

# ISO 15733:2015-08 (E)

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

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>1</b>
<b>3</b>	<b>Terms, definitions and symbols .....</b>	<b>1</b>
<b>4</b>	<b>Principle .....</b>	<b>3</b>
<b>5</b>	<b>Apparatus .....</b>	<b>3</b>
<b>5.1</b>	<b>Test machine .....</b>	<b>3</b>
<b>5.2</b>	<b>Load train .....</b>	<b>3</b>
<b>5.3</b>	<b>Extensometer .....</b>	<b>3</b>
<b>5.4</b>	<b>Data recording system .....</b>	<b>4</b>
<b>5.5</b>	<b>Micrometers .....</b>	<b>4</b>
<b>6</b>	<b>Test specimens .....</b>	<b>4</b>
<b>7</b>	<b>Test specimen preparation .....</b>	<b>7</b>
<b>7.1</b>	<b>Machining and preparation .....</b>	<b>7</b>
<b>7.2</b>	<b>Number of test of specimens .....</b>	<b>8</b>
<b>8</b>	<b>Test procedures .....</b>	<b>8</b>
<b>8.1</b>	<b>Test set-up: other considerations .....</b>	<b>8</b>
<b>8.1.1</b>	<b>Displacement rate .....</b>	<b>8</b>
<b>8.1.2</b>	<b>Measurement of test specimens dimensions .....</b>	<b>8</b>
<b>8.2</b>	<b>Testing technique .....</b>	<b>8</b>
<b>8.2.1</b>	<b>Specimen mounting .....</b>	<b>8</b>
<b>8.2.2</b>	<b>Setting of extensometer .....</b>	<b>8</b>
<b>8.2.3</b>	<b>Measurements .....</b>	<b>8</b>
<b>8.3</b>	<b>Test validity .....</b>	<b>8</b>
<b>9</b>	<b>Calculation of results .....</b>	<b>9</b>
<b>9.1</b>	<b>Test specimen origin .....</b>	<b>9</b>
<b>9.2</b>	<b>Tensile strength .....</b>	<b>9</b>
<b>9.3</b>	<b>Strain at maximum tensile force .....</b>	<b>9</b>
<b>9.4</b>	<b>Proportionality ratio or pseudo-elastic modulus, elastic modulus .....</b>	<b>9</b>
<b>10</b>	<b>Test report .....</b>	<b>10</b>
<b>Bibliography .....</b>		<b>12</b>