

# ISO 463:2006-03 (E)

## Geometrical Product Specifications (GPS) - Dimensional measuring equipment - Design and metrological characteristics of mechanical dial gauges

---

<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>Design characteristics .....</b>	<b>2</b>
4.1	General .....	2
4.2	Dimensions .....	2
4.3	Dial and pointer .....	5
4.4	Revolution counting device .....	6
4.5	Contact element .....	6
4.6	Zero adjustment .....	6
4.7	Movable limit indicators .....	7
4.8	Design characteristics (manufacturer's specification) .....	7
<b>5</b>	<b>Metrological characteristics .....</b>	<b>7</b>
5.1	MPE and MPL for a number of metrological characteristics .....	7
5.2	Contact element .....	8
5.3	Measuring forces .....	8
<b>6</b>	<b>Proving conformance with specification .....</b>	<b>8</b>
6.1	General .....	8
6.2	Measurement standards for calibration of metrological characteristics .....	8
<b>7</b>	<b>Marking .....</b>	<b>8</b>
<b>Annex A (informative) Example diagram of errors of indication .....</b>		<b>9</b>
<b>Annex B (informative) Example data sheet for mechanical dial gauges .....</b>		<b>10</b>
<b>Annex C (informative) Calibration of metrological characteristics .....</b>		<b>11</b>
<b>Annex D (informative) Relation to the GPS matrix model .....</b>		<b>12</b>
<b>Bibliography .....</b>		<b>14</b>