

BS 2853:2011



BSI Standards Publication

Specification for the testing of steel overhead runway beams for hoist blocks

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

raising standards worldwide™



Publishing and copyright information

The BSI copyright notice displayed in this document indicates when the document was last issued.

© BSI 2011

ISBN 978 0 580 71930 1

ICS 77.140.70

The following BSI references relate to the work on this standard:

Committee reference CB/203

Draft for comment 10/30229805 DC

Publication history

First published May 1957

Second edition, October 2011

Amendments issued since publication

Date	Text affected
------	---------------

Contents

Foreword *ii*

1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Information to be supplied	1
5	Design	1
6	Deflection	2
7	End stops	2
8	Testing and inspection	2
9	Marking	3
10	Certificates	4

Bibliography **5**

Summary of pages

This document comprises a front cover, an inside front cover, pages i to ii, pages 1 to 6, an inside back cover and a back cover.

Foreword

Publishing information

This British Standard is published by BSI and came into effect on 31 October 2011. It was prepared by Technical Committee CB/203, *Design and execution of steel structures*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This British Standard, together with BS EN 1993-6 (and its associated National Annex), supersedes BS 2853:1957, which is withdrawn.

Information about this document

This is a full revision of the standard, and introduces the following principal changes.

- The detailed requirements for structural design have been removed.
- Requirements about the slopes of beams have been added.
- It has been clarified that the deflection limits for beams are relative to their supports.
- The former references to Statutory Requirements have been removed.
- The detailed requirements for Test Certificates have been removed.
- References to The Lifting Operations and Lifting Equipment Regulations 1998 [1] have been added.

Previous editions of this British Standard also covered the structural design of the runway beams. This is now covered by BS EN 1993-6, in association with BS EN 1991-3, and their associated National Annexes.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

1 Scope

This British Standard specifies requirements for the testing of fixed overhead runway beams made from rolled steel sections.

This British Standard applies to the runway beams and their components only. It does not apply to supporting structures, travelling trolleys or lifting appliances operating on the beams, nor to runway beams for cranes that run on rails.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS EN ISO 7500-1, *Metallic materials – Verification of static uniaxial testing machines – Part 1: Tension/compression testing machines – Verification and calibration of the force-measuring system*

3 Terms and definitions

For the purposes of this British Standard the following terms and definitions apply.

- 3.1 certifier**
person signing the certificates specified in this British Standard
- 3.2 runway**
runway beam and runway components
- 3.3 runway beam**
overhead track for carrying loads which are moved along it
- 3.4 runway components**
those parts of the runway immediately attached to the runway beam, e.g. splices, end stops, clamps and switches

4 Information to be supplied

The certifier shall be supplied with full details of the loads to be handled and the service required of the runway. This information shall form the basis of the test. These loads shall include any additional items, such as apparatus or services, which might have to be supported by the runway.

5 Design

The runway beam on which the trolley moves shall be of sufficient size and strength, and have an even running surface. It shall be appropriately supported or suspended, and readily accessible for maintenance.

The design and layout of the runway beam and its supporting structure shall be such as to ensure that before the application of loads to the runway beam, its slope does not deviate by more than 1 in 250 from the horizontal, or from its intended slope.

NOTE For the structural design of runway beams, see BS EN 1991-3 and BS EN 1993-6.