

# ISO 14916:2017-03 (E)

## Thermal spraying - Determination of tensile adhesive strength

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>1</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>1</b>
<b>4</b>	<b>Principles .....</b>	<b>2</b>
<b>5</b>	<b>Equipment for testing and measuring and auxiliary equipment .....</b>	<b>3</b>
<b>5.1</b>	<b>Test instruments .....</b>	<b>3</b>
<b>5.2</b>	<b>Measurement instrument .....</b>	<b>3</b>
<b>5.3</b>	<b>Specimen fixing device for bonding of the tensile adhesive specimen .....</b>	<b>4</b>
<b>6</b>	<b>Specimens .....</b>	<b>4</b>
<b>6.1</b>	<b>Shape of specimens .....</b>	<b>4</b>
<b>6.2</b>	<b>Material of the specimen .....</b>	<b>6</b>
<b>6.3</b>	<b>Preparing the substrate and loading blocks .....</b>	<b>6</b>
<b>6.4</b>	<b>Preparing and spraying of the specimen .....</b>	<b>8</b>
<b>6.5</b>	<b>Manufacture of the specimens for tensile testing .....</b>	<b>9</b>
<b>6.5.1</b>	<b>Machining of the coated substrate block (or test disc) and preparation for bonding .....</b>	<b>9</b>
<b>6.5.2</b>	<b>Gluing the specimen .....</b>	<b>9</b>
<b>6.5.3</b>	<b>Bonding agent .....</b>	<b>9</b>
<b>6.6</b>	<b>Reference specimen .....</b>	<b>10</b>
<b>6.7</b>	<b>Number of specimens to be tested .....</b>	<b>10</b>
<b>7</b>	<b>Applying the testing .....</b>	<b>10</b>
<b>8</b>	<b>Measurement readings and evaluation .....</b>	<b>11</b>
<b>9</b>	<b>Test report -- Documentation .....</b>	<b>12</b>
<b>10</b>	<b>Possible sources of fault when preparing the specimens and on testing .....</b>	<b>13</b>
	<b>Annex A (informative) Work instructions for gluing .....</b>	<b>14</b>
	<b>Annex B (informative) Recommendations for further auxiliary equipment .....</b>	<b>17</b>
	<b>Annex C (informative) Function areas on the tensile adhesive specimen and possibilities of fracture locations according to ASTM C633-13 .....</b>	<b>21</b>
	<b>Annex D (informative) Record for the applied tensile adhesive test according to this document .....</b>	<b>22</b>
	<b>Bibliography .....</b>	<b>26</b>