

CONFIRMED
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Specification for

Graphical symbols for coal preparation plant flowsheets

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Solid Mineral Fuels Standards Policy Committee (SFC/-) to Technical Committee SFC/5, upon which the following bodies were represented:

- British Coal Corporation
- Coal Preparation Plant Association
- Minerals Engineering Society

This British Standard, having been prepared under the direction of the Solid Mineral Fuels Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 1 May 1992

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The following BSI references relate to the work on this standard:
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Amendments issued since publication

Amd. No.	Date	Comments

Contents

	Page
Committees responsible	Inside front cover
Foreword	ii
0 Introduction	1
1 Scope	1
2 Conventions for the drawing of symbols	1
3 Symbols	1
Index	15
Publication(s) referred to	Inside back cover

Foreword

This British Standard has been prepared under the direction of the Solid Mineral Fuels Standards Policy Committee. It is a revision of, and supersedes, BS 3553:1986, which is withdrawn.

The technical changes in this edition are as follows.

- a) The symbols for items 37 and 38 have been modified slightly to align them with the corresponding symbols in ISO 561:1989.
- b) For items 52 and 53, the pressure variant of the filters is included.
- c) For item 68, the vacuum variant is included.
- d) A spiral separator (item 69) is represented by a different symbol and both a two-product variant and a three-product variant are included.
- e) A probability screen (item 70) has been introduced.

The items numbered 69, 70, 71 and 72 in BS 3553:1986 have been renumbered as 71, 72, 69 and 73 respectively.

This British Standard is related to ISO 561:1989, published by the International Organization for Standardization (ISO). The items numbered from 1 to 70 in this standard correspond to those numbered from 1 to 70 in ISO 561:1989, with the following differences.

- 1) Some symbols are slightly different, but are still easily recognizable.
- 2) The vacuum variant of the belt filter (item 68) is not included in ISO 561:1989.
- 3) The spiral separator (item 69) is referred to as a “spiral” in ISO 561:1989.

Items 71, 72 and 73 in this British Standard are not included in ISO 561:1989.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 16, 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.

0 Introduction

The symbols included in this standard have been selected in accordance with the following principles.

- The items of plant listed should be widely used for coal preparation purposes, and should be required by the user of the flowsheet to be identified thereon.
- The symbols should be both easy to draw and readily distinguishable one from another.
- Each symbol should preferably give some indication of the principle of the operation involved, but should not represent the appearance of any particular type of machine.

1 Scope

This British Standard specifies basic symbols for use in flowsheets and other diagrams relating to coal preparation plant.

NOTE1 BS 3567 gives guidance on preparing basic process and equipment flowsheets.

NOTE2 Attention is drawn to the graphical symbols specified in BS 1553; they should be used on flowsheets representing the general engineering aspects of coal preparation plant.

NOTE3 Symbols relating to process controls can be obtained from BS 1646-1.

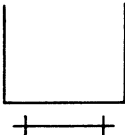
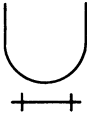
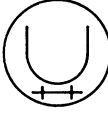
NOTE4 The titles of the publications referred to in this standard are listed on the inside back cover.

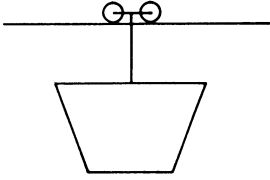
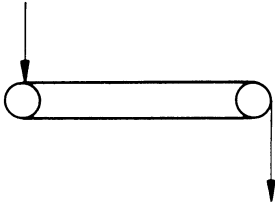
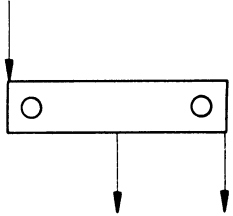
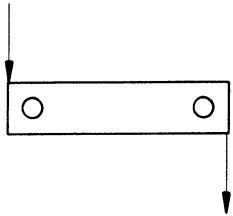
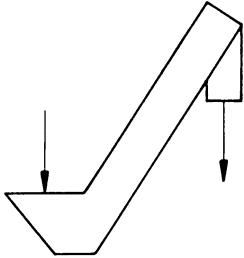
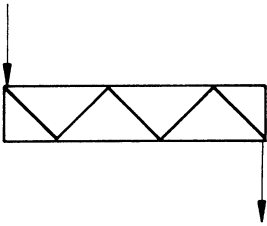
2 Conventions for the drawing of symbols

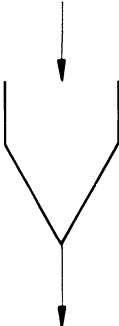
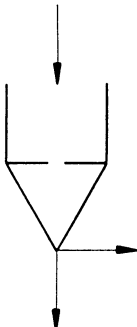
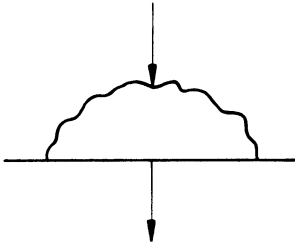
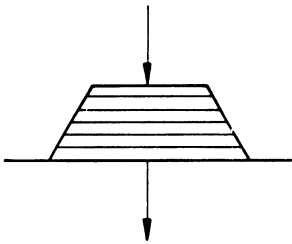
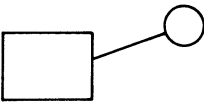
The following conventions shall be adopted for drawing the symbols in this standard.

- The lines for plant symbols shall be thicker than those for product flow, but all lines shall be of the same density.
- The flowlines shall enter the symbol from above or from the left and shall leave the symbol downwards or to the right.
- Where there is more than one entry or exit to or from an item of plant, the number of entry and exit arrows shall be varied accordingly.

3 Symbols

No.	Item	Symbol
1	Wagon	
2	Tub	
3	Wagon tippler	
4	Tub tippler	

No.	Item	Symbol
5	Aerial ropeway	
6	Conveyor	
7	Scraper conveyor (a) One discharge (b) Two discharges	 (a) (b)
8	Elevator	
9	Screw conveyor	

No.	Item	Symbol
10	Bunker	
11	Bunker (drainage)	
12	(a) Stockpile (b) Layered stockpile	 (a)  (b)
13	Bucket wheel reclaimer	
14	Feeder	