BS EN ISO 6412-3:1996 BS 308-4.8: 1996

# Technical drawings — Simplified representation of pipelines —

Part 3: Terminal features of ventilation and drainage systems

The European Standard EN ISO 6412-3:1996 has the status of a British Standard

ICS 01.100.20: 23.040.90



# Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee TDE/4, Engineering drawing practice, upon which the following bodies were represented:

Atomic Weapons Establishment

British Gas plc

British Standards Society

Drawing Office Material Manufacturers' and Dealers' Association

**Electricity Association** 

Gauge and Tools Makers' Association

**HEVAC** Association

Institution of Chemical Engineers

Institution of Engineering Designers

Power Generation Contractors' Association

Society of British Aerospace Companies Ltd.

University of Warwick

This British Standard, having been prepared under the direction of the Engineering Sector Board, was published under the authority of the Standards Board and comes into effect on 15 August 1996

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The following BSI references relate to the work on this standard:
Committee reference TDE/4
Draft announced in *BSI News*August 1996

ISBN 0 580 26187 5

#### Amendments issued since publication

Amd. No.	Date	Comments

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#### National foreword

This British Standard has been prepared by Technical Committee TDE/4 and is the English language version of EN ISO 6412-3:1996 Technical drawings — Simplified representation of pipelines — Part 3: Terminal features of ventilation and drainage systems, published by the European Committee for Standardization (CEN). It is identical with ISO 6412-3:1993 published by the International Organization for Standardization (ISO).

#### **Cross-references**

Publication referred to

Corresponding British Standard

EN ISO 6412-1:1994 (ISO 6412-1:1989)

BS EN ISO 6412 Technical drawings. Simplified

representation of pipelines

BS EN ISO 6412-1:1995 General rules and orthogonal

representation

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#### Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 8, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 6412-3

**April** 1996

ICS 01.100.20; 23.040.90

Descriptors: Drawings, technical drawings, graphic methods, pipelines, accessories, graphic symbols

English version

# Technical drawings — Simplified representation of pipelines — Part 3: Terminal features of ventilation and drainage systems

(ISO 6412-3:1993)

Dessins techniques — Représentation simplifiée de tuyaux et linges de tuyauteries — Partie 3: Accessoires pour les systèmes de ventilation et de drainage (ISO 6412-3:1993) Technische Zeichnungen — Vereinfachte Darstellung von Rohrleitungen — Teil 3: Zubehörteile für Lüftungs- und Entwässerungsanlagen (ISO 6412-3:1993)

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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.

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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

#### **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 a European Standard by the Technical Board of CEN.

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 October 1996, and conflicting national standards shall be withdrawn at the latest by October 1996.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of 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 and the United Kingdom.

 ${f NOTE}$  Normative references to International Standards are listed in annex ZA (normative).

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#### Introduction

The principle of drawing practice is to depict an object to scale using lines. In simplified representations only essential features are shown, preferably in outline form (in order to save time and effort). The degree of simplification depends on the type of object represented, the scale of the drawing and the purpose of the documentation.

#### 1 Scope

This part of ISO 6412 specifies simplified representations used in technical drawings for terminal features of ventilation and drains in pipeline systems.

#### 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 indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 5456-2:—<sup>1)</sup>, Technical drawings — Projection methods — Part 2: Orthographic representations.
ISO 6412-1:1989, Technical drawings — Simplified representation of pipelines — Part 1: General rules and orthogonal representation.

#### 3 Design and representation

The simplified representations shown in clause 4 may be combined with graphical symbols, e.g. for actuators or pipes. General principles and additional graphical symbols are given in ISO 6412-1.

#### 4 Simplified representation

See Table 1.

The terminal features listed under numbers 1 to 9 are each shown in two orthographic projection views [1.1, 2.1, 3.1 etc. are views from the front and 1.2, 2.2, 3.2 etc. are views from above (see ISO 5456-2)].

The terminal feature listed under number 10 applies to directional vanes in ducts. That in 10.1. shows a bent duct with two vanes and those in 10.2 show T-junction ducts with single vanes in opposing directions.

<sup>1)</sup> To be published.

Table 1

No.	Description	Simplified representation
1	Scupper	
1.1		Ĭ
1.2		Ф
2	Scupper with closing device	
		_
2.1		ļ Ÿ
		1
2.2		$\oplus$
3	Scupper with smell seal and closing device	-
		_
3.1		<del>-</del>
		i
3.2		<b>①</b>
4	Air pipe (Goose neck)	
4.1		
4.2		_
5	Wall ventilator cowl	
9	wan ventuator cowi	
5.1		
9.1		
		_
5.2		
6	Mushroom ventilator	_
	NOTE Where applicable with indication "with screen".	
6.1		
		1
6.2		
3.2		

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Table 1

Table 1						
No.	Description	Simplified representation				
7	Mushroom ventilator with closing device					
	NOTE Where applicable with indication "with screen".					
7.1		<del></del>				
7.1		<b>,</b> , ,				
		'				
7.2		(≒(				
8	Fixed ventilator cowl					
8.1						
0.1						
		1				
8.2		$ \times $				
9	Turnable ventilator cowl					
9	Turnable ventilator cowi					
9.1	Outlet or exhaust					
		·				
9.2	Inlet or supply					
10	Directional vane within a flow line (pipe or duct)					
	NOTE An oblique stroke indicates where the vane is located and short					
	(parallel) lines drawn at right angles to the oblique stroke indicate the number of vanes.					
10.1		×				
10.1		^				
10.2		$  \times   \times  $				

# Annex A (informative) Bibliography

 $[1] \ ISO\ 128:1982, \ Technical\ drawings-General\ principles\ of\ presentation.$ 

#### 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.

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

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## List of references

See national foreword.

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