

INTERNATIONAL
STANDARD

ISO
13417

First edition
1997-12-15

**Aerospace — Airframe needle track roller,
stud type, single-row, sealed —
Metric series**

*Aéronautique et espace — Galets de came à aiguilles sur axe, à une
rangée avec joints, pour cellule d'aéronef — Série métrique*



Reference number
ISO 13417:1997(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 13417 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 15, *Airframe bearings*.

Annex A of this International Standard is for information only.

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Aerospace — Airframe needle track roller, stud type, single-row, sealed — Metric series

1 Scope

This International Standard specifies the characteristics, boundary dimensions, tolerances, internal clearances and permissible static loads of metric series, single-row, stud type needle track rollers used in airframe applications.

The airframe needle roller bearings covered by this International Standard are designed to operate in the temperature range -54 °C to $+121\text{ °C}$.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 286-2:1988, *ISO system of limits and fits — Part 2: Tables of standard tolerance grades and limit deviations for holes and shafts.*

ISO 683-17:—¹⁾, *Heat-treated steels, alloy steels and free-cutting steels — Part 17: Ball and roller bearing steels.*

ISO 1132:1980, *Rolling bearings — Tolerances — Definitions.*

ISO 2082:1986, *Metallic coatings — Electroplated coatings of cadmium on iron or steel.*

ISO 3353:1976, *Aerospace — Rolled threads for bolts — Lead and runout requirements.*

ISO 4520:1981, *Chromate conversion coatings on electroplated zinc and cadmium coatings.*

ISO 5593:1997, *Rolling bearings — Vocabulary.*

ISO 5855-1:1988, *Aerospace — MJ threads — Part 1: General requirements.*

ISO 5855-2:1988, *Aerospace — MJ threads — Part 2: Limit dimensions for bolts and nuts.*

ISO 6158:1984, *Metallic coatings — Electroplated coatings of chromium for engineering purposes.*

ISO 13411:1997, *Aerospace — Airframe needle roller, cylindrical roller and track roller bearings — Technical specification.*

AMS 2417E:1993, *Plating, zinc-nickel alloy*²⁾.

¹⁾ To be published. (Revision of ISO 683-17:1976)

²⁾ Available from: SAE International
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Warrendale, PA 15096-0001 USA