

# ISO 1502:1996-02 (E)

## ISO\_general-purpose metric screw threads\_- Gauges and gauging

---

### Contents

	Page
<b>1</b> Scope .....	<b>1</b>
<b>2</b> Normative references .....	<b>1</b>
<b>3</b> Symbols and abbreviations .....	<b>1</b>
<b>4</b> Types of gauges .....	<b>3</b>
<b>4.1</b> Gauges for external threads of workpieces and their check plugs and setting plugs .....	<b>3</b>
<b>4.2</b> Gauges for internal threads of workpieces .....	<b>3</b>
<b>5</b> Gauging of workpieces .....	<b>3</b>
<b>5.1</b> Gauging of external threads .....	<b>3</b>
<b>5.2</b> Gauging of internal threads .....	<b>4</b>
<b>5.3</b> Inspection gauging .....	<b>4</b>
<b>6</b> Reference temperature .....	<b>4</b>
<b>7</b> Function, checking and use of gauges .....	<b>4</b>
<b>7.1</b> Gauges for external threads of workpieces and their check plugs and setting plugs .....	<b>5</b>
<b>7.2</b> Gauges for internal threads of workpieces .....	<b>8</b>
<b>8</b> Tolerance zones for the diameters of gauges (see figures 1 and 2) .....	<b>8</b>
<b>9</b> Tolerance zones for plain gauges (see figures 3 and 4) .....	<b>11</b>
<b>10</b> Thread profiles for gauges .....	<b>13</b>
<b>10.1</b> Profiles with complete flanks (see figures 5 and 6) .....	<b>13</b>
<b>10.2</b> Profiles with truncated flanks (see figures 7 and 8) .....	<b>16</b>
<b>10.3</b> Displacement of the clearance groove for a profile with truncated flanks .....	<b>18</b>
<b>11</b> General features of screw gauges .....	<b>19</b>
<b>11.1</b> Gauges for external threads of workpieces .....	<b>19</b>
<b>11.2</b> Gauges for internal threads of workpieces .....	<b>19</b>

<b>11.3</b>	Blunt start of thread .....	<b>19</b>
<b>12</b>	Tolerances and permissible wear for pitch diameters of gauges (see tables 4 to 9) .....	<b>21</b>
<b>13</b>	Formulae for calculation of gauge limits .....	<b>23</b>
<b>13.1</b>	Screw gauges for external threads of workpieces .....	<b>23</b>
<b>13.2</b>	Plain gauges for the major diameters of external threads of workpieces .....	<b>23</b>
<b>13.3</b>	Screw gauges for internal threads of workpieces .....	<b>23</b>
<b>13.4</b>	Plain gauges for the minor diameters of internal threads of workpieces .....	<b>23</b>
<b>Annex</b>		
<b>A</b>	Bibliography .....	<b>27</b>