

# DIN ISO 1328-1:2018-03 (E)

## Cylindrical gears - ISO system of flank tolerance classification - Part 1: Definitions and allowable values of deviations relevant to flank s of gear teeth (ISO 1328-1:2013)

<b>Contents</b>	<b>Page</b>
National foreword.....	3
Foreword.....	5
Introduction.....	6
<b>1 Scope</b> .....	<b>7</b>
<b>2 Normative references</b> .....	<b>8</b>
<b>3 Terms, definitions and symbols</b> .....	<b>8</b>
3.1 Fundamental terms and symbols.....	8
3.2 General dimensions.....	12
3.3 Pitch deviations.....	15
3.4 Profile deviations.....	16
3.5 Helix deviations.....	20
<b>4 Application of the ISO flank tolerance classification system</b> .....	<b>23</b>
4.1 General.....	23
4.2 Geometrical parameters to be verified.....	23
4.3 Equipment verification and uncertainty.....	25
4.4 Considerations for elemental measurements.....	25
4.5 Specification of gear flank tolerance requirements.....	30
4.6 Acceptance and evaluation criteria.....	31
4.7 Presentation of data.....	31
<b>5 Tolerance values</b> .....	<b>31</b>
5.1 General.....	31
5.2 Use of formulae.....	32
5.3 Tolerance formulae.....	32
<b>Annex A (normative) Zone-based tolerance evaluation</b> .....	<b>34</b>
<b>Annex B (normative) Evaluation of profile and helix deviations using the second order analysis method</b> .....	<b>38</b>
<b>Annex C (informative) Profile and helix data filtering</b> .....	<b>41</b>
<b>Annex D (informative) Sector pitch deviation</b> .....	<b>43</b>
<b>Annex E (normative) Allowable values of runout</b> .....	<b>46</b>
<b>Annex F (informative) Single flank composite testing</b> .....	<b>49</b>
<b>Annex G (informative) Adjacent pitch difference, <math>f_u</math></b> .....	<b>54</b>
<b>Bibliography</b> .....	<b>56</b>







