

# ISO 16592:2012-08 (E)

## Microbeam analysis - Electron probe microanalysis - Guidelines for determining the carbon content of steels using a calibration curve method

---

<b>Contents</b>		<b>Page</b>
<b>Foreword</b> .....		<b>iv</b>
<b>1</b>	<b>Scope</b> .....	<b>1</b>
<b>2</b>	<b>Procedure</b> .....	<b>1</b>
<b>2.1</b>	<b>General</b> .....	<b>1</b>
<b>2.2</b>	<b>Reference materials</b> .....	<b>1</b>
<b>2.3</b>	<b>Specimen preparation</b> .....	<b>1</b>
<b>2.4</b>	<b>Measurement of carbon K Xray intensity</b> .....	<b>2</b>
<b>2.5</b>	<b>Background subtraction</b> .....	<b>3</b>
<b>2.6</b>	<b>Establishment of the calibration curve</b> .....	<b>4</b>
<b>3</b>	<b>Evaluation of uncertainty</b> .....	<b>6</b>
<b>4</b>	<b>Test report</b> .....	<b>6</b>
<b>Annex A (informative) Method of estimating the uncertainty of the calculated value using a calibration curve</b> .....		<b>8</b>
<b>Annex B (informative) A practical example of the determination of the mass fraction of carbon and the evaluation of uncertainty in a steel</b> .....		<b>10</b>
<b>Bibliography</b> .....		<b>12</b>