# INTERNATIONAL STANDARD

**ISO 6412-3**

First edition
1993-01-15



# Technical drawings — Simplified representation of pipelines —

## Part 3:
## Terminal features of ventilation and drainage systems

*Dessins techniques — Représentation simplifiée des tuyaux et lignes de tuyauteries —*

*Partie 3: Accessoires pour les systèmes de ventilation et de drainage*

Reference number
ISO 6412-3:1993(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 voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 6412-3 was prepared by Technical Committee ISO/TC 10, *Technical drawings, product definition and related documentation*, Sub-Committee SC 6, *Mechanical engineering documentation*.

It replaces in part ISO Recommendation R 644:1967, which is currently under revision as ISO 538.

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*

— *Part 3: Terminal features of ventilation and drainage systems*

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





International Organization for Standardization
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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.

# Technical drawings — Simplified representation of pipelines —

# Part 3:
Terminal features of ventilation and drainage systems



## 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:—[1] *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

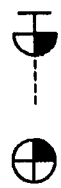
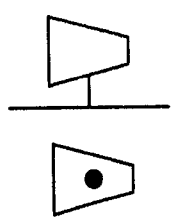
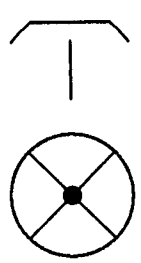
See table 1.

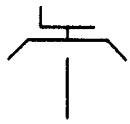
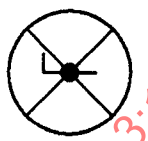
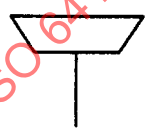
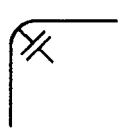
The terminal features listed under numbers 1 to 9 are each shown in two orthographic projection views [1.1, 2.1, 3.1 etc. are views from the front and 1.2, 2.2, 3.2 etc. are views from above (see ISO 5456-2)].

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.

1) To be published.

Table 1

| No. | Description | Simplified representation |
|---|---|---|
| 1<br>1.1<br>1.2 | Scupper |  |
| 2<br>2.1<br>2.2 | Scupper with closing device |  |
| 3<br>3.1<br>3.2 | Scupper with smell seal and closing device |  |
| 4<br>4.1<br>4.2 | Air pipe (Goose neck) |  |
| 5<br>5.1<br>5.2 | Wall ventilator cowl |  |
| 6<br>6.1<br>6.2 | Mushroom ventilator<br>NOTE — Where applicable with indication "with screen". |  |

| No. | Description | Simplified representation |
|---|---|---|
| 7 | Mushroom ventilator with closing device<br><br>NOTE — Where applicable with indication "with screen". | |
| 7.1 | |  |
| 7.2 | |  |
| 8 | Fixed ventilator cowl | |
| 8.1 | |  |
| 8.2 | |  |
| 9 | Turnable ventilator cowl | |
| 9.1 | Outlet or exhaust |  |
| 9.2 | Inlet or supply |  |
| 10 | Directional vane within a flow line (pipe or duct)<br><br>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 | |  |
| 10.2 | |  |

## Annex A
(informative)

## Bibliography

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

[2] ISO 5455:1979, *Technical drawings — Scales.*