

इंटरनेट

मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

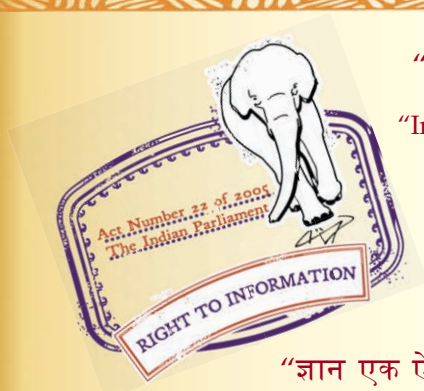
“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

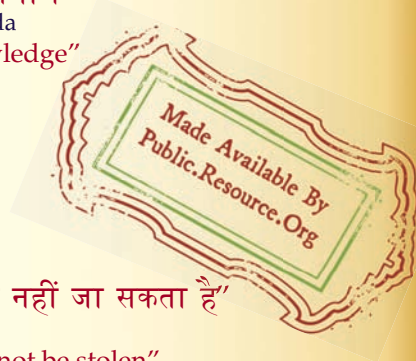
IS 10715-3 (1999): Technical Drawings - Screw Threads and Threaded Parts, Part 3: Simplified Representation [PGD 24: Drawings]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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IS 10715 (Part 3) : 1999
ISO 6410-3 : 1993
(Reaffirmed 2004)

भारतीय मानक

तकनीकी ड्राइंग — पेंच चूड़ियाँ और चूड़ीदार हिस्से

भाग 3 सरलीकृत निरूपण

Indian Standard

TECHNICAL DRAWINGS — SCREW THREADS AND
THREADED PARTS

PART 3 SIMPLIFIED REPRESENTATION

ICS 01.100.20; 21.040.01

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BUREAU OF INDIAN STANDARDS
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NEW DELHI 110002

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NATIONAL FOREWORD

This Indian Standard (Part 3), which is identical with ISO 6410-3 : 1993 'Technical drawings — Screw threads and threaded parts — Part 3 : Simplified representation' issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on the recommendation of Drawings Sectional Committee and approval of Light Mechanical Engineering Division Council.

This standard was originally published in 1983 by adopting ISO 6410 : 1981 'Technical drawings — Conventional representation of threaded parts'. ISO 6410 has since been revised in 1993 by splitting it into the following three parts, under the general title 'Technical drawings — Screw threads and threaded parts'.

Part 1 General conventions

Part 2 Screw thread inserts

Part 3 Simplified representation

In view of the above, the committee responsible for the formulation of this standard has also decided to revise IS 10715 : 1983 splitting into three parts by adopting the above three parts of ISO 6410 respectively.

This standard (Part 3) establishes rules for simplified representation of threaded parts with the exception of screw thread inserts. Other parts of this series are given as follows:

IS 10715 (Part 1) : 1999 Technical drawings — Screw threads and threaded parts : Part 1
General conventions (*first revision*)

IS 10715 (Part 2) : 1999 Technical drawings — Screw threads and threaded parts : Part 2
Screw thread inserts

The text of ISO has been approved as suitable for publication as Indian Standard without deviations. Certain conventions are, however, not identical to those used in the Indian Standards. Attention is especially drawn to the following:

- a) Wherever the words, 'International Standard' appear, referring to this standard, they should be read as 'Indian Standard'.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a full point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards which are to be substituted in their place are listed below along with their degree of equivalence for the editions indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 225 : 1983	IS 8536 : 1987 Fasteners — Bolts, screws studs and nuts — Symbols and designation of dimensions	Identical
ISO 6410-1 : 1993	IS 10715 (Part 1) : 1999 Technical drawings — Screw threads and threaded parts : Part 1 General conventions (<i>first revision</i>)	do

Indian Standard

TECHNICAL DRAWINGS — SCREW THREADS AND THREADED PARTS

PART 3 SIMPLIFIED REPRESENTATION

1 Scope

This part of ISO 6410 establishes rules for the simplified representation of threaded parts, with the exception of screw thread inserts, which are covered in ISO 6410-2. This representation is applicable when it is not necessary to show the exact shape and details of the parts (see ISO 6410-1), for example in assembly drawings.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 6410. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 6410 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 225:1983, *Fasteners — Bolts, screws, studs and nuts — Symbols and designations of dimensions*.

ISO 6410-1:1993, *Technical drawings — Screw threads and threaded parts — Part 1: General conventions*.

3 Simplified representation

3.1 General

In simplified representation only essential features shall be shown. The degree of simplification depends on the kind of object represented, the scale of the drawing and the purpose of the documentation.

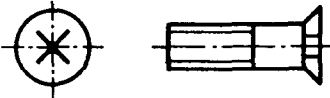
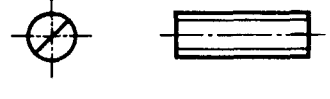
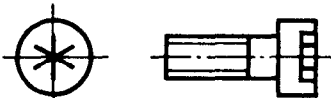
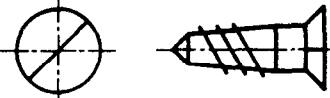
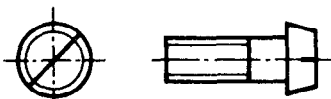
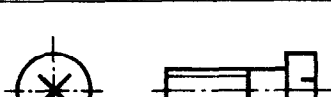
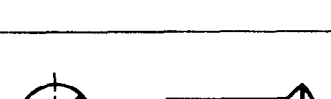
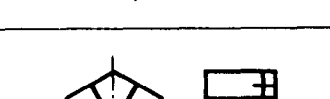
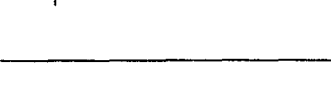
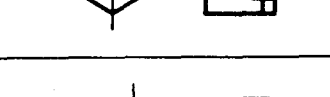
Therefore, the following features shall not be drawn in simplified representations of threaded parts:

- edges of chamfers of nuts and heads;
- thread run-outs;
- the shape of ends of screws;
- undercuts.

3.2 Screws and nuts

When it is essential to show the shapes of screw heads, drive patterns or nuts, the examples of simplified representations shown in table 1 shall be used. Combinations of features, not shown in table 1, may also be used. A simplified representation of the opposite (threaded) end view is not necessary.

Table 1

No.	Designation	Simplified representation	No.	Designation	Simplified representation
1	Hexagon head screw		9	Countersunk screw, cross slot	
2	Square head screw		10	Set screw, slot	
3	Hexagon socket screw		11	Wood and self-tapping screw, slot	
4	Cylinder screw (pan-head type), slot		12	Wing screw	
5	Cylinder screw, cross slot		13	Hexagon nut	
6	Oval countersunk screw, slot		14	Crown nut	
7	Oval countersunk screw, cross slot		15	Square nut	
8	Countersunk screw, slot		16	Wing nut	

3.3 Small diameter threads

It is permissible to simplify the representation and/or the indication of dimensions if

- the diameter (on the drawing) is ≤ 6 mm or
- there is a regular pattern of holes or threads of the same type and size.

The designation shall include all necessary features normally shown in a conventional representation and/or dimensioning (see ISO 6410-1:1992, 4.3).

The designation shall appear on a leader line which points to the centre-line of the hole and terminates in an arrowhead (see figures 1 to 4).

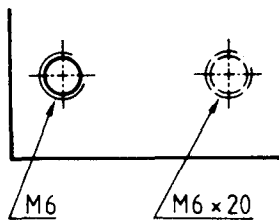


Figure 1

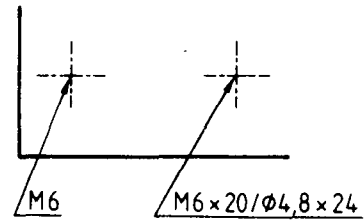


Figure 3

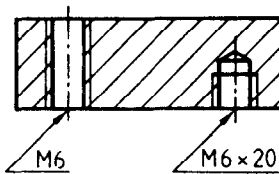


Figure 2

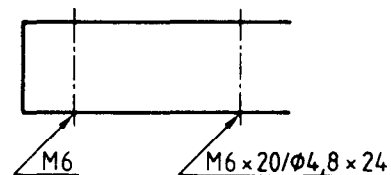


Figure 4

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Review of Indian Standards

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of 'BIS Handbook' and 'Standards : Monthly Additions'.

This Indian Standard has been developed from Doc : No. LM 02 (0477).

Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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