

Please be aware that this PDF has been created from the original hardcopy document, which might not be in good condition and so the PDF might reflect this.

Licensed copy: Techstreet Content, ISO Exchange - Michigan, Version correct as of 05/09/2023.

Currently in preview, click to buy full version.

No. 709—1938.

Committee Room B

S/S by 1387-47 + 2 ARMS.

British Standards Institution

Incorporated by Royal Charter.

FORMED IN 1901 AS THE ENGINEERING STANDARDS COMMITTEE
INCORPORATED IN 1917 AS THE BRITISH ENGINEERING STANDARDS ASSOCIATION.

BRITISH STANDARD
SPECIFICATION

FOR
STEEL TUBES AND TUBULARS
GAS (LIGHT), WATER (MEDIUM) AND STEAM (HEAVY) QUALITIES.

LONDON:
PUBLISHED BY THE BRITISH STANDARDS INSTITUTION,
PUBLICATIONS DEPARTMENT,
28, VICTORIA STREET, LONDON, S.W.1.
Telegrams: Standards, Sec. London. Telephone: Abbey 3338.

February, 1938.

COPYRIGHT.
ALL RIGHTS RESERVED. INCLUDING RIGHTS OF TRANSLATION.
Price 2/- net. Post free 2/2.

No. 789—1938.

British Standards Institution
Incorporated by Royal Charter.

FORMED IN 1901 AS THE ENGINEERING STANDARDS COMMITTEE
INCORPORATED IN 1918 AS THE BRITISH ENGINEERING STANDARDS ASSOCIATION.

BRITISH STANDARD
SPECIFICATION

FOR

STEEL TUBES AND TUBULARS
FOR GAS (LIGHT), WATER (MEDIUM) AND STEAM (HEAVY) QUALITIES.

This Specification, having been approved by the Mechanical Industry Committee and endorsed by the Chairman of the Engineering Divisional Council, was published under the authority of the General Council as a British Standard on 21st February, 1938.

LONDON:
PUBLISHED BY THE BRITISH STANDARDS INSTITUTION,
PUBLICATIONS DEPARTMENT,
38, VICTORIA STREET, LONDON, S.W.1.
Telegrams: Standards, London. Telephone: Abbey 3333.

February, 1938.

COPY RIGHT.

ALL RIGHTS RESERVED, INCLUDING RIGHTS OF TRANSLATION.

Price 2/- net. Post free 2/2.

CONTENTS.

	PAGE
Co-Operating Organisations ...	5
Foreword ...	6
SPECIFICATION.	
PART 1. GENERAL.	
1. Scope ...	7
2. Definitions ...	
PART 2. TUBES AND SOCKETS.	
3. Designation of Sockets ...	8
4. Process of Manufacture ...	8
5. Quality of Material ...	8
6. Dimensions of Tubes and Sockets ...	8
7. Joints ...	9
8. Lengths ...	9
9. Galvanising ...	9
10. Tolerances ...	10
11. Hydraulic Test ...	10
12. Tests on Finished Tubes ...	11
13. Workmanship ...	11
14. Marking for Indication of Quality ...	12
15. Packing for Transport ...	12
PART 3. TUBULARS.	
16. General ...	13
17. Joints ...	13
18. Galvanising ...	13

	PAGE
19. Marking ...	13
20. Pieces ...	13
21. Longscrews (Connectors) ...	13
22. Bends and Springs ...	14
23. Return Bends ...	14
24. Barrel Nipples ...	14
25. Manufacturer's Certificate ...	14

TABLES.

1. Dimensions and Weights of Steel Tubes ...	16
2. Pieces ...	17
3. Longscrews ...	19
4. Bends and Springs ...	21
5. Return Bends ...	22
6. Barrel Nipples ...	23

CO-OPERATING ORGANISATIONS.

The Mechanical Industry Committee under whose supervision this British Standard was prepared consists of representatives from the following Government Departments and Scientific and Industrial Organisations :—

- *Admiralty.
- *Crown Agents for the Colonies.
- Department of Scientific and Industrial Research.
- *High Commissioner for India.
- *H.M. Office of Works.
- Home Office.
- Ministry of Transport.
- *War Office.
- Agricultural Engineers and Road Machinery Manufacturers' Association.
- British Chemical Plant Manufacturers' Association.
- British Electrical and Allied Manufacturers' Association.
- British Engineers' Association.
- British Iron and Steel Federation.
- Institution of Automobile Engineers.
- Institution of Gas Engineers.
- *Institution of Heating and Ventilating Engineers.
- Institution of Mechanical Engineers.
- Locomotive Manufacturers' Association.
- Machine Tool Trades Association.

The Government Departments and Scientific and Industrial Organisations marked with an asterisk in the above list, together with the following, were directly represented on the Committee entrusted with the preparation of this British Standard :—

- British Association of Refrigeration.
- British Corporation Register of Shipping and Aircraft.
- Institute of Plumbers.
- Institution of Chemical Engineers.
- Institution of Municipal and County Engineers.
- Institution of Naval Architects.
- Institution of Petroleum Technologists.
- Institution of Sanitary Engineers.
- Institution of Water Engineers.
- London County Council.
- National Association of Heating, Ventilating and Domestic Engineering Employers.
- National Association of Coke and By-product Plant Owners.
- Manufacturers of Steel Tubes.

FOREWORD.

The desirability of preparing a British Standard Specification for steel tubes has been under consideration for several years, but difficulties which were experienced in the formulation of a standard acceptable to both manufacturers and users led to the work being deferred.

Subsequently the Standards Association of Australia indicated that difficulties which were experienced in Australia in the purchase of such tubing from this country would be considerably diminished by the issue of a Standard Specification and that, moreover, such a Standard Specification was required for incorporation in the Australian Boiler Code.

In view of the fact that this particular type of tubing was not at that time manufactured in Australia, the Standards Association of Australia considered that it would be unwise for them to attempt to take the initiative in preparing such a Standard, and requested that the British Standards Institution should proceed with the preparation of a British Standard.

After careful consideration therefore the industry unanimously decided to proceed with the preparation of a British Standard Specification.

This Specification has been formulated with the full concurrence of the statutory authorities, users and manufacturers.

This Specification requires reference to the following British Standards :—

- No. 21. Pipe Threads.
- No. 729. Testing of the Zinc Coating on Galvanised Articles.

In order to keep abreast of progress in the Industries concerned, the British Standards are subject to periodical review.

Suggestions for improvements, addressed to the British Standards Institution, 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 Publications to which they refer.

Note :—For Wrought Iron Tubes and Tubulars, see B.S. No. 788.

NOTE.—The Institution 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.

5

BRITISH STANDARD
SPECIFICATION

FOR

STEEL TUBES AND TUBULARS
FOR
GAS (LIGHT), WATER (MEDIUM) AND STEAM (HEAVY) QUALITIES.

10

PART 1. GENERAL.

Scope.

1. This Specification applies to welded and weldless, screwed and socketed steel tubes and tubulars and plain end steel tubes of nominal bores from $\frac{1}{8}$ in. to 6 in. inclusive. It does not apply to plain end pipes for water and gas which fall within the scope of 15 B.S. No. 534; Steel Spigot and Socket Pipes for Water, Gas and Sewage. The requirements of the present Specification are applicable to tubes which would come within its scope if screwed and socketed.

Definitions.

2. For the purpose of this Specification, the following definitions have been adopted.

- (a) *Tube*.—The term "tube" denotes a straight tube of uniform bore.
- (b) *Socket*.—The term "socket" denotes the coupling 25 utilised in jointing the tubes together.
- (c) *Tubular*.—The term "tubular" covers pieces, long-screws, bends and springs, "cur" bends and barrel nipples, as are described in Part 3 and Table 6 of this Specification.
- (d) *Length*.—The length of a screwed and socketed "random 30 length" tube is the overall length when the socket has been screwed on.