



SLOVENSKI STANDARD
SIST EN ISO 6411:2001

01-julij-2001

Tehniške risbe - Poenostavljeno prikazovanje centrirnih izvrtin (ISO 6411:1982)

Technical drawings - Simplified representation of centre holes (ISO 6411:1982)

Technische Zeichnungen - Vereinfachte Darstellung von Zentrierbohrungen (ISO 6411:1982)

Dessins techniques - Représentation simplifiée des trous de centre (ISO 6411:1982)

STANDARD PREVIEW
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Ta slovenski standard je istoveten z: EN ISO 6411:1997

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ICS:

01.100.20	Konstruktivske risbe	Mechanical engineering drawings
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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 6411

October 1997

ICS 01.100.20

Descriptors: See ISO document

English version

Technical drawings - Simplified representation of centre holes
(ISO 6411:1982)

Dessins techniques - Représentation simplifiée des trous
de centre (ISO 6411:1982)

Technische Zeichnungen - Vereinfachte Darstellung von
Zentrierbohrungen (ISO 6411:1982)

This European Standard was approved by CEN on 12 September 1997.

CEN members are bound to comply with the CEN/GENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

Page 2
EN ISO 6411:1997

Foreword

The text of the International Standard from Technical Committee ISO/TC 10 "Technical drawings, product definition and related documentation" of the International Organization for Standardization (ISO) has been taken over as an European Standard by CEN/CS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 1998, and conflicting national standards shall be withdrawn at the latest by April 1998.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 6411:1982 has been approved by CEN as a European Standard without any modification.

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International Standard



6411

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Technical drawings — Simplified representation of centre holes

Dessins techniques — Représentation simplifiée des trous de centre

First edition — 1982-04-15

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UDC 744.4

Ref. No. ISO 6411-1982 (E)

Descriptors : engineering drawings, centre holes, graphic methods, generalities, designation.

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 6411 was developed by Technical Committee ISO/TC 10, *Technical drawings*, and was circulated to the member bodies in January 1980.

It has been approved by the member bodies of the following countries :

Australia	France	Poland
Austria	Germany, F. R.	Romania
Belgium	India	South Africa, Rep. of
Brazil	Italy	Spain
Canada	Japan	Sweden
China	Korea, Dem. P. Rep. of	Switzerland
Czechoslovakia	Korea, Rep. of	United Kingdom
Denmark	Mexico	USA
Finland	Norway	USSR

The member body of the following country expressed disapproval of the document on technical grounds :

Netherlands

Technical drawings — Simplified representation of centre holes

iTeh STANDARD PREVIEW (standards.iteh.ai)

1 Scope and field of application

This International Standard specifies the simplified representation of centre holes and their designation. Simplified representation of centre holes may be used particularly when it is not necessary to show the exact form and size and where the designation of standardized centre holes is sufficient for information.

ISO 3098/1, *Technical drawings — Lettering — Part 1: Currently used characters.*

ISO 6428, *Technical drawings — Requirements for micro-copying.*¹⁾

2 References

ISO 128, *Technical drawings — General principles of presentation.*

ISO 866, *Centre drills for centre holes without protecting chamfers — Type A.*

ISO 2540, *Centre drills for centre holes with protecting chamfers — Type B.*

ISO 2541, *Centre drills for centre holes with radius form — Type R.*

3 Indication on drawings

3.1 Requirements

Generally, three different requirements may be defined on technical drawings for the form and size of centre holes, namely :

- a) centre hole is required on the finished part;
- b) centre hole can be accepted on the finished part, but is not a fundamental requirement;
- c) centre hole shall not exist on the finished part.

¹⁾ At present at the stage of draft.

ISO 6411-1982 (E)

3.2 Simplified representation

The symbols representing centre holes and their application to the end face of a shaft are shown in column 2 of table 1.

3.3 Designation of centre holes

The designation of centre holes is dependent on the drill and may be indicated with reference either to an International Standard or to any other standard dealing with this subject.

The designation of the centre hole itself consists of

- a reference to this International Standard;
- the letter for the type (R, A or B);
- the pilot diameter d ;

- the outside countersink centre hole diameter D .

The two values are separated by a solidus.

Example : a centre hole¹⁾, type B with $d = 2,5$ mm and $D_3 = 8$ mm may be indicated on the drawing as :

ISO 6411-B 2,5/8


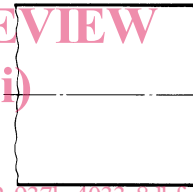
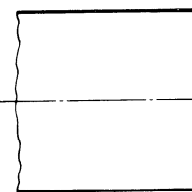
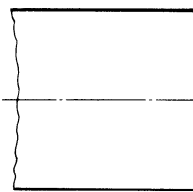
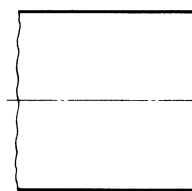
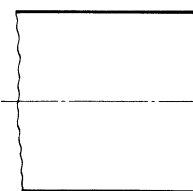
4 Interpretation of indication

The relationship between the various designations used to specify the centre holes, the dimensions represented by the given designations, and dimensions depending on the centre drill used are shown in table 2.

Further details specifying the dimensions of the centre hole, to be indicated preferably on the drawings, are given in annex A.

Table 1 — Representation and designation of centre holes on drawings

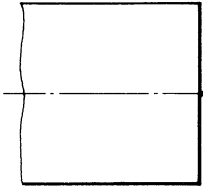
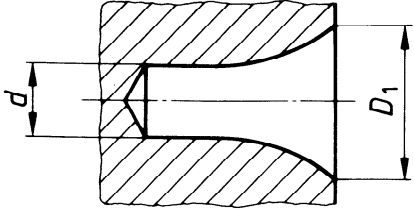
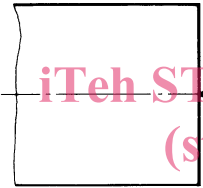
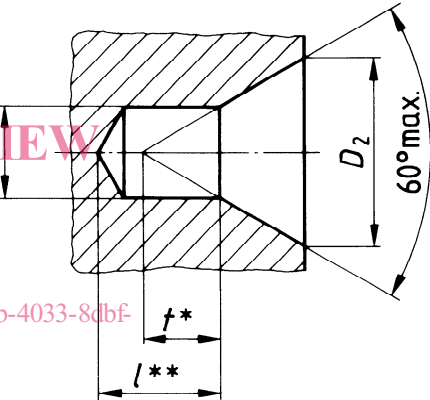
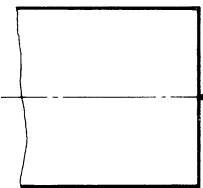
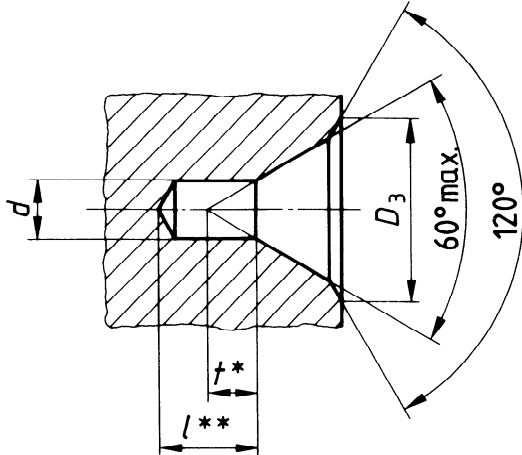
Dimensions in millimetres

Requirement	Representation	Designation
Centre hole is required on the finished part		 ISO 6411 - B 2,5/8
Centre hole may remain on the finished part		 ISO 6411 - B 2,5/8
Centre hole shall not exist on the finished part		 ISO 6411 - B 2,5/8

1) For the machining of such a centre hole, a drill with $d = 2,5$ and $d_1 = 10$ according to ISO 2540 is used.

Table 2 – Interpretation of the designation

Dimensions in millimetres

Type of centre hole	Designation (examples)	Interpretation of the designation
<p>R with radius form</p> <p>(centre drill according to ISO 2541)</p>	 <p>ISO 6411 - R 3,15/6,7</p>	 <p>$d = 3,15$ $D_1 = 6,7$</p>
<p>A without protecting chamfer</p> <p>(centre drill according to ISO 866)</p>	 <p>ISO 6411 - A 4/8,5</p> <p>https://standards.iteh.ai/catalog/standards/sist/2ba2f0a2-937b-4033-8dbf-d4782281e2ec/sist-en-iso-6411-2001</p>	 <p>$d = 4$ $D_2 = 8,5$</p>
<p>B with protecting chamfer</p> <p>(centre drill according to ISO 2540)</p>	 <p>ISO 6411 - B 2,5/8</p>	 <p>$d = 2,5$ $D_3 = 8$</p>

* For dimension t , see annex A.** Dimension l depends on the length of the centre drill. It should not be less than t .