

ISO 22605:2020 (E)

Refractories — Determination of dynamic Young's modulus (MOE) at elevated temperatures by impulse excitation of vibration

Contents

	Foreword
1	Scope
2	Normative references
3	Terms and definitions
4	Principle
5	Significance and use
6	Apparatus
7	Sampling
8	Test specimens
8.1	Specimen geometry
8.2	Specimen dimensions
8.3	Surface finishing of specimens
9	Procedure
9.1	Specimen drying
9.2	Determination of specimen mass and dimension
9.3	Loading of the test specimen
9.4	Determination of the room temperature Young's modulus
9.5	Determination of fundamental flexural resonant frequency
9.5.1	Method A: Isothermal measurement at pre-set temperature
9.5.2	Method B: Continuous measurement during ramping to test temperature
10	Calculations
11	Test report
Annex A	(informative) Factors affecting accuracy of determinations
Annex B	(informative) Calculation of Young's modulus at room temperature (according to ISO 12680-1)
B.1	Calculations
B.2	Cylindrical rod specimens
B.3	Alternative calculations

Page count: 12