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DIN EN ISO 10628:2001-03

Diagrams for the chemical and petrochemical industry – Part 2: Graphical symbols (ISO 10628-2:2012); English version EN ISO 10628-2:2012, English translation of DIN EN ISO 10628-2:2013-04

Schemata für die chemische und petrochemische Industrie –
Teil 2: Graphische Symbole (ISO 10628-2:2012);
Englische Fassung EN ISO 10628-2:2012,
Englische Übersetzung von DIN EN ISO 10628-2:2013-04

Schémas de procédé pour l'industrie chimique et pétrochimique –
Partie 2: Symboles graphiques (ISO 10628-2:2012);
Version anglaise EN ISO 10628-2:2012,
Traduction anglaise de DIN EN ISO 10628-2:2013-04

Document comprises 56 pages

Translation by DIN-Sprachendienst.
In case of doubt, the German-language original shall be considered authoritative.

03.13 1999351

A comma is used as the decimal marker.

National foreword

This document (EN ISO 10628-2:2012) has been prepared by Technical Committee ISO/TC 10/SC 10 “Process plant documentation” and has been taken over by Technical Committee CEN/SS F01 “Technical drawings” (Secretariat: CCMC).

The responsible German body involved in its preparation was the *Normenausschuss Chemischer Apparatebau* (Process Engineering Standards Committee), Working Committee NA 012-00-03 AA *Dokumentation für Prozessanlagen*.

For further graphical symbols of valves and pipes see DIN 28000-4.

For further graphical symbols of vessels and equipment see DIN 28000-5 (in preparation).

Amendments

This standard differs from DIN EN ISO 10628:2001-03 as follows:

a) the standard has been divided into two parts;

b) the informative Annex C (graphical symbols) has been transferred to the normative part;

c) the graphical symbols have been harmonized with ISO 14617;

d) the standard has been editorially revised.

Previous editions

DIN 28004-1: 1971-04, 1977-06, 1988-05
DIN 28004-2: 1971-04, 1977-06, 1988-05
DIN 28004-3: 1971-04, 1977-01, 1988-05
DIN EN ISO 10628: 2001-03

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 10628-2

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ICS 75.020; 01.080.30; 71.020

Supersedes EN ISO 10628:2000

English Version

Diagrams for the chemical and petrochemical industry - Part 2: Graphical symbols (ISO 10628-2:2012)

Schémas de procédé pour l'industrie chimique et pétrochimique - Partie 2: Symboles graphiques (ISO 10628-2:2012)

Schemata für die chemische und petrochemische Industrie - Teil 2: Graphische Symbole (ISO 10628-2:2012)

This European Standard was approved by CEN on 10 November 2012.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN ISO 10628-2:2012) has been prepared by Technical Committee ISO/TC 10 “Technical product documentation”.

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 June 2013, and conflicting national standards shall be withdrawn at the latest by June 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 10628:2000.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 10628-2:2012 has been approved by CEN as a EN ISO 10628-2:2012 without any modification.

1 Scope

This part of ISO 10628 defines graphical symbols for the preparation of diagrams for the chemical and petrochemical industry. It is a collective application standard of the ISO 14617 series.

This part of ISO 10628 does not apply to graphical symbols for electrotechnical diagrams; for these, see IEC 60617.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 10209, *Technical product documentation — Vocabulary — Terms relating to technical drawings, product definition and related documentation*

ISO 14617 (all parts), *Graphical symbols for diagrams*

ISO 15519-1, *Specification for diagrams for process industry — Part 1: General rules*

ISO 81714 (all parts), *Design of graphical symbols for use in the technical documentation of products*

IEC 81714 (all parts), *Design of graphical symbols for use in the technical documentation of products*

3 Terms and definitions

For the purposes of this document, the definitions given in the ISO 14617 series and ISO 10209 apply.

4 Structure of graphical symbols

The graphical symbols are grouped according to functional and/or design features. See Table 1.

Table 1 — Subject groups

Group number	Subject group
1	Vessels and tanks
2	Columns with internals
3	Heat exchangers
4	Steam generators, furnaces, recooling device
5	Cooling tower
6	Filters, liquid filters, gas filters
7	Screening devices, sieves and rakes
8	Separators
9	Centrifuges
10	Drier

Table 1 *(continued)*

Group number	Subject group
11	Crushing/Grinding machines
12	Mixers/Kneaders
13	Shaping machines – processing in vertical direction
14	Shaping machines – processing in horizontal direction
15	Liquid pumps
16	Compressors, vacuum pumps
17	Blowers, fans
18	Lifting, conveying and transport equipment
19	Proportioners, feeders and distribution facilities
20	Engines
21	Valves
22	Check valves
23	Valves and fittings with safety function
24	Fittings
25	Graphical symbols for piping
26	Apparatus elements
27	Internals
28	Agitators, stirrers
29	Internal characteristics and built-in-components

5 Graphical symbols

Graphical symbols for diagrams used in chemical and petrochemical industry are presented in Table 2, which is is divided into four columns, as follows:

1 Item no. — Consecutive numbering within each subject group according to Table 1

2 Reg. no. — Registration numbers structured as follows:

- nnn — Registration number for ISO 14617 graphical symbols.
- Cnnnn — Preliminary registration number for a new graphical symbol, which will be implemented in ISO 14617. The preliminary registration number will be replaced with the final ISO 14617 registration number at first periodical review of ISO 10628-2.
- X2nnn — Registration number for ISO 14617 symbol examples.
- X8nnn — Registration number for ISO 10628-2 symbol examples.

3 Graphical symbol — Graphical symbols shown with a 2,5 mm dotted grid behind. Preferred locations of connections at graphical symbols are indicated by "—". This is not a part of the graphical symbol.

4 Description — The preferred descriptors for the graphical symbol.

Rules for modification of proportions and orientation of graphical symbols are given in ISO 81714 and IEC 81714.

If a graphical symbol is not accessible in ISO 10628-2, then ISO 14617 should be consulted for the needed graphical symbol.