

Institut luxembourgeois de la normalisation de l'accréditation, de la sécurité et qualité des produits et services

**ILNAS-EN ISO 10628:2000** 

Flow diagrams for process plants - General rules (ISO 10628:1997)

Fließschemata für verfahrenstechnische Anlagen - Allgemeine Regeln (ISO 10628:1997)

Schémas de procédé pour les unités de fabrication/de production - Règles générales (ISO 10628:1997)

01011010010 0011010010110100101010101111

## **National Foreword**

This European Standard EN ISO 10628:2000 was adopted as Luxembourgish Standard ILNAS-EN ISO 10628:2000.

Every interested party, which is member of an organization based in Luxembourg, can participate for FREE in the development of Luxembourgish (ILNAS), European (CEN, CENELEC) and International (ISO, IEC) standards:

- Participate in the design of standards
- Foresee future developments
- Participate in technical committee meetings

https://portail-qualite.public.lu/fr/normes-normalisation/participer-normalisation.html

# THIS PUBLICATION IS COPYRIGHT PROTECTED

Nothing from this publication may be reproduced or utilized in any form or by any mean - electronic, mechanical, photocopying or any other data carries without prior permission!

# EUROPEAN STANDARD LINAS-EN ISO 10628:20 EN ISO 10628

# NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

December 2000

ICS 01.080.30

# English version

# Flow diagrams for process plants - General rules (ISO 10628:1997)

Schémas de procédé pour les unités de fabrication/de production - Règles générales (ISO 10628:1997)

Fließschemata für verfahrenstechnische Anlagen -Allgemeine Regeln (ISO 10628:1997)

This European Standard was approved by CEN on 16 November 2000.

CEN members are bound to comply with the CEN/CENELEC 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 Management Centre 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 Management Centre 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.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Page 2

EN ISO 10628:2000

# **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 CMC.

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 Juni 2001, and conflicting national standards shall be withdrawn at the latest by Juni 2001.

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 10628:2000 has been approved by CEN as a European Standard without any modification.

Annexes A to D of this international Standard are informative only.

# ILNAS-EN ISO 10628:2000 - Preview only Copy via ILNAS e-Shop

# INTERNATIONAL STANDARD

ISO 10628

> First edition 1997-04-15

# Flow diagrams for process plants — General rules

Schémas de procédé pour les unités de fabrication/de production — Règles générales



Contents		Page
1	Scope	1
2	Normative references	1
3	Definitions	2
4	Classification, information content and presentation of flow diagrams	2
5	Draughting rules	6
Anı	nexes	
Α	Equivalent terms in other languages	9
В	Examples of flow diagrams for process plants	10
С	Selection of graphical symbols	17
D	Code letters	58

## © ISO 1997

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet central@iso.ch
X.400 c=ch; a=400net; p=iso; o=isocs; s=central

Printed in Switzerland

# **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 10628 was prepared by Technical Committee ISO/TC 10, Technical drawings, product definition and related documentation.

Annexes A to D of this International Standard are for information only.

# Introduction

The purpose of this International Standard is to provide guidelines for the development of flow diagrams for process plants. Flow diagrams for process plants are used principally in the chemical, petrochemical, petroleum, pharmaceutical, food and beverages, and environmental industries.

They can also be used in other industries, for example the mining and metallurgical industries, where they are used to describe production processes and auxiliary systems.

Depending on the amount of information to be furnished a distinction should be made between a block diagram, a process flow diagram and a piping and instrument diagram (P & ID).

Standardization of diagrams will simplify the preparation and understanding of such diagrams by specialists.

# Flow diagrams for process plants — General rules

# 1 Scope

This International Standard establishes general rules for the preparation of flow diagrams for process plants. These diagrams represent the configuration and function of process plants and form integral parts of the complete technical documentation necessary for planning, mechanical engineering, erecting, managing, commissioning, operating, maintaining and decommissioning of a plant.

Flow diagrams help to simplify the exchange of information between the parties involved in the development, mechanical engineering, erection, operation and maintenance of such process plants.

This International Standard does not apply to electrotechnical diagrams.

# 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard 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 128:1982, Technical drawings — General principles of presentation.

ISO 1000:1992, SI units and recommendations for the use of their multiples and of certain other units.

ISO 3098-1:1974, Technical drawings — Lettering — Part 1: Currently used characters.

ISO 3461-2:1987, General principles for the creation of graphical symbols — Part 2: Graphical symbols for use in technical product documentation.

ISO 3511-1:1977, Process measurement control functions and instrumentation — Symbolic representation — Part 1: Basic requirements.

ISO 3511-2:1984, Process measurement control functions and instrumentation — Symbolic representation — Part 2: Extension of basic requirements.

ISO 3511-4:1985, Industrial process measurement control functions and instrumentation — Symbolic representation — Part 4: Basic symbols for process computer, interface, and shared display/control functions.

ISO 4196:1984, Graphical symbols — Use of arrows.