

# ISO 1328-2:2020-02 (E)

## Cylindrical gears - ISO system of flank tolerance classification - Part 2: Definitions and allowable values of double flank radial composite deviations

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>1</b>
<b>3</b>	<b>Terms, definitions and symbols .....</b>	<b>1</b>
<b>3.1</b>	<b>Terms and definitions .....</b>	<b>1</b>
<b>3.2</b>	<b>Symbols .....</b>	<b>3</b>
<b>4</b>	<b>Application of the ISO double flank radial composite tolerance classification system .....</b>	<b>3</b>
<b>4.1</b>	<b>General .....</b>	<b>3</b>
<b>4.2</b>	<b>Gear tooth tolerance class .....</b>	<b>4</b>
<b>4.3</b>	<b>Specification of datum surfaces .....</b>	<b>4</b>
<b>4.4</b>	<b>Application of the ISO flank classification standard .....</b>	<b>5</b>
<b>4.4.1</b>	<b>Measurement equipment and master gears .....</b>	<b>5</b>
<b>4.4.2</b>	<b>Equipment verification and uncertainty .....</b>	<b>5</b>
<b>4.4.3</b>	<b>Filtering and data density .....</b>	<b>5</b>
<b>4.5</b>	<b>Acceptance criteria .....</b>	<b>5</b>
<b>4.6</b>	<b>Correlation of double flank radial composite and element deviations .....</b>	<b>5</b>
<b>4.7</b>	<b>Designation of the double flank radial composite tolerance class or tolerances .....</b>	<b>6</b>
<b>5</b>	<b>Tolerance values .....</b>	<b>6</b>
<b>5.1</b>	<b>General .....</b>	<b>6</b>
<b>5.2</b>	<b>Use of formulae .....</b>	<b>6</b>
<b>5.2.1</b>	<b>Number of teeth used to calculate tolerances .....</b>	<b>6</b>
<b>5.2.2</b>	<b>Rounding rules .....</b>	<b>6</b>
<b>5.3</b>	<b>Tooth-to-tooth radial composite tolerance, fidT .....</b>	<b>7</b>
<b>5.4</b>	<b>Total radial composite tolerance, FidT .....</b>	<b>7</b>
<b>5.4.1</b>	<b>Total radial composite tolerance for cylindrical gears .....</b>	<b>7</b>
<b>5.4.2</b>	<b>Total radial composite tolerance for sector gears .....</b>	<b>7</b>
<b>Annex A (informative)</b>	<b>Graph of tolerance values for class R34, R44, and R50 for spur gears with module = 1,0 mm .....</b>	<b>8</b>
<b>Annex B (informative)</b>	<b>Double flank radial composite deviation over segments of k teeth .....</b>	<b>10</b>
<b>Annex C (informative)</b>	<b>Reasons for changing double flank composite tolerances .....</b>	<b>12</b>
<b>Annex D (informative)</b>	<b>Conversion from another double flank composite tolerance specification</b>	<b>13</b>
<b>Annex E (informative)</b>	<b>Calculation examples .....</b>	<b>14</b>
<b>Bibliography .....</b>		<b>22</b>