

Specification for

Steel links and strap assemblies for lifting attachments for packing cases

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Packaging and Freight Containers Standards Committee (PKM/-) to Technical Committee PKM/553, upon which the following bodies were represented:

- British Fibreboard Packaging Association
- PIRA
- Timber Packaging and Pallet Confederation
- Timber Research and Development Association
- United Kingdom Tea Association

The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

- British Ports Association and the National Association of Ports Employers
- Health and Safety Executive
- Institute of Packaging
- Ministry of Defence

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Foreword

This revision of BS 2837 has been prepared under the direction of the Packaging and Freight Containers Standards Committee. It supersedes BS 2837:1970 which is withdrawn.

This revision makes changes to the material specifications for strap assemblies and increases the specified thicknesses as necessary to enable the assemblies to provide the required levels of performance. These changes have been made following investigations which confirmed that the materials previously specified were no longer available as steel stock in flat bar form.

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.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 8, 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.

1 Scope

This British Standard specifies requirements for 10 classes of drop forged or welded triangular link and its associated strap assembly for use as lifting attachments for packing cases. This British Standard deals with that part of the strap assembly which contains the turnover forming the housing for the link. When lifting on four links, these assemblies are suitable for loads up to 25 tonnes.

This British Standard also describes in Appendix A typical styles of attachment for strap assemblies.

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

2 Rating

2.1 Links

The links shall be rated according to the safe working loads given in Table 1.

2.2 Lifting on four links

When lifting on four links, the safe working load of the combined strap assemblies shall not exceed the values given in column 7 of Table 2.

2.3 Lifting on two links

Where the height of the packing case is materially the greatest dimension, a two-link assembly may be used; the safe working load of the strap assembly shall then not exceed the values given in column 8 of Table 2.

3 Material

3.1 Links

The links shall be made from wrought carbon manganese steel having the following chemical composition¹⁾:

Carbon	Manganese	Sulphur	Phosphorus
% min.	% min.	% max.	% max.
0.25	0.70	0.050	0.050
% max.	% max.		
0.30	0.90		

3.2 Strap assemblies

The strap assemblies shall be made from either:

- welding quality structural steel complying with grade 50B of BS 4360; or
- steel complying with grade 43A of BS 4360.

4 Forms and dimensions

4.1 Links

The form of the links shall be in accordance with Figure 1 and the dimensions, subject to the tolerances given in 4.1.1 and 4.1.2, shall be in accordance with Table 1.

4.1.1 Tolerances on drop forged links. Tolerances on drop forged links shall be quality F as specified in BS 4114.

4.1.2 Tolerances on welded links. The internal dimensions of welded links shall be not less than the specified sizes and shall not exceed them by more than 5 %. The size of the material in the finished link shall be not less than the nominal diameter, and shall not exceed the nominal diameter by more than 0.8 mm.

4.2 Strap assemblies

The form of the strap assemblies shall be in accordance with Figure 2, and the dimensions of the cross sections shall be in accordance with Table 2, and appropriate to the material from which the assemblies are made (see BS 4360). There shall be provision for not less than two bolts in the turnover of each strap assembly, and the distance from the bottom lower hole to the end of the turnover shall not exceed one quarter of the breadth of the strap.

NOTE The length of the turnover and the spacing of the bolts have not been specified as these dimensions vary with the type of case (see Appendix A).

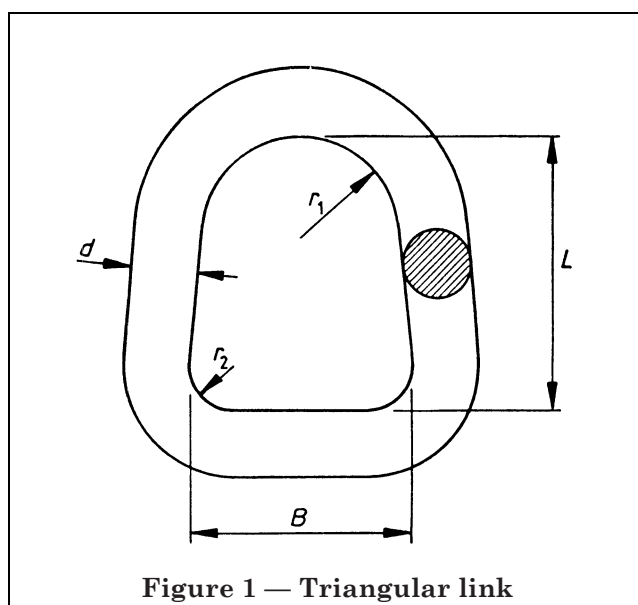


Figure 1 — Triangular link

¹⁾ For further information in relation to this material, apply to Enquiry Section, BSI, Linford Wood, Milton Keynes MK14 6LE, enclosing a stamped addressed envelope for reply.