BRITISH STANDARD

BS 7166:1989

Specification for

Wedge and socket anchorages for wire ropes

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Mechanical Handling Standards Policy Committee (MHE/-) to Technical Committee MHE/1, upon which the following bodies were represented:

Associated Offices Technical Committee
British Chain Manufacturers' Association
British Forging Industry Association
British Ports Association and the National Association of Ports Employers
British Railways Board
British Steel Industry
Chain Testers Association of Great Britain
Corporation of Trinity House
Department of Trade and Industry (National Physical Laboratory)
Federation of Wire Rope Manufacturers of Great Britain
Health and Safety Executive
Lloyds Register of Shipping
Ministry of Defence

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

Association of Supervisory and Executive Engineers
British Coal
Drop Forging Research Association
Electricity Supply Industry in England and Wales
Engineering Equipment and Materials Users' Association
Federation of Manufacturers of Construction Equipment and Cranes
Independent Engineering Insurers' Committee
National Association of Lift Makers
Steel Castings Research and Trade Association

This British Standard, having been prepared under the direction of the Mechanical Handling Standards Policy Committee, was published under the authority of the Board of BSI and comes into effect on 31 May 1989

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Foreword

This British Standard has been prepared under the direction of the Mechanical Handling Standards Policy Committee. It covers requirements for wedge and socket anchorages which are among the simplest devices for the termination of wire ropes. Such anchorages consist of a flat, pear-shaped wedge which fits into a suitably tapered socket or body (see Figure 1). The wedge has a peripheral groove to take a wire rope and the socket is often of the clevis type with an eye and pin fitting.

Wedge and socket anchorages are intended for on-site attachment and can be used as a quick means of replacing and re-reeving wire ropes on cranes, excavators, lifts, etc.

This standard specifies type tests on the socket body and on the wedge and socket anchorage assembly. A proof test on each socket body is also required. In service, the performance of an assembly will depend upon the design of the wedge and socket anchorage and on the type and construction of the actual wire rope used. The in-service termination efficiency may therefore be less than the type performance. Where considered necessary, suitable additional testing should be carried out to establish the termination efficiency; attention is drawn to the testing requirements of Section 6(1)(b) of the Health and Safety at Work, etc. Act 1974.

Accidents involving wedge and socket anchorages are possible from causes such as the use of incompatible (mismatched) components and assembly where the wedge has not been properly and firmly seated in the body.

Purchasers ordering wedge and socket anchorages for wire ropes to BS 7166 are advised to specify in their purchasing contract that the manufacturer operates a quality system in compliance with the appropriate Part of BS 5750, or suitable equivalent, to ensure for themselves that products claimed to comply with BS 7166 consistently achieve the required level of quality.

Appendix B, Appendix C, Appendix D and Appendix E give guidance on storage of components, method of selection and fitting, method of assembly and inspection in use respectively.

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 6, 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.

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