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**Refractory test piece preparation —  
Gunning refractory panels by the  
pneumatic-nozzle mixing type guns**

*Préparation d'éprouvettes réfractaires — Panneaux réfractaires pour  
gunitage au pistolet mélangeur pneumatique*



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## Foreword

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ISO 20182 was prepared by Technical Committee ISO/TC 33, *Refractories*.

# Refractory test piece preparation — Gunning refractory panels by the pneumatic-nozzle mixing type guns

**WARNING** — This International Standard may involve 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 standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

## 1 Scope

This International Standard describes the procedure for the preparation of test panels from refractory materials by gunning through pneumatic-nozzle mixing type guns at ambient temperatures.

**NOTE** The values obtained from test pieces cut from the panel prepared using this method may not correspond with those obtained from test pieces of the same material prepared at a gunning installation site.

It does not apply to plastic gunning mixes, and may not apply to those mixes that contain aggregates that are susceptible to hydration.

It also does not apply to shotcrete type mixes.

## 2 Normative references

The following referenced documents are indispensable for the application 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 836, *Terminology for refractories*

ISO 8656-1, *Refractory products — Sampling of raw materials and unshaped products — Part 1: Sampling scheme*

## 3 Terms and definitions

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

### 3.1

#### **gun**

assembly essentially comprising a chamber into which the refractory is added, together with a mechanism that controls the flow of the material through the unit

**NOTE** Depending on the type used, the gun may be open at the top, or a closed pressurized unit.

### 3.2

#### **rebound material**

material that fails to adhere to the surface when being sprayed, and ricochets out of the immediate area