

ISO 3548-3:2012-12 (E)

Plain bearings - Thin-walled half bearings with or without flange - Part 3: Measurement of peripheral length

Contents		Page
Foreword		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Symbols	2
5	Purpose of checking	3
6	Checking methods	4
6.1	Method A	4
6.2	Method B	4
7	Choice and designation of checking method	5
7.1	Choice of checking method	5
7.2	Designation of checking method	6
8	Measuring equipment	6
9	Measuring equipment requirements	8
9.1	General	8
9.2	Tolerance on checking load setting	8
9.3	Speed of approach of measuring head	9
9.4	Construction of measuring head	9
9.5	Accuracy of the measuring plane for metering bars	9
9.6	Accuracy of the dial gauge	9
10	Gauging tools for establishing the datum	9
10.1	General	9
10.2	Master checking block (used alone)	10
10.3	Series checking block used alone	10
10.4	Series checking block with master shell	10
11	Checking block requirements	10
11.1	General	10
11.2	Reference tooling: master checking block -- General	11
11.3	Series gauging tools	13
12	Master shell and comparison shell requirements	15
12.1	Master shell requirements	15
12.2	Comparison shell requirements	17
13	Correction factors	18
13.1	Reference tooling: master checking block correction factor, $F_{cor,cbm}$	18
13.2	Series control tooling	18
13.3	Marking	19
13.4	Reference setting	19

14	Typical checking procedure	19
15	Conditions of the half bearings to be checked	20
16	Measuring errors	20
16.1	Errors due to measuring equipment	20
16.2	Errors due to the checking block	20
16.3	Errors due to the correction factor	21
16.4	Errors due to the half bearing	21
16.5	Error due to the choice of checking method	21
17	Accuracy of methods used	21
17.1	Checking conditions	21
17.2	Limits	21
17.3	Calculation	21
18	Specifications on bearing drawings	21
19	Specifications for the control of the checking means	21
Annex A (normative) Determination of the correction factor of the master checking block -- Method A		23
Annex B (normative) Determination of the correction factor of the master checking block -- Method B		27
Annex C (normative) Determination of the correction factor of the series checking block used alone		31
Annex D (normative) Determination of the correction factor of the master shell or comparison shell		33
Annex E (normative) Tests and calculation of repeatability, reproducibility and comparability		35