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

Préparation d'éprouvettes réfractaires — Panneaux réfractaires pour gunitage par techniques de gunitage humide

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Foreword

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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 ISO/TC 33, *Refractories*.

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

1 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).

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 836, *Terminology for refractories*

ISO 1927-4, *Monolithic (unshaped) refractory products — Part 4: Determination of consistency of castables*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 836 and the following apply.

3.1
activator
chemical solution added to the refractory at, or prior to, the gunning nozzle which causes the refractory to set, stiffen or coagulate

Note 1 to entry: This International Standard may involve the use of hazardous materials, operations and equipment. It does not attempt to address the safety problems associated with its use. It is the responsibility of the user of this International Standard to establish appropriate safety and health practices and to determine the applicability of regulatory limitations prior to use.

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