INTERNATIONAL STANDARD

ISO 10959

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Aerospace — MJ threads — Gauging

Aéronautique et espace — Filetage MJ — Vérification par calibres

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 4, *Aerospace fastener systems*.

This second edition cancels and replaces the first edition (ISO 10959:2000), which has been technically revised.

Introduction

The purpose of this International Standard, which differs from ISO 1502, is to take into account the basic characteristics of the ISO MJ threads (restricted form variation and increased root radius of the external thread) as well as the specific tolerances and to standardize the gauging principles for ISO MJ threads, intended for products for aerospace applications.

Aerospace — MJ threads — Gauging

1 Scope

This International Standard contains information for the gauging of ISO MJ threads in accordance with ISO 5855-1, ISO 5855-2, and ISO 5855-3.

Other methods of ensuring that the product is within the specified limits may be used provided correlation with the specified gauges is established [see 8.2, e)].

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1, *Geometrical Product Specifications (GPS) — Standard reference temperature for geometrical product specification and verification*

ISO 1502:1996, *ISO general-purpose metric screw threads — Gauges and gauging*

ISO 5408, *Screw threads — Vocabulary*

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

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

ISO 5855-3, *Aerospace — MJ threads — Part 3: Limit dimensions for fittings for fluid systems*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5408 and the following apply.

3.1
best wire size
cylinder or sphere which has a radius so that it will contact the thread flanks at the pitch cylinder intersection

Note 1 to entry: The radius of the best wire or sphere is theoretically equal to 0,288 68 *P*.

3.2
indicating gauge
device having contacts which will precisely compare the size of a work piece thread to a setting standard of known dimensions

Note 1 to entry: The value for the indicated characteristic thus established is the dimensional value attributed to the work piece. An indicating gauge may have contacts designed to measure any thread characteristic. This International Standard specifies the characteristics and designs for ISO MJ threads.

3.3
simple pitch diameter
diameter of an imaginary cylinder intersecting an actual thread over the width of one groove where that width is equal to one half of the basic pitch