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No. 249—1926.

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British Engineering Standards Association.
(Incorporated 1913)

FORMED IN 1901 AS THE ENGINEERING STANDARDS COMMITTEE

BY

THE INSTITUTION OF CIVIL ENGINEERS,
THE INSTITUTION OF MECHANICAL ENGINEERS,
THE INSTITUTION OF NAVAL ARCHITECTS,
THE IRON AND STEEL INSTITUTE,
THE INSTITUTION OF ELECTRICAL ENGINEERS.

BRITISH
STANDARD SPECIFICATION

FOR

BRASS BARS

(HIGH SPEED SCREWING AND TURNING).

LONDON

PUBLISHED FOR THE ASSOCIATION BY CROSBY LOCKWOOD & SON,
7, STATIONERS' HALL COURT, LUDGATE HILL, LONDON, E.C. 4,
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The following Government Departments and Scientific and Industrial Organisations were represented upon the Sectional Committee, Sub-Committee and Panel entrusted with the preparation of this Specification:

Admiralty.
War Office.
Air Ministry.
General Post Office.
National Physical Laboratory.
Lloyd's Register of Shipping.
Institute of Metals.
Institution of Automobile Engineers.
Railway Companies of Great Britain.
British Non-Ferrous Metals Research Association.
Association of British Motor Manufacturers.
Brass and Copper Tube Association.
Brass Wire Association.
Brassfounders' Employers' Association.
British Electrical and Allied Manufacturers' Association.
Cold-Rolled Brass and Copper Association.
High Conductivity Copper Association.
Manufactured Copper Association.
Society of British Aircraft Constructors, Ltd.
Society of Motor Manufacturers and Traders, Ltd.

This Specification was adopted by the Sectional Committee on Non-Ferrous Alloys in February, 1926, and approved on behalf of the Main Committee on April 21st, 1926.

NOTE.

In order to keep abreast of progress in the Industries concerned, the British Standard Specifications are subjected to periodical revision.

Suggestions for improvements, addressed to the Secretary, British Engineering Standards Association, 28, Victoria Street, London, S.W.1, will be welcomed at all times. They will be recorded and in due course brought to the notice of the Committees charged with the revision of the Specifications to which they refer.

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(2)

CONTENTS.**SPECIFICATION: TABLE OF CLAUSES.**

	PAGE.
1. Quality of Material	3
2. Methods of Manufacture	3
3. Freedom from Defects	3
4. Margins of Manufacture... ..	3
5. Provision of Test Pieces	3
6. Mechanical Test	3
7. Re-Tests	4
8. Inspection... ..	4
9. Testing Facilities... ..	4

APPENDICES.

Appendix I. Margins of Manufacture:	
Table 1. Round and Square Bars	5
Table 2. Hexagon Bars ...	6
Appendix II. Forms of British Standard Tensile	
Test Pieces	7
Appendix III. Metric Equivalents of Margins of	
Manufacture:	
Table 1. Round and Square Bars	10
Table 2. Hexagon Bars ...	11

(3)

NOTE.—The Association desires to call attention to the fact that this Specification is intended to include the technical provisions necessary for the supply of the material herein referred to, but does not purport to include all the necessary provisions of a Contract.

BRITISH STANDARD SPECIFICATION

5

FOR

BRASS BARS**(HIGH SPEED SCREWING AND TURNING).**

The figures in British measures are to be regarded as the Standard. Approximate metric equivalents are given for the convenience of users in 10 countries in which the metric system has been generally adopted.

Quality of Material.**1. The Brass shall contain:—**

Copper	...	Not less than 56.0 per cent nor more than 60.0 per cent.	15
Lead	...	Not less than 1.75 per cent nor more than 3.0 per cent.	
Zinc	...	The remainder.	
Total Impurities	...	Not more than 0.75 per cent.	

The representative of the Engineer (or of the Purchaser) shall be at liberty to inspect the material and to have a chemical analysis carried out at his own expense, the results to be furnished to the Manufacturer, if required.

Methods of Manufacture.

2. The Bars may be delivered in the extruded, rolled, extruded and drawn, or rolled and drawn condition.

Freedom from Defects.

3. The Bars shall be sound, straight and free from twists, and shall have a workmanlike finish.

Margins of Manufacture.

4. The margins of manufacture shall be those given in Appendix I (pages 5 and 6).

Provision of Test Pieces.

5. For the purpose of the mechanical test, the Bars shall be grouped in batches or parcels of not more than fifty, and one Bar shall be selected from each batch or parcel to provide the samples for both the tensile and the fracture test. The sample for the tensile test shall be cut from this Bar, and the fracture test shall be made by nicking and breaking the remainder of the bar selected. The fracture shall show freedom from piping and other defects.

Mechanical Test.

6. The Bars shall comply with the following mechanical test, the test being made on the material as supplied:—