

**Tehnilised joonised. Torustike lihtsustatud
kujutamine. Osa 2: Isomeetriline projektsioon**

Technical drawings - Simplified representation of
pipelines - Part 2: Isometric projection

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 6412-2:1999 sisaldab Euroopa standardi EN ISO 6412-2:1994 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 12.12.1999 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 6412-2:1999 consists of the English text of the European standard EN ISO 6412-2:1994.

This standard is ratified with the order of Estonian Centre for Standardisation dated 12.12.1999 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

ICS 01.100.99, 23.040.01

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EUROPEAN STANDARD

EN ISO 6412-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 1994

ICS 01.100.20; 23.040.90

Descriptors: pipelines, drawings, technical drawings

English version

**Technical drawings - Simplified representation of
pipelines - Part 2: Isometric projection
(ISO 6412-2:1989)**

Dessin techniques - Représentation simplifiée
des tuyaux et lignes de tuyauteries - Partie 2:
Projection isométrique (ISO 6412-2:1989)

Technische Zeichnungen - Vereinfachte
Darstellung von Rohrleitungen - Teil 2:
Isometrische Darstellung (ISO 6412-2:1989)

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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

Foreword

This European Standard was taken over by CEN from the work of ISO/TC 10 "Technical drawings, product definition and related documentation" of the international Standards Organization (ISO).

The Technical Board had decided to submit the final draft for Formal Vote. The result was positive.

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of an identical text or by endorsement, at the latest by April 1995, and conflicting national standards shall be withdrawn at the latest by April 1995.

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

Endorsement notice

The text of the International Standard ISO 6412-2:1989 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in annex ZA (normative).

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Annex ZA (normative)
Normative references to international publications
with their relevant European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN</u>	<u>Year</u>
ISO 6412-1	1989	Technical drawings - Simplified representation of pipelines - Part 1: General rules and orthogonal representation	EN ISO 6412-1	1994

INTERNATIONAL STANDARD

ISO
6412-2

First edition
1989-10-15

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Technical drawings — Simplified representation of pipelines —

Part 2 : Isometric projection

*Dessins techniques — Représentation simplifiée des tuyaux et lignes du tuyautes —
Partie 2 : Projection isométrique*



Reference number
ISO 6412-2 : 1989 (E)

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.

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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 6412-2 was prepared by Technical Committee ISO/TC 10, *Technical drawings*.

ISO 6412 consists of the following parts, under the general title *Technical drawings — Simplified representation of pipelines*:

- *Part 1: General rules and orthogonal representation*
- *Part 2: Isometric projection*

Annex A of this part of ISO 6412 is for information only.

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Introduction

For drawings for tender, manufacturing drawings and erection drawings in pipeline construction as well as in machine construction and the construction industry, isometric projection has been introduced to a great extent, since the drawing work can be cut down and the presentation made clearer.

For the purposes of this part of ISO 6412, all dimensions and tolerances on the drawings have been stencilled in upright lettering. It should be understood that these indications could just as well be written in free-hand or inclined (italic) lettering without altering the meaning of the indications.

For the presentation of lettering (proportions and dimensions), see ISO 6412-1.

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Technical drawings — Simplified representation of pipelines

Part 2 : Isometric projection

1 Scope

This part of ISO 6412 specifies supplementary rules, in addition to the general rules given in ISO 6412-1, applicable to isometric representation. Isometric representation shall be used where the essential features are to be shown clearly in three dimensions.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 6412. 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 6412 are encouraged to investigate the possibility of applying the most recent editions of the standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 128 : 1982, *Technical drawings — General principles of presentation*.

ISO 129 : 1985, *Technical drawings — Dimensioning — General principles, definitions, methods of execution and special indications*.

ISO 5261 : 1981, *Technical drawings for structural metal work*.

ISO 6412-1 : 1989, *Technical drawings — Simplified representation of pipelines — Part 1: General rules and orthogonal representation*.

3 Definitions

For the purposes of this part of ISO 6412, the definitions given in ISO 6412-1 apply.

4 Coordinates

As far as it is necessary to use Cartesian coordinates, for instance for calculations or numerical control of machine tools, the coordinate axes shall comply with figure 1.

In all cases, the coordinates of individual pipes or pipe assemblies should comply with those adopted for the complete installation and shall be indicated on the drawing or in an associated document.

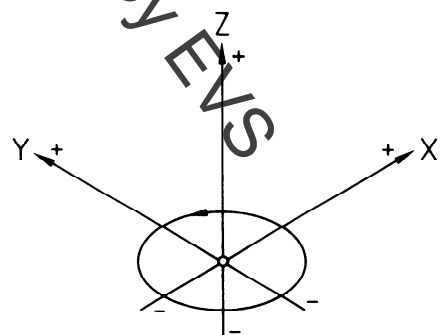


Figure 1

5 Line conventions

See ISO 6412-1.