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OBJECTIVE OF STANDARDIZATION

The objective of documents is to specify clear and unambiguous provisions in order to help international trade and communication.

To achieve this objective, documents shall:

- be complete within the limits specified by their scope;

NOTE 1 When a document provides requirements or recommendations, these are either written explicitly, or made by reference to other documents.

- be consistent, clear and accurate;
- be written using all available knowledge about the state of the art;
- take into account the current market conditions;
- **provide a framework for future technological development;**
- **be comprehensible to qualified people who have not participated in their preparation;** and
- conform to the ISO/IEC Directives, Part 2.

SOURCE: Clause 4 of the ISO/IEC Directives, Part 2, 2018

What is the framework provided by ISO?

ISO provide a framework for future technological development

EXAMPLE: ISO 68-1 ISO general purpose screw threads — Basic profile —

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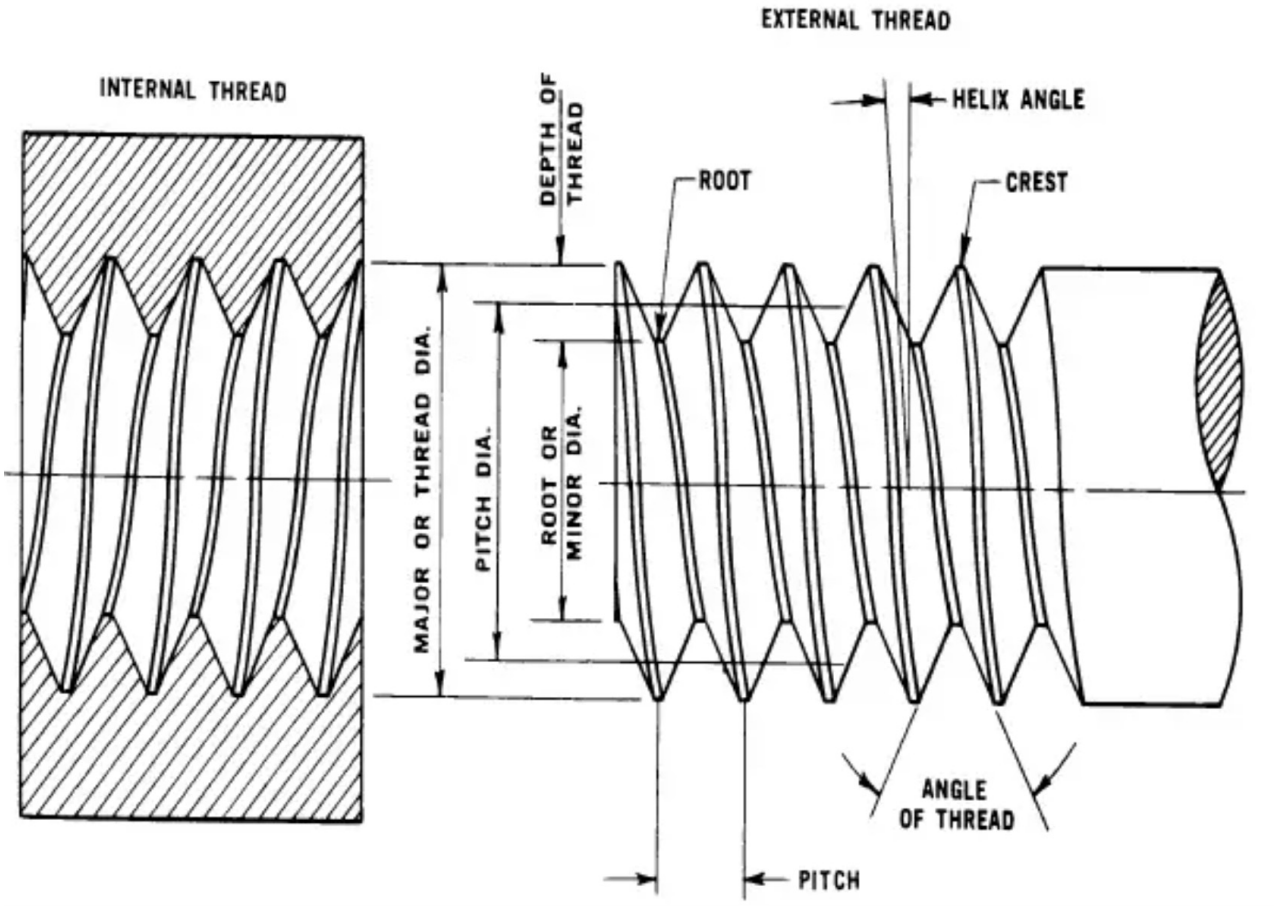
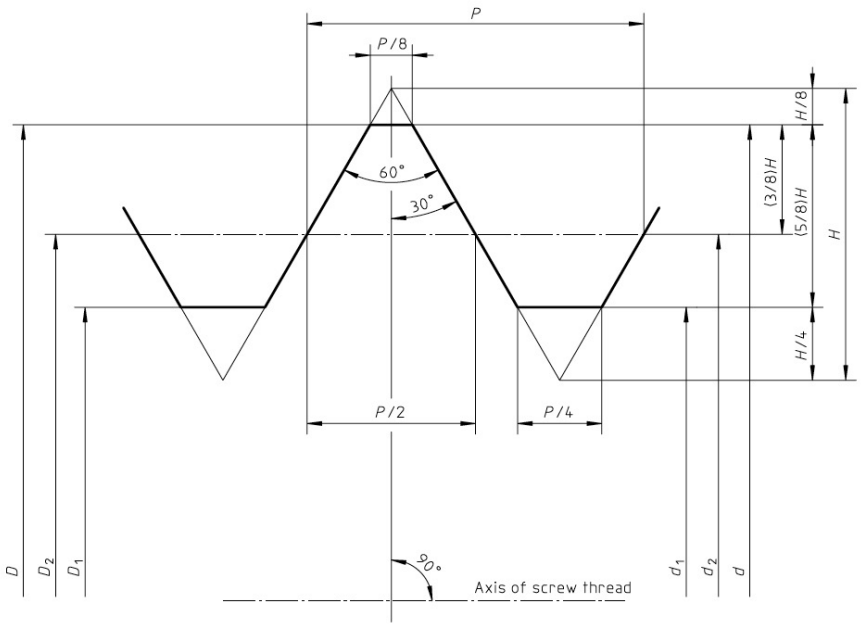


ISO is **not a collection of drawings** of this kind, but it does provide a framework for creating screw threads.

ISO 68-1 ISO general purpose screw threads — Basic profile —

ISO 68-1:1998(E)



where

D is the basic major diameter of internal thread (nominal diameter)

d is the basic major diameter of external thread (nominal diameter)

D_2 is the basic pitch diameter of internal thread

d_2 is the basic pitch diameter of external thread

D_1 is the basic minor diameter of internal thread

d_1 is the basic minor diameter of external thread

H is the height of fundamental triangle

P is the pitch

Figure 1

4 Dimensions

The fundamental deviations and tolerances specified in ISO 965-1 are applied to the dimensions of the basic profile shown in figure 1 and derived from table 1.

$$H = \frac{\sqrt{3}}{2} P = 0{,}866\,025\,404\ P$$

$$\frac{5}{8} H = 0{,}541\,265\,877\ P$$

$$\frac{3}{8} H = 0{,}324\,759\,526\ P$$

$$\frac{H}{4} = 0{,}216\,506\,351 P$$

$$\frac{H}{8} = 0{,}108\,253\,175\ P$$

Dimensions in millimetres

Pitch P	H	$\frac{5}{8} H$	$\frac{3}{8} H$	$\frac{H}{4}$	$\frac{H}{8}$
0,2	0,173 205	0,108 253	0,064 952	0,043 301	0,021 651
0,25	0,216 506	0,135 316	0,081 190	0,054 127	0,027 063
0,3	0,259 808	0,162 380	0,097 428	0,064 952	0,032 476
0,35	0,303 109	0,189 443	0,113 666	0,075 777	0,037 889
0,4	0,346 410	0,216 506	0,129 904	0,086 603	0,043 301
0,45	0,389 711	0,243 570	0,146 142	0,097 428	0,048 714
0,5	0,433 013	0,270 633	0,162 380	0,108 253	0,054 127
0,6	0,519 615	0,324 760	0,194 856	0,129 904	0,064 952
0,7	0,606 218	0,378 886	0,227 332	0,151 554	0,075 777
0,75	0,649 519	0,405 949	0,243 570	0,162 380	0,081 190
0,8	0,692 820	0,433 013	0,259 808	0,173 205	0,086 603
1	0,866 025	0,541 266	0,324 760	0,216 506	0,108 253