

Specification for
Slewing jib cranes

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/3, upon which the following bodies were represented:

Associated British Ports
 Associated Offices Technical Committee
 Association of Consulting Engineers
 BP Trading Limited
 British Ports Federation and the National Association of Ports Employers
 British Railways Board
 British Steel plc
 Construction Plant Hire Association
 Department of the Environment (Building Research Establishment)
 Department of Trade and Industry [Mechanical Engineering and Manufacturing Technology Division (MMT)]
 Electricity Supply Industry in England and Wales
 Engineering Equipment and Materials Users' Association
 Federation of Civil Engineering Contractors
 Federation of Manufacturers of Construction Equipment and Cranes
 Federation of Wire Rope Manufacturers of Great Britain
 Health and Safety Executive
 Independent Engineering Insurers Committee
 Institute of Materials Management
 Institution of Mechanical Engineers
 Institution of Plant Engineers
 Institution of Production Engineers
 Institution of Structural Engineers
 Lloyds Register of Shipping
 Welding Institute

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

British Constructional Steelwork Association Ltd.
 Department of the Environment (Property Services Agency)
 GAMBICA (BEAMA Ltd.)
 High Commission of India
 Institution of Engineering Designers
 Iron and Steel Trades Confederation
 Manufacturing Science Finance

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Foreword

This British Standard has been prepared under the direction of the Mechanical Handling Standards Policy Committee. It forms one of a series of standards relating to cranes and excavators. As with all British Standards for cranes, the primary object of the specification is to ensure reliability and safety without placing restrictions on the general design of cranes or the methods employed in their construction.

Other standards in the series are as follows.

BS 327, *Specification for power-driven derrick cranes*¹⁾.

BS 357, *Specification for power-driven travelling jib cranes (rail-mounted low carriage type)*¹⁾.

BS 466, *Specification for power driven overhead travelling cranes, semi-goliath and goliath cranes for general use.*

BS 1757, *Specification for power-driven mobile cranes.*

BS 1761, *Specification for single bucket excavators of the crawler-mounted friction-driven type*¹⁾.

BS 2452, *Specification for electrically driven jib cranes mounted on a high pedestal or portal carriage (high pedestal or portal jib cranes).*

BS 2573, *Rules for the design of cranes.*

BS 2573-1, *Specification for classification, stress calculations and design criteria for structures.*

BS 2573-2, *Specification for classification, stress calculations and design of mechanisms.*

BS 2799, *Specification for power-driven tower cranes for building and engineering construction*¹⁾.

The method of classification used in this British Standard is that adopted by the International Organization for Standardization (ISO), published as ISO 4301/1 and incorporated in BS 2573. This provides a means of defining the anticipated duty of the crane which serves as the basis of agreement between the purchaser and the manufacturer, and supplies information on which much of the design analysis can be based. The classification of the crane is defined from the number of operating cycles and from the anticipated loading it will experience during its life and therefore provides a sound basis for rational design along with economic production.

Appendix A lists information that should be supplied by the purchaser at the time of enquiry and/or order.

Appendix B lists information to be supplied by the manufacturer upon delivery of the crane.

Appendix C comprises a list of British Standards for materials and equipment suitable for use in the manufacture of cranes.

Attention is drawn to BS 5744 and BS 7121-1 which cover the safe use of cranes and provide details of legislation relating to cranes.

This British Standard has been written on the basis that the inspection and testing after installation and the provision of the test certificate, before putting the crane into service, is the responsibility of the crane manufacturer.

¹⁾ Obsolescent