

# DIN EN ISO 6507-3:2018-07 (E)

## Metallic materials - Vickers hardness test - Part 3: Calibration of reference blocks (ISO 6507-3:2018)

---

<b>Contents</b>		<b>Page</b>
<b>European foreword</b> .....		<b>3</b>
<b>Foreword</b> .....		<b>4</b>
<b>1</b>	<b>Scope</b> .....	<b>5</b>
<b>2</b>	<b>Normative references</b> .....	<b>5</b>
<b>3</b>	<b>Terms and definitions</b> .....	<b>5</b>
<b>4</b>	<b>Manufacture of reference blocks</b> .....	<b>5</b>
4.1	General.....	5
4.2	Thickness.....	5
4.3	Test surface area.....	5
4.4	Magnetism.....	6
4.5	Flatness and parallelism.....	6
4.6	Surface roughness.....	6
4.7	Prevention of the regrind of the test surface.....	6
<b>5</b>	<b>Calibration machine</b> .....	<b>6</b>
5.1	General.....	6
5.2	Direct verification.....	6
5.3	Traceability of verification instruments.....	6
5.4	Test force.....	7
5.5	Indenter.....	7
5.6	Diagonal measuring system.....	8
<b>6</b>	<b>Calibration procedure</b> .....	<b>9</b>
<b>7</b>	<b>Number of indentations</b> .....	<b>9</b>
<b>8</b>	<b>Uniformity of hardness</b> .....	<b>10</b>
8.1	Relative non-uniformity.....	10
8.2	Uncertainty of measurement.....	11
<b>9</b>	<b>Marking</b> .....	<b>11</b>
<b>10</b>	<b>Calibration certificate</b> .....	<b>11</b>
<b>11</b>	<b>Validity</b> .....	<b>12</b>
<b>Annex A (informative) Uncertainty of the mean hardness value of hardness reference blocks</b> .....		<b>13</b>
<b>Annex B (informative) Adjustment of Köhler illumination systems</b> .....		<b>18</b>
<b>Bibliography</b> .....		<b>19</b>