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ISO metric trapezoidal screw threads — General plan

Filetages métriques trapézoïdaux ISO — Vue d'ensemble

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Contents

Page

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.

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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 second edition cancels and replaces the first edition (ISO 2902:1977), Clause 4 of which has been technically revised (now Clause 6).

ISO metric trapezoidal screw threads — General plan

1 Scope

This document specifies a series of diameter and pitch combinations for ISO metric trapezoidal screw threads having the basic and design profiles according to ISO 2901.

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

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2903, *ISO metric trapezoidal screw threads — Tolerances*

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 Choice of diameter and pitch

Choose, for preference, diameters in column 1 of Table 1 and, if necessary, in column 2, and then in column 3.

The diameters in column 3 shall not be used for new designs.

For the diameter selected, choose one of the pitches shown on the corresponding line, for preference, the pitches within broad frames.

If it is necessary to use a trapezoidal thread with a pitch other than shown in the table, choose one of the pitches assigned to a neighbouring diameter.

5 Diameter and pitch combinations

The nominal diameter and pitch combinations are specified in Table 1.

6 Designation

A screw thread in conformity with this document shall be designated in accordance with ISO 2903.

Table 1 — Nominal diameter and pitch combinations

Dimensions in millimetres

Nominal diameters *D*, *d*			Pitches *P*																					
Col. 1	Col. 2	Col. 3	44	40	36	32	28	24	22	20	18	16	14	12	10	9	8	7	6	5	4	3	2	1,5
8																								**1,5**
	9																						**2**	1,5
10																							**2**	1,5
	11																					3	**2**	
12																						**3**	2	
	14																					**3**	2	
16																					**4**		2	
	18																				**4**		2	
20																					**4**		2	
	22																8			**5**		3		
24																	8			**5**		3		
	26																8			**5**		3		
28																	8			**5**		3		
	30														10				**6**			3		
32															10				**6**			3		
	34														10				**6**			3		
36															10				**6**			3		
	38														10			**7**				3		
40															10			**7**				3		
	42														10			**7**				3		
44														12				**7**				3		
	46													12			**8**					3		
48														12			**8**					3		
	50													12			**8**					3		
52														12			**8**					3		
	55												14			**9**						3		
60													14			**9**						3		
	65											16			**10**						4			
70												16			**10**						4			
	75											16			**10**						4			
80												16			**10**						4			
	85										18			**12**							4			
90											18			**12**							4			
	95										18			**12**							4			
100										20				**12**							4			
		105								20				**12**							4			
	110									20				**12**							4			
		115							22				**14**						6					
120									22				**14**						6					