

Specification for

Continuous mechanical handling equipment — Safety requirements —

Part 1: General —

[ISO title: Continuous mechanical
handling equipment — Safety code —
General rules]

UDC 621.867:614.8

Cooperating organizations

The Mechanical Engineering Standards Committee, under whose direction this British Standard was prepared, consists of representatives from the following Government departments and scientific and industrial organizations:

Associated Offices Technical Committee*	Department of the Environment
Association of Consulting Engineers*	Department of Trade (Marine Division)
Association of Hydraulic Equipment Manufacturers	Engineering Equipment Users' Association*
Association of Mining, Electrical and Mechanical Engineers	Federation of Manufacturers of Construction Equipment and Cranes
British Compressed Air Society	Health and Safety Executive*
British Electrical and Allied Manufacturers' Association (BEAMA)	Institution of Gas Engineers
British Gas Corporation	Institution of Mechanical Engineers
British Gear Manufacturers' Association	Institution of Plant Engineers
British Internal Combustion Engine Manufacturers' Association	Institution of Production Engineers*
British Pump Manufacturers' Association	London Transport Executive
British Steel Corporation	Machine Tool Trades Association
British Steel Industry	Ministry of Defence
Chartered Institution of Building Services	National Coal Board*
Crown Agents for Oversea Governments and Administrations	Oil Companies Materials Association
Department of Industry (Mechanical Engineering)	Process Plant Association
Department of Industry (National Engineering Laboratory)	Railway Industry Association of Great Britain
	Telecommunication, Engineering and Manufacturing Association (TEMA)
	The Society of Motor Manufacturers and Traders Limited
	Water-tube Boilermakers' Association

The organizations marked with an asterisk in the above list, together with the following, were directly represented on the committee entrusted with the preparation of this British Standard:

Amalgamated Union of Engineering Workers	Institution of Mining and Metallurgy
British Quarrying and Slag Federation	Institution of Mining Engineers
British Rubber Manufacturers' Association	Mechanical Handling Engineers' Association
Chain Testers' Association of Great Britain	Metal Packaging Manufacturers' Association
Coke Oven Managers' Association	Sand and Gravel Association Limited
Electrical, Electronic, Telecommunications and Plumbing Union	Society of Dairy Technology
Electricity Supply Industry in England and Wales	

This British Standard, having been prepared under the direction of the Mechanical Engineering Standards Committee, was published under the authority of the Executive Board on 31 January 1979

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The following BSI references relate to the work on this standard:
Committee reference MEE/128
Draft for comment 76/72197 DC

ISBN 0 580 10497 4

Amendments issued since publication

Amd. No.	Date of issue	Comments

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National foreword

This British Standard has been prepared under the direction of the Mechanical Engineering Standards Committee. This Part is identical with ISO 1819 “*Continuous mechanical handling equipment — Safety code — General notes*”, developed by Technical Committee ISO/TC 101, Continuous mechanical handling equipment, and lays down rules for the safety of personnel in the use of continuous mechanical handling equipment under normal working conditions when carrying loose bulk materials on unit loads.

It is important that both manufacturers and users of such equipment are aware of the latest safety regulations. Attention is therefore drawn to Appendix Z of this standard.

This standard forms part of a series concerned with continuous mechanical handling. The other Parts which also implement ISO publications relate to special safety rules.

This standard is complementary to the other British Standards dealing with conveyors, i.e. BS 2567, BS 2890, BS 4409 and BS 4531. It does not in anyway supersede them.

Terminology and conventions. The text of the international standard has been approved as suitable for publication, without deviation, as a British Standard. Some terminology and certain conventions are not identical with those used in British Standards; attention is especially drawn to the following.

The comma has been used throughout as a decimal marker. In British Standards it is current practice to use a full point on the baseline as the decimal marker.

Wherever the words “International Standard” appear, referring to this standard, they should be interpreted as “British Standard”.

Cross-references. The references to ISO/TR 5045, ISO/TR 5046 and ISO/TR 5047 constitute informative matter only. ISO/TR 5046 has been implemented as Part 18 in this series. Technically equivalent British Standards will also be produced for ISO/TR 5045 and ISO/TR 5047. Since no mandatory requirements are involved, the validity of this British Standard is not affected.

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 10, 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

It must be understood that the present International Standard applies only to conveying devices that have been correctly designed, and constructed and erected with care.

It must also be understood that the conveying device has been selected according to the characteristics of the product or the objects being conveyed, and is suitable for the working conditions.

When the equipment conveys dangerous, noxious, toxic or harmful products, the user shall inform the manufacturer and if necessary the erectors, and specify the special safety conditions to be complied with.

1 General

1.1 Scope

This International Standard sets out safety rules relating to continuous mechanical handling equipment, including its construction, installation, utilization and maintenance, to ensure that it is used to the best advantage, and to prevent, as far as possible, any accidents or mishaps that could arise from misuse.

To this end, these rules provide precise directives necessary to comply with legal texts (see Appendix Z) and requirements decreed by governing bodies in certain countries.

1.2 Field of application

The safety rules laid down in this International Standard apply in the normal working conditions defined in **1.3.1**, regardless of the use for which the equipment is intended.

These safety rules limit the supplier's responsibility to continuous mechanical handling equipment proper, excluding the structures (building frameworks, planks, etc.) to which such equipment is affixed or on which it is placed and for which the user is responsible, except when such structures have been designed, supplied and erected by the conveying device manufacturer.

The sole object of these rules is the safety of the personnel defined in **1.3.2**.

Skilled personnel — fitters, maintenance and repair personnel, who only work from time to time at the request of the person responsible for the plant — shall observe special rules, particularly those set out in **2.3.17** to **2.3.21**.

Persons whose duties do not demand their presence on the plant or in the vicinity of the equipment under consideration shall observe orders forbidding access to certain areas.

1.3 Definitions

1.3.1

normal working conditions

specified conditions as agreed by the interested parties for the use of continuous mechanical handling equipment

these normal working conditions will either be defined by the user and agreed with the manufacturer at the time of passing the order, or defined for standard equipment in the manufacturer's catalogue when it is issued

1.3.2

personnel

persons essential to the use (the operation) of the continuous mechanical handling equipment itself and persons legitimately in the vicinity

1.4 General plan

The safety code is divided into two parts:

- a) General rules relating to all continuous mechanical handling equipment for loose bulk materials or unit loads (covered by this International Standard).
- b) Special rules for continuous mechanical handling equipment for loose bulk materials or unit loads. These rules, written for individual appliances or groups of appliances, are covered by separate International Standards.

Each part of the safety code is divided into three clauses dealing with the safety rules applying to the following stages:

- construction (design and manufacture);
- installation (layout, erection and entry into service);
- utilization (operation and maintenance).

2 General rules

The construction and operation of all continuous mechanical handling equipment for loose bulk materials and unit loads shall meet

- the legal and local requirements relating to safety in general¹⁾;
- the principles laid down in clause 1 of this International Standard;
- the following general rules.

¹⁾ See Appendix Z.