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ISO metric trapezoidal screw threads — Basic and design profiles

Filetages métriques trapézoïdaux ISO — Profils de base et nominal

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ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

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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 World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 1, *Screw threads*.

This third edition cancels and replaces the second edition (ISO 2901:1993), which has been technically revised. The following changes have been made:

— the phrase "maximum material profiles" has been replaced by "design profiles";

— the reference ISO 2903 has been replaced by ISO 5408;

— the symbols have been updated;

— the definition of basic profile has been deleted;

— Figure 2 has been revised and Figure 3 has been deleted.

ISO metric trapezoidal screw threads — Basic and design profiles

1 Scope

This document specifies the basic and design profiles of ISO metric trapezoidal screw threads.

This document is chiefly applicable to traversing threads for traversing motion on machines, tools, etc. It can also be used for fastening threads.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

4 Symbols

For the purposes of this document, the following symbols apply.

D	major diameter of internal thread on basic profile
D_4	major diameter of internal thread on design profile
d	major diameter of external thread (nominal diameter)
D_2	pitch diameter of internal thread
d_2	pitch diameter of external thread
D_1	minor diameter of internal thread
d_1	minor diameter of external thread on basic profile
d_3	minor diameter of external thread on design profile
P	pitch
H	fundamental triangle height
H_2	thread height on basic profile
H_0	thread overlap on design profile
H_4	thread height of internal thread on design profile