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SPECIFICATION FOR

STEEL TUBES AND TUBULARS

SUITABLE FOR SCREWING TO BS 21 PIPE THREADS

BS 1387 : 1967

INCLUDING AMENDMENT 1/2358. 30/9/77.

Price 8/- net

BRITISH STANDARDS INSTITUTION

INCORPORATED BY ROYAL CHARTER

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THIS BRITISH STANDARD, having been approved by the Mechanical Engineering Industry Standards Committee and endorsed by the Chairman of the Engineering Divisional Council, was published under the authority of the General Council on 21st March, 1967.

First published (as BS 789), February, 1938.
First revision (as war emergency BS 789A), October, 1940.
Second revision (as BS 1387), July, 1947.
Third revision, November, 1957.
Fourth revision, March, 1967.

The Institution desires to call attention to the fact that this British Standard does not purport to include all the necessary provisions of a contract.

This standard makes reference to the following British Standards:

BS 18. Methods for tensile testing of metals. Part 4 Steel tubes.
BS 21. Pipe threads.
BS 1740. Wrought pipe fittings, iron and steel (screwed B.S.P. thread).
BS 3894. Method for converting elongation values for steel. Part 1. Carbon and low alloy steels.

British Standards are revised, when necessary, by the issue either of amendment slips or of revised editions. It is important that users of British Standards should ascertain that they are in possession of the latest amendments or editions.

The following BSI references relate to the work on this standard:
Committee reference MEE/45 Draft for comment D65/9648

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CO-OPERATING ORGANIZATIONS

The Mechanical Engineering Industry Standards Committee, under whose supervision this British Standard was prepared, consists of representatives from the following Government departments and scientific and industrial organizations:

Associated Offices' Technical Committee
Association of Consulting Engineers
Association of Mining Electrical and Mechanical Engineers
Board of Trade
British Chemical Plant Manufacturers' Association
British Compressed Air Society
British Electrical and Allied Manufacturers' Association
British Gear Manufacturers' Association
British Internal Combustion Engine Manufacturers' Association
*British Iron and Steel Federation
British Mechanical Engineering Federation
British Railways Board
*Crown Agents for Oversea Governments and Administrations
Electricity Council, the Central Electricity Generating Board and the Area Boards in England and Wales
Engineering Equipment Users' Association
*Gas Council
Institute of Marine Engineers
Institution of Civil Engineers
*Institution of Gas Engineers
*Institution of Heating and Ventilating Engineers
*Institution of Mechanical Engineers
Institution of Mechanical Engineers (Automobile Division)
Institution of Production Engineers
Locomotive and Allied Manufacturers' Association of Great Britain
London Transport Board
Machine Tool Trades Association
Ministry of Defence, Army Department
Ministry of Defence, Navy Department
Ministry of Labour, H.M. Factory Inspectorate
Ministry of Power
Ministry of Public Building and Works
Ministry of Technology, National Engineering Laboratory
Ministry of Transport
National Coal Board
National Physical Laboratory (Ministry of Technology)
Radio Industry Council
Royal Institute of British Architects

The scientific and industrial organizations 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:

Gas List Tube Association
Heating and Ventilating Contractors' Association
Institute of Petroleum
Institute of Plumbing
Institute of Refrigeration
Institution of Chemical Engineers
Institution of Municipal Engineers
Institution of Public Health Engineer
Institution of Water Engineers
Metropolitan Water Board
Royal Institution of Naval Architects
Royal Society for the Promotion of Health
Individual firms

BRITISH STANDARD SPECIFICATION FOR

STEEL TUBES AND TUBULARS SUITABLE FOR SCREWING TO BS 21 PIPE THREADS

FOREWORD

A British Standard for steel tubes and tubulars was first issued in 1938 as BS 789. In 1947 a revised edition with the present number BS 1387 was issued. A further revision taking account of ISO 50* and 65† was issued in 1957.

The present revised standard includes running nipples and close taper nipples which are no longer covered by BS 1740‡. The minimum outside diameters of sockets have been brought into line with those agreed for fittings to BS 1740. The opportunity has been taken to revise other clauses to bring the standard into line with present practice.

Throughout this standard metric values are shown alongside the British values. These are either corresponding values taken from the relevant ISO Standard or, where these are not applicable, approximate values. Whilst the metric values are not necessarily exact values, they do, for the purpose of this standard, ensure practicable interchangeability.

The 3½ in nominal size is not in great demand and has been deleted from the standard.

Attention is drawn to the fact that 6½ in (165·1 mm) outside diameter is no longer a British or International Standard for plain end tubes and should be used only where screwing to BS 21 is unavoidable. Where 6 in (150 mm) nominal size is required, 6⅝ in (168·3 mm) outside diameter should be used screwed to ASA B2.1§ or API 5B‖, as recommended in ISO 64¶, or using other forms of joints.

Existing British Standard Codes of Practice for building relating to town gas and water, and also the relevant bye-laws, preclude the use of light tubes for these services.

NOTE. This British Standard does not indicate the services for which the tubes are appropriate. Where the use of tubes is not controlled by bye-laws or regulations, reference should be made to the appropriate Code of Practice or application standard.

* ISO 50, 'Steel sockets screwed in accordance with ISO/R 7. Minimum lengths'. This Recommendation gives the corresponding metric dimensions to the inch values.

† ISO 65, 'Steel tubes suitable for screwing in accordance with ISO/R 7'. This Recommendation gives the corresponding metric dimensions to the inch values.

‡ BS 1740, 'Wrought pipe fittings, iron and steel (screwed B.S.P. thread)'.

§ ANSI B2.1, 'Pipe threads'.

‖ API 5B, 'Specification for line pipe threads'.

¶ ISO 64, 'Steel tubes. Outside diameters'.

SPECIFICATION

1. GENERAL

1.1 SCOPE

This British Standard applies to welded and seamless, screwed and socketed steel tubes and tubulars, and to plain end steel tubes suitable for screwing to BS 21 pipe threads of nominal bores from ⅛ in (6 mm) to 6 in (150 mm) inclusive. Three thicknesses of tube are provided for as specified in Tables 1, 2 and 3 and are designated *Light*, *Medium* and *Heavy*.

1.2 DEFINITIONS

For the purposes of this British Standard the following definitions apply:

(1) *Tube.* A straight tube of uniform bore.

NOTE. The term ' tube ' is synonymous with the term ' pipe '.

(2) *Socket.* The screwed coupling utilized in jointing the tubes together.

NOTE. The term ' socket ' is synonymous with the term ' coupler '.

(3) *Tubulars.* Pieces, nipples, longscrews, bends, springs and return bends, as described in Section 3 and in Tables 5 to 9.

(4) *Length. a.* Of a screwed and socketed ' random length ' tube. The overall length when one socket has been screwed on.

b. Of a screwed and socketed ' exact length ' tube. The length of the tube exclusive of the socket.

(5) *Nominal bore.* A size reference denoting the approximate bore of the tube. For each size of tube, the outside diameter is fixed by the corresponding screw thread dimensions of BS 21*, therefore the actual bore of each size of tube will vary according to the thickness.

1.3 DESIGNATION

The tubes and tubulars shall be designated by their nominal bores. Sockets and backnuts shall be designated by the respective nominal bores of the tubes for which they are intended.

1.4 INFORMATION REQUIRED WITH ENQUIRY AND ORDER

When the purchaser desires to witness the mechanical or other tests, or to receive certificates that the tubes or tubulars conform in all respects to the appropriate requirements of this standard, he shall state this in his enquiry and order. He shall also state whether he requires the galvanizing test (see 2.7) to be carried out.

* BS 21, ' Pipe threads '.