements for systems and their components	IS 10481 : 2020/ISO 4413 : 2010 Hydraulic fluid power — General rules and safety requirements for systems and their components (<i>second revision</i>)	Identical
ISO 4414 Pneumatic fluid power — General rules and safety requirements for systems and their components	IS 12725 : 2021/ISO 4414 : 2010 Pneumatic fluid power — General rules and safety requirements for systems and their components (<i>second revision</i>)	Identical
ISO 7000 Graphical symbols for use on equipment — Registered symbols	IS 16450 : 2023/ISO 7000 : 2019 Graphical symbols for use on equipment — Registered symbols (<i>first revision</i>)	Identical
ISO 12100 : 2010 Safety of machinery — General principles for design — Risk assessment and risk reduction	IS 16819 : 2018/ISO 12100 : 2010 Safety of machinery — General principles for design — Risk assessment and risk reduction	Identical

ISO 13105-1 Building construction machinery and equipment — Machinery for concrete surface floating and finishing — Part 1: Terms and commercial specifications	IS/ISO 13105-1 : 2014 Building construction machinery and equipment — Machinery for concrete surface floating and finishing: Part 1 Terms and commercial specifications	Identical
ISO 13766-1 Earth-moving and building construction machinery — Electromagnetic compatibility (EMC) of machines with internal electrical power supply — Part 1: General EMC requirements under typical electromagnetic environmental conditions	IS/ISO 13766-1 : 2018 Earth-moving and building construction machinery — Electromagnetic compatibility (EMC) of machines with internal electrical power supply: Part 1 General EMC requirements under typical electromagnetic environmental conditions	Identical
ISO 13766-2 Earth-moving and building construction machinery — Electromagnetic compatibility (EMC) of machines with internal electrical power supply — Part 2: Additional EMC requirements for functional safety	IS/ISO 13766-2 : 2018 Earth-moving and building construction machinery — Electromagnetic compatibility (EMC) of machines with internal electrical power supply: Part 2 Additional EMC requirements for functional safety	Identical
IEC 60204-1 : 2016 Safety of machinery — Electrical equipment of machines — Part 1: General requirements	IS 16504 (Part 1) : 2019/IEC 60204-1 : 2016 Safety of machinery — Electrical equipment of machines: Part 1 General requirements (<i>first revision</i>)	Identical
IEC 60309-1 Plugs, socket-outlets and couplers for industrial purposes — Part 1: General requirements	IS/IEC 60309-1 : 2021 Plugs, fixed or portable socket-outlets and appliance inlets for industrial purposes: Part 1 General requirements (<i>second revision</i>)	Identical
IEC 60529 : 2001 Degrees of protection provided by enclosures (IP code)	IS/IEC 60529 : 2001 Degrees of protection provided by enclosures (IP Code)	Identical

The technical committee has reviewed the provisions of the following International Standard referred in this adopted standard and has decided that it is acceptable for use in conjunction with this standard:

<i>International Standard</i>	<i>Title</i>
ISO 3744	Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering methods for an essentially free field over a reflecting plane

ISO 11201	Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions in an essentially free field over a reflecting plane with negligible environmental corrections
ISO 13732-1	Ergonomics of the thermal environment — Methods for the assessment of human responses to contact with surfaces — Part 1: Hot surfaces
ASTM E-1155	Standard Test Method for Determining FF Floor Flatness and FL Floor Levelness Numbers
EN 50525-2-21	Electric cables — Low voltage energy cables of rated voltages up to and including 450/750 V (U0/U) — Part 2-21: Cables for general applications — Flexible cables with crosslinked elastomeric insulation

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 ‘Rules for rounding off numerical values (*second revision*)’. The number of significant places retained in the rounded-off value should be the same as that of the specified value in this standard.

NOTE: The technical content of the document has not been enclosed as these are identical with the corresponding ISO standard. For details, please refer the corresponding **ISO 13105-2 : 2023** or kindly contact:

Head
Mechanical Engineering Department
Bureau of Indian Standard
9 Bahadur Shah Zafar Marg
New Delhi 110002
Email: med@bis.gov.in
Telefax 011-23232509