

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

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