

ISO 15733:2026-06 (E)

Fine ceramics (advanced ceramics, advanced technical ceramics) - Mechanical properties of ceramic composites at ambient temperature in air atmospheric pressure - Determination of tensile properties

Contents

Page

Foreword.....	iv
1 Scope.....	1
2 Normative references.....	1
3 Terms, definitions and symbols.....	1
4 Principle.....	3
5 Apparatus.....	4
5.1 Test machine.....	4
5.2 Load train.....	4
5.3 Extensometer.....	4
5.4 Data recording system.....	5
5.5 Micrometer.....	5
6 Test specimens.....	5
7 Test specimen preparation.....	8
7.1 Machining and preparation.....	8
7.2 Number of test of specimens.....	8
8 Test procedures.....	8
8.1 Test set-up: other considerations.....	8
8.1.1 Displacement rate.....	8
8.1.2 Measurement of test specimen dimensions.....	8
8.2 Testing technique.....	8
8.2.1 Specimen mounting.....	8
8.2.2 Setting of extensometers.....	8
8.2.3 Measurements.....	9
8.3 Test validity.....	9
9 Calculation of results.....	10
9.1 Test specimen origin.....	10
9.2 Tensile strength.....	10
9.3 Longitudinal Strain.....	10
9.4 Lateral strain.....	10
9.5 Longitudinal strain at maximum tensile force.....	11
9.6 Tensile modulus.....	11
9.7 Poisson's ratio.....	12
10 Test report.....	12
Annex A (informative) Illustration of tensile modulus.....	14
Bibliography.....	15