BS ISO 13124:2011

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Fine ceramics (advanced ceramics, advanced technical ceramics) — Test method for interfacial bond strength of ceramic materials

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National foreword

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INTERNATIONAL STANDARD

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Foreword

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ISO 13124 was prepared by Technical Committee ISO/TC 206, *Fine ceramics*.

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INTERNATIONAL STANDARD ISO 13124:2011(E)

Fine ceramics (advanced ceramics, advanced technical ceramics) — Test method for interfacial bond strength of ceramic materials

1 Scope

This International Standard specifies a test method for determining the interfacial tensile and shear bond strength of ceramic-ceramic, ceramic-metal, and ceramic-glass joining at ambient temperature by compression tests on cross-bonded test pieces. Methods for test-piece preparation, test modes and rates (load rate or displacement rate), data collection and reporting procedures are addressed.

This International Standard applies primarily to ceramic materials, including monolithic fine ceramics and whisker-, fibre- or particulate-reinforced ceramic composites. This test method can be used for materials research, quality control, and characterization and design data generation purposes.

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 3611:2010, *Geometrical product specifications (GPS) — Dimensional measuring equipment: Micrometers for external measurements — Design and metrological characteristics*

ISO 7500-1:2004, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system*

ISO 14704:2008, *Fine ceramics (advanced ceramics, advanced technical ceramics) — Test method for flexural strength of monolithic ceramics at room temperature*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
fine ceramic (advanced ceramic, advanced technical ceramic)
highly engineered, high-performance predominately non-metallic, inorganic, ceramic material having specific functional attributes

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