

Glossary of terms used in

Materials handling —

Part 5: Terms used in connection with
lifting tackle

Co-operating organizations

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

Associated Offices' Technical Committee	Gas Council
Association of Consulting Engineers	Institution of Civil Engineers
Association of Mining Electrical and Mechanical Engineers	Institution of Gas Engineers
Board of Trade	Institution of Heating and Ventilating Engineers
British Chemical Plant Manufacturers' Association	Institution of Mechanical Engineers
British Compressed Air Society	Institution of Mechanical Engineers (Automobile Division)
British Electrical and Allied Manufacturers' Association	Institution of Production Engineers
British Gear Manufacturers' Association	Locomotive and Allied Manufacturers' Association of Great Britain
British Internal Combustion Engine Manufacturers' Association	London Transport Executive
British Mechanical Engineering Confederation	Machine Tool Trades Association
British Pump Manufacturers' Association	Ministry of Defence
British Steel Industry	Ministry of Defence, Army Department*
Crown Agents for Oversea Governments and Administrations	Ministry of Public Building and Works
Department of Employment and Productivity*	Ministry of Technology
Electricity Council, the Central Electricity Generating Board and the Area Boards in England and Wales	Ministry of Technology — National Engineering Laboratory
Engineering Equipment Users' Association	Ministry of Transport
	National Coal Board
	National Physical Laboratory (Ministry of Technology)
	Royal Institute of British Architects
	Water Tube Boilermakers' Association

The Government departments 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:

British Railways Board	Mechanical Handling Engineers' Association
Chain Testers' Association of Great Britain	National Association of Lift Makers
Federation of Manufacturers of Construction Equipment and Cranes	National Joint Council on Materials Handling
Federation of Wire Rope Manufacturers of Great Britain	Road Haulage Association
Institute of Materials Handling	The Cranfield Work Study School
Lifting Equipment Manufacturers' Association	United Kingdom National Committee of the International Cargo Handling Co-ordination Association

This British Standard, having been approved by the Mechanical Engineering Industry Standards Committee, was published under the authority of the Executive Board on 23 February 1971

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Foreword

In order to keep abreast of progress in the industries concerned, British Standards are subject to periodical review. Suggestions for improvements will be recorded and in due course brought to the notice of the committees charged with the revision of the standards to which they refer.

A complete list of British Standards, numbering over 5000, fully indexed and with a note of the contents of each, will be found in the British Standards Yearbook, price £1.50. The BS Yearbook may be consulted in many public libraries and similar institutions.

This standard makes reference to the following British Standard:

BS 302, *Wire ropes for cranes, excavators and general engineering purposes*.

This British Standard has been prepared at the request of the National Joint Council on Materials Handling under the authority of the Mechanical Engineering Industry Standards Committee. It is intended to cover the whole field of materials handling in a number of Parts of this standard.

The terms used in this Part are in general agreement with those given in the relevant British Standards, and also with accepted terms used in industry. Pulley blocks, which are not included in this Part, will be dealt with in Part 6.

In preparing this Part of the glossary, the drafting committee was mindful of the trend to move, lift or transfer large unit loads, including containers.

Consideration will be given to extending this Part at a later date to include these devices.

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.

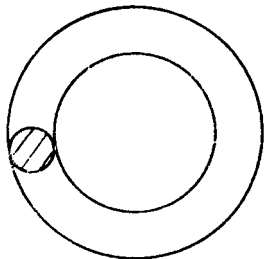
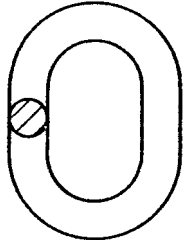
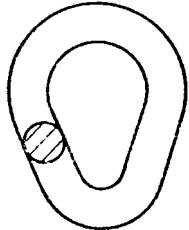
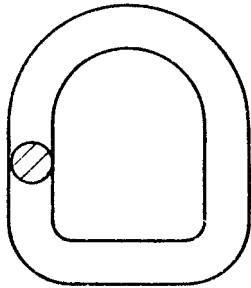
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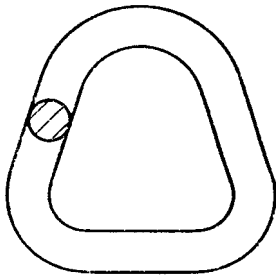
This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 32 and a back cover.

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.

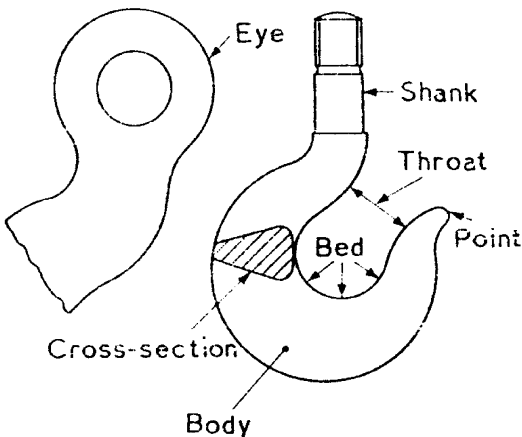
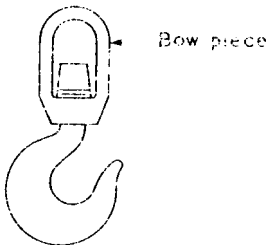
Section 1. Components of lifting tackle

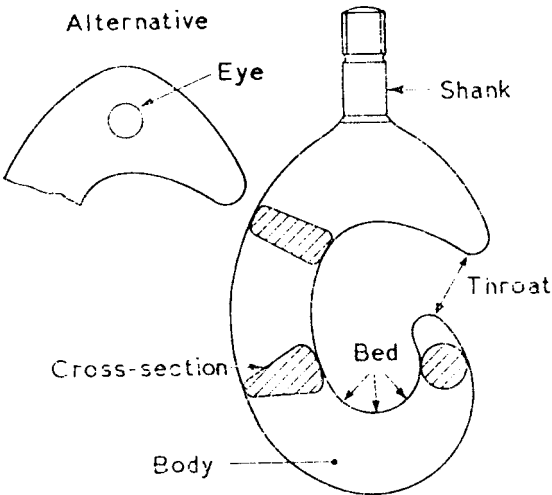
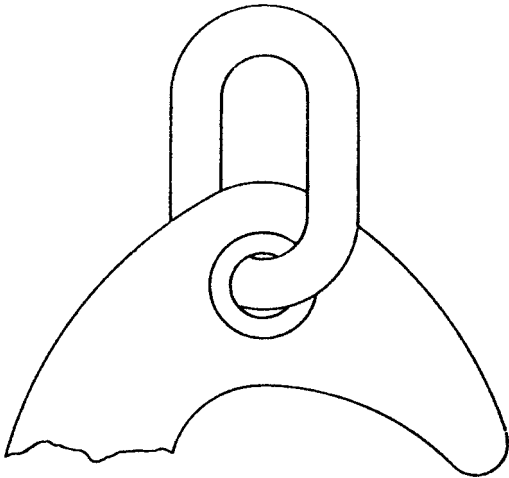
A. Rings and links

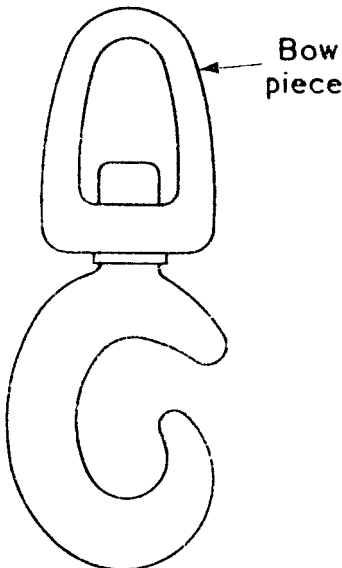
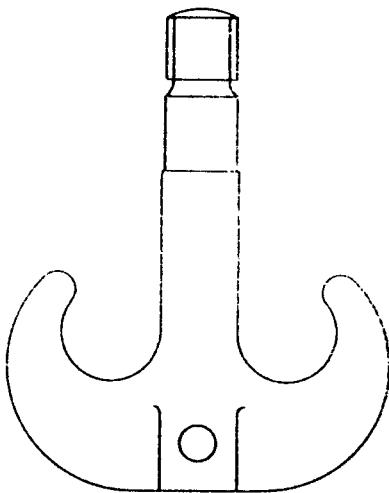
Term No.	Term and definition	Typical example
51001	Ring. A ring of the form shown in Figure 1.	 Figure 1
51002	Straight-sided link. A link of the form shown in Figure 2.	 Figure 2
51003	Egg link. A link of the form shown in Figure 3.	 Figure 3
51004	Dee link. A link of the form shown in Figure 4, normally designed to support a uniformly distributed load along the straight portion of the lower limb.	 Figure 4

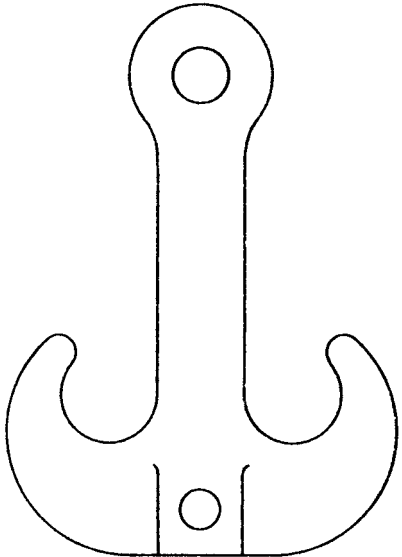
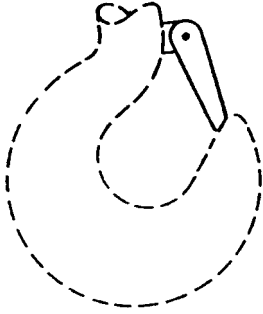
Term No.	Term and definition	Typical example
51005	Triangular link. A link of the form shown in Figure 5, normally designed to support a uniformly distributed load along the straight portion of the lower limb.	 Figure 5
NOTE For definitions of "short link" and "long link", see Section 3 A.		

B. Hooks

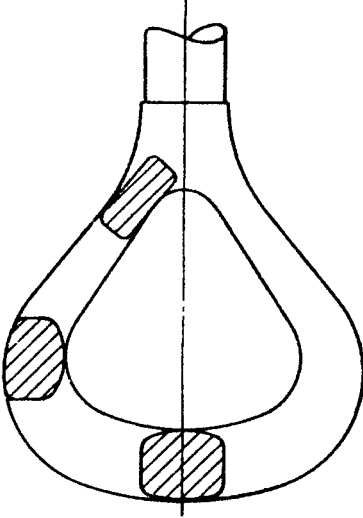
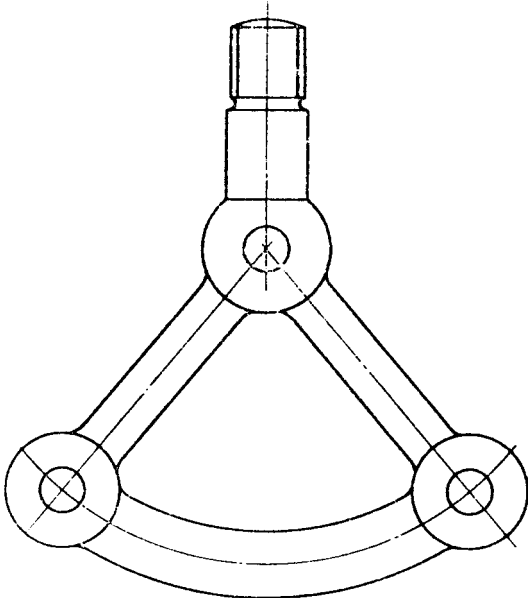
Term No.	Term and definition	Typical example
51101	Point hook. The nomenclature and form of a point hook is shown in Figure 6; the eye (which is an alternative to the shank) to be suitable for either chain, shackle pin or wire rope thimble.	Alternative  Figure 6
51102	Point hook, with either plain or ball bearing swivel. A hook with bow-piece of the form shown in Figure 7.	 Figure 7

Term No.	Term and definition	Typical example
51103	“C” hook. The nomenclature and form of a “C” hook is shown in Figure 8. (“C” type hooks are sometimes referred to as “Liverpool” or cargo hooks.) The eye is an alternative to the shank.	 Figure 8
51104	“C” hook, with eye and link. A hook of the form shown in Figure 9, with eye complete with a link suitable for accepting a wire rope thimble.	 Figure 9

Term No.	Term and definition	Typical example
51105	“C” hook, with either plain or ball bearing swivel. A hook with bow-piece of the form shown in Figure 10.	 Figure 10
51106	Ramshorn hook with shank. A hook of the form shown in Figure 11, generally used for heavy loads. A central hole may be provided to suit an auxiliary shackle for lighter loads.	 Figure 11

Term No.	Term and definition	Typical example
51107	Ramshorn hook with eye. A hook of the form shown in Figure 12.	 Figure 12
51108	Cross-section of hook. Typical cross-sections are shown in Figure 13, Figure 14 and Figure 15. (The cross-section should be measured at the position indicated in Figure 6 and Figure 8.) NOTE The British Standard trapezoidal cross-section is normally used.	Figure 13  Trapezoidal cross-section Figure 14  Round cross-section Figure 15  Rectangular cross-section
51109	Safety catch. A device that prevents the hook becoming accidentally detached from the load.	 Figure 16

C. Triangular lifting eyes

Term No.	Term and definition	Typical example
51201	Forged triangular lifting eye. A triangular eye with shank forged in one piece, machined and screwed as required.	 Figure 17
51202	Fabricated triangular lifting eye. A triangular eye with shank, assembled from fabricated parts, sometimes referred to as a Flemish hook.	 Figure 18