

INTERNATIONAL STANDARD



1123

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Tapered roller bearings — Inch series — Chamfer dimension limits

Roulements à rouleaux coniques — Séries en inches — Dimensions limites des arrondis

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Descriptors : rolling bearings, tapered roller bearings, chamfer, dimensions, imperial system.

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standard institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up has the right to be represented on that Committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

Prior to 1972, the results of the work of the Technical Committees were published as ISO Recommendations; these documents are now in the process of being transformed into International Standards. As part of this process, Technical Committee ISO/TC 4 has reviewed ISO Recommendation R 1123 and found it technically suitable for transformation. International Standard ISO 1123 therefore replaces ISO Recommendation R 1123-1969 and Amendment 1 to which it is technically identical.

ISO Recommendation R 1123 was approved by the Member Bodies of the following countries :

Australia	India	Spain
Austria	Israel	Sweden
Belgium	Italy	Switzerland
Canada	Japan	Thailand
Czechoslovakia	Netherlands	Turkey
Egypt, Arab Rep. of	Peru	United Kingdom
France	Poland	U.S.A.
Germany	Romania	
Hungary	South Africa, Rep. of	

The Member Body of the following country expressed disapproval of the Recommendation on technical grounds :

U.S.S.R.

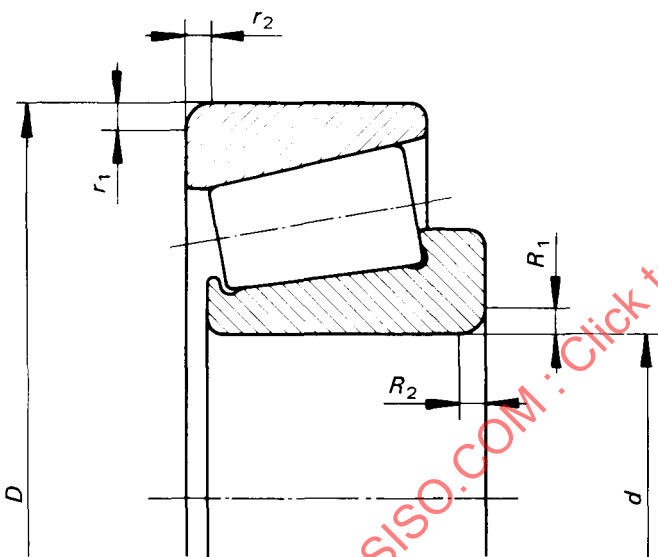
No Member Body disapproved the transformation of ISO/R 1123 into an International Standard.

Tapered roller bearings — Inch series — Chamfer dimension limits

1 SCOPE AND FIELD OF APPLICATION

This International Standard lays down the maximum chamfer dimension limits for the chamfers, for which minimum values $R_{\min}$ and $r_{\min}$ are given in ISO/R 355, Part I, *Rolling bearings — Tapered roller bearings — Boundary dimensions*.

2 SYMBOLS



- d = inner ring bore diameter
- D = outer ring outside diameter
- R = nominal dimension of inner ring backface chamfer
- R_1 = height of inner ring backface chamfer
- R_2 = width of inner ring backface chamfer
- r = nominal dimension of outer ring backface chamfer
- r_1 = height of outer ring backface chamfer
- r_2 = width of outer ring backface chamfer

3 CHAMFER DIMENSION LIMITS

TABLE 1 — Inner ring

Bore diameter d nominal		Chamfer height R_1		Chamfer width R_2	
Over	Incl.	min.	max.	min.	max.
Values in inches					
—	2	R	$R + 0.015$	R	$R + 0.035$
(2)	4	R	$R + 0.020$	R	$R + 0.050$
(4)	10	R	$R + 0.025$	R	$R + 0.070$
Values in millimetres					
—	50,8	R	$R + 0,38$	R	$R + 0,89$
(50,8)	101,6	R	$R + 0,51$	R	$R + 1,27$
(101,6)	254	R	$R + 0,64$	R	$R + 1,78$

The value of R is identical with that of $R_{\min}$ in ISO/R 355, Part I.

TABLE 2 — Outer ring

Outside diameter D nominal		Chamfer height r_1		Chamfer width r_2	
Over	Incl.	min.	max.	min.	max.
Values in inches					
—	4	r	$r + 0.023$	r	$r + 0.042$
(4)	6.625	r	$r + 0.025$	r	$r + 0.046$
(6.625)	10.5	r	$r + 0.033$	r	$r + 0.053$
(10.5)	14	r	$r + 0.067$	r	$r + 0.067$
Values in millimetres					
—	101,6	r	$r + 0,58$	r	$r + 1,07$
(101,6)	168,275	r	$r + 0,64$	r	$r + 1,17$
(168,275)	266,7	r	$r + 0,84$	r	$r + 1,35$
(266,7)	355,6	r	$r + 1,70$	r	$r + 1,70$

The value of r is identical with that of $r_{\min}$ in ISO/R 355, Part I.