

भारतीय मानक ब्यूरो

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भारतीय मानक प्रारूप

अग्निसह परीक्षण खंड तैयार करना — आर्द्र गणनिंग टेक्निक्स द्वारा गणनिंग
अग्निसह पैनल तैयार करना

Draft Indian Standard

**Refractory test-piece preparation — Gunning refractory panels by
wet gunning techniques**

ICS 81.080

Refractories Sectional Committee, MTD 15.

Last date of comment:
13/12/2023

NATIONAL FOREWORD

This draft Indian Standard which is identical with ISO 18886:2016 'Refractory test-piece preparation — Gunning refractory panels by wet gunning techniques' issued by the International Organization for Standardization (ISO), and subject to its finalization, is to be adopted by the Bureau of Indian Standards on the recommendation of the Refractories Sectional Committee and approval of the Metallurgical Engineering Division Council.

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

- Wherever the words 'International Standard' appear referring to this standard, it should be read as 'Indian Standard'.
- 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 Standards for which Indian Standards also exists. The corresponding Indian Standards which are to be substituted in their place are listed below along with their degree of equivalence for the edition indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
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ISO 836 : 2001 Terminology
for refractories.

IS 4041 : 2006 Terminology for Identical
refractories (First Revision).

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:

International Standard

Title

ISO 1927-4 : 2012

Monolithic (unshaped) refractory products —
Part 4: Determination of consistency of
castables.

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.

The scope of the standard is as follows:

SCOPE

This International Standard specifies the procedures for the preparation of test pieces from refractory materials by wet gunning at ambient temperatures. The test pieces are for the determination of properties on wet-gunned products prepared under either “standard conditions” (as required for quality assurance or product development) or “site conditions”. In the case of “site conditions”, the purpose of the testing is to establish the properties pertaining to a given installation or a given set of installation conditions. In this case, the gunned panel is obtained during the on-site installation. Such parameters as activator addition (type, amount, method of addition), conveying pressure and curing conditions (temperature, orientation of the panel) applying during the preparation of the panel are as near as possible to the same parameters pertaining to the site installation.

This procedure applies to refractory materials that can be transported through a gunning hose after having been mixed with the total water requirement for material placement. The consistency of these materials (see 7.5) is typically such that they would be suitable for placement by casting were they not to be transported through the gunning hose and applied by spraying.

Refractory materials that are pneumatically conveyed in the “dry” state through a gunning hose, even after mixing with a portion of the total water requirement (the bulk of the water being added at the nozzle) are dealt with in ISO 20182.

This International Standard does not apply to the gunning of plastic refractory materials (refer to ISO 1927-1).

The complete document/text of ISO 18886:2016 ‘Refractory test-piece preparation — Gunning refractory panels by wet gunning techniques’ may be made available, on request to:

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