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# INTERNATIONAL STANDARD



# 561

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION · МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ · ORGANISATION INTERNATIONALE DE NORMALISATION

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## Coal preparation plant – Graphical symbols

*Appareils pour la préparation du charbon – Symboles graphiques*

First edition – 1974-10-01

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[ISO 561:1974](https://standards.iteh.ai/catalog/standards/sist/35f04b38-cc4c-4d8a-b9de-61027cf20c04/iso-561-1974)

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UDC 662.8.05 : 003.62

Ref. No. ISO 561-1974 (E)

**Descriptors** : coal, preparation, industrial plants, apparatus, symbols, graphic symbols, symbolic codes.

Price based on 10 pages

## FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

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.

Prior to 1972, the results of the work of the Technical Committees were published as ISO Recommendations; these documents are now in the process of being transformed into International Standards. As part of this process, Technical Committee ISO/TC 27 has reviewed ISO Recommendation R 561 and found it technically suitable for transformation. International Standard ISO 561 therefore replaces ISO Recommendation R 561-1967 to which it is technically identical.

<https://standards.iteh.ai/catalog/standards/sist/35f04b38-cc4c-4d8a-b9de-02972203-1a00>

ISO Recommendation R 561 was approved by the Member Bodies of the following countries :

Australia	France	Poland
Austria	Germany	Portugal
Belgium	Greece	Romania
Bulgaria	India	South Africa, Rep. of
Canada	Italy	Spain
Chile	Japan	Switzerland
Czechoslovakia	Netherlands	Turkey
Denmark	New Zealand	United Kingdom
Egypt, Arab Rep. of	Philippines	U.S.S.R.

No Member Body expressed disapproval of the Recommendation.

No Member Body disapproved the transformation of ISO/R 561 into an International Standard.

# Coal preparation plant – Graphical symbols

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### 1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies basic symbols for use in flowsheets (see note) and other diagrams relating to coal preparation plant.

It is expected that the general adoption of these standard symbols will greatly simplify the exchange of information between those concerned with the design, construction and operation of coal preparation plant.

NOTE – Reference may also be made to ISO/R 924, *Principles and conventions for flowsheets for coal preparation plant*.

### 2 PRINCIPLE

The symbols included in this International Standard have been selected in accordance with the following principles :

- a) the items of plant listed should be widely used for coal preparation purposes, and should be required to be identified on flowsheets;
- b) the symbols should be easy to draw and readily distinguishable one from another;

c) the symbols should preferably give some indication of the *principle* of the operation involved, but should not represent the *appearance* of any particular type of machine;

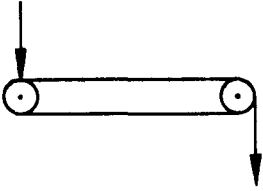
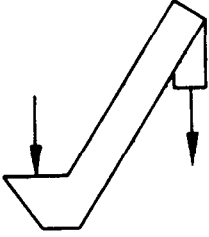




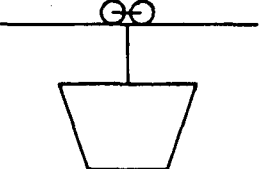
d) where a single symbol represents a group of items for which separate symbols are standardized nationally, the ISO symbol should be readily distinguishable from any one of the national symbols.

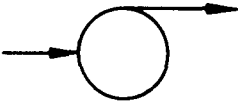

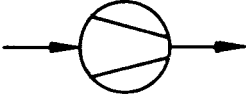
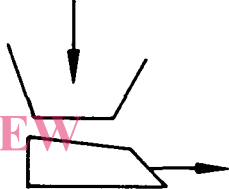
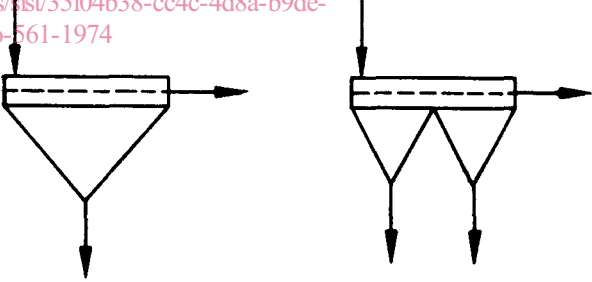
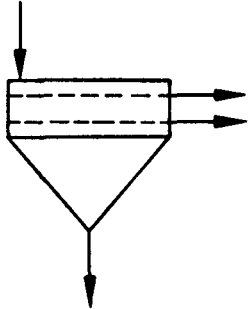
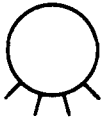
### 3 CONVENTIONS FOR DRAWING OF SYMBOLS

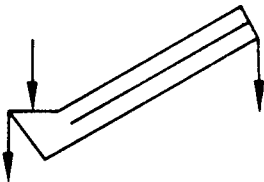
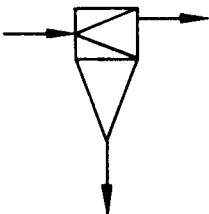
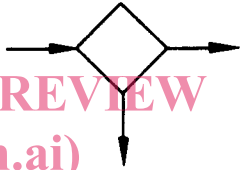
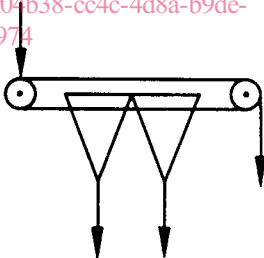
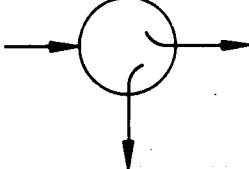
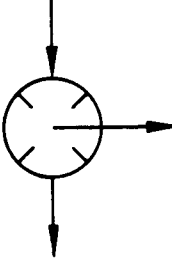
The following conventions shall be adopted for drawing the standard symbols :

- a) the plant symbols shall be shown by heavy lines and the product flow by light lines;
- b) in general, the flowlines shall enter the symbol from above or from the left and shall leave the symbol downwards or to the right;
- c) where more than one product may enter or leave an item of plant, the number of entry and exit arrows shall be varied accordingly.

4 SYMBOLS

No.	Item	Symbol
1	Conveyor	
2	Elevator	
3	Wagon	<p style="text-align: center; color: red; font-weight: bold;">iTeh STANDARD PREVIEW (standards.iteh.ai)</p>  <p style="text-align: center; color: red; font-size: small;">ISO 561:1974 <a href="https://standards.iteh.ai/catalog/standards/sist/35f04b38-cc4c-4d8a-b9de-61027cf20c04/iso-561-1974">https://standards.iteh.ai/catalog/standards/sist/35f04b38-cc4c-4d8a-b9de-61027cf20c04/iso-561-1974</a></p>
4	Tub	
5	Wagon tippler	
6	Tub tippler	
7	Aerial ropeway	

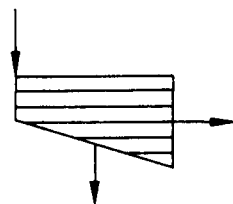
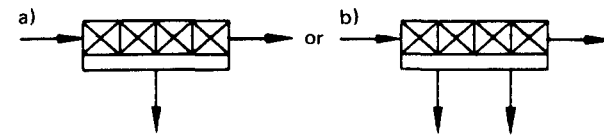
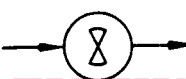
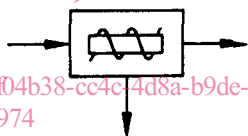
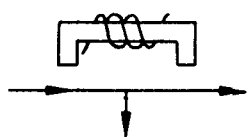
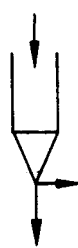
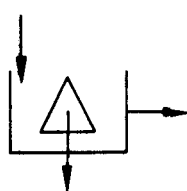
No.	Item	Symbol
8	Pump	
9	Fan	
10	Compressor	
11	Feeder	
12	Screen	<p data-bbox="421 1128 1136 1234"> <a href="https://standards.iteh.ai/catalog/standards/list/35f04b38-cc4c-4d8a-b9de-61027cf20c04/iso-561-1974">https://standards.iteh.ai/catalog/standards/list/35f04b38-cc4c-4d8a-b9de-61027cf20c04/iso-561-1974</a> </p> <p data-bbox="709 1128 997 1155">a) One under-product</p> <p data-bbox="1133 1128 1364 1155">b) Two under-products</p> 
13	Screen (double deck)	
14	Water spray	

No.	Item	Symbol
15	Mechanical classifier	
16	Cyclone classifier	
17	De-duster	
18	Picking belt	<p data-bbox="428 1131 1147 1227"> <a href="https://standards.iteh.ai/catalog/standards/sist/35f04b38-cc4c-4d8a-b9de-61027cf20c04/iso-561-1974">https://standards.iteh.ai/catalog/standards/sist/35f04b38-cc4c-4d8a-b9de-61027cf20c04/iso-561-1974</a> </p> 
19	Picking table (circular)	
20	Bradford breaker	

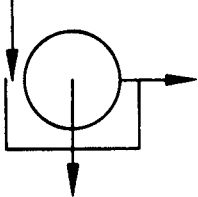
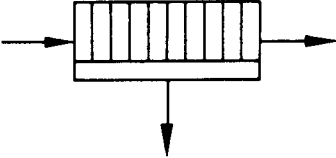
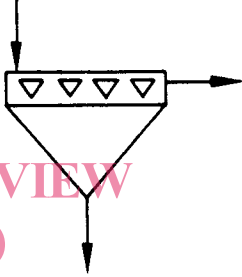
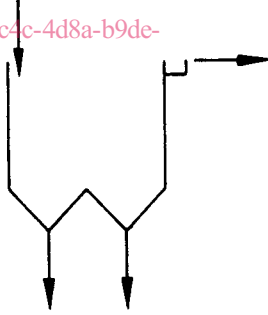
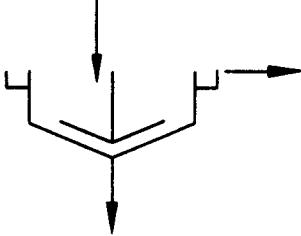
No.	Item	Symbol
21	Jig washer	
22	Dry cleaner	
23	Dense medium separator	
24	Cyclone separator	
25	Trough washer	

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ISO 561:1974  
<https://standards.iteh.ai/catalog/standards/sis/5510-138-cc4c-4d8a-b9de-61027cf20c04/iso-561-1974>

No.	Item	Symbol
26	Concentrating table	
27	Froth flotation cells	
28	Conditioner	
29	Magnetic separator (medium)	<p data-bbox="415 985 1108 1097" style="text-align: center; color: red;">iTeh STANDARD PREVIEW (standards.iteh.ai)</p> <p data-bbox="708 1131 862 1164" style="text-align: center; color: red;">ISO 561:1974</p> <p data-bbox="415 1164 1139 1232" style="text-align: center; color: red;"><a href="https://standards.iteh.ai/catalog/standards/sist/35f04b38-cc4c-4d8a-b9de-61027cf20c04/iso-561-1974">https://standards.iteh.ai/catalog/standards/sist/35f04b38-cc4c-4d8a-b9de-61027cf20c04/iso-561-1974</a></p> 
30	Magnetic separator (tramp iron)	
31	Bunker (drainage)	
32	Centrifuge	



No.	Item	Symbol
33	Filter (vacuum)	
34	Filter (pressure)	
35	De-watering screen	
36	Spitzkasten	<p data-bbox="428 1133 1145 1227"> <a href="https://standards.iteh.ai/catalog/standards/sist/35f04b38-cc4c-4d8a-b9de-61027cf20c04/iso-561-1974">https://standards.iteh.ai/catalog/standards/sist/35f04b38-cc4c-4d8a-b9de-61027cf20c04/iso-561-1974</a> </p> 
37	Thickener	
38	Conical settling tank	