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Interested committees:

Title: Draft BS ISO 24046 Fine ceramics (advanced ceramics, advanced technical ceramics) —Methods of tests for reinforcements — Determination of the tensile properties of resin-impregnated yarns.

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Introduction

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Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



DRAFT International Standard

ISO/DIS 24046

Fine ceramics (advanced ceramics, advanced technical ceramics) — Methods of tests for reinforcements — Determination of the tensile properties of resin-impregnated yarns

Céramiques techniques (céramique technique, céramique technique avancée) — Méthodes d'essais pour renforts — Détermination des propriétés en traction des fils imprégnés de résine

ICS: 81.060.30

ISO/TC 206

Secretariat: JISC

Voting begins on:
2025-11-03

Voting terminates on:
2026-01-26

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Foreword

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

This second edition cancels and replaces the first edition (ISO 24046:2022), of which it constitutes a minor revision. The main changes are as follows:

- definitions of [3.1](#), [3.2](#), [3.3](#), and [3.9](#) corrected;
- changes in [9.4](#) and [9.5](#) associated with the correction of [3](#) terms and definitions.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Fine ceramics are widely used in various fields, such as machinery, electronics, chemistry, construction, energy, aerospace and the nuclear industry, and in environmental applications. Fibre-reinforced ceramic matrix composites (CMCs) have been the subject of extensive research and development. CMCs are lightweight, have suitable chemical and thermal stability, and exhibit high strength, elastic modulus and creep resistance. These composites have been applied in devices and components in the aerospace industry and in high-temperature applications.

CMCs have been put to practical use as components in the jet engines of passenger planes and are also being developed as components of gas turbines for electric power generation.

The reliability of CMCs is influenced by the properties of the reinforcing fibre. High reliability is particularly important for jet engine parts. The mechanical properties of these fibres also require fixed values and distribution.

This document establishes a method for the measurement of mechanical properties such as tensile strength, elastic modulus and strain at the maximum force of a resin-impregnated yarn specimen prepared from the reinforcing ceramic fibre in CMCs.

Fibre and CMC manufacturers will be able to use this method to perform quality control and relative comparison of ceramic fibres used as the reinforcement of CMCs.

