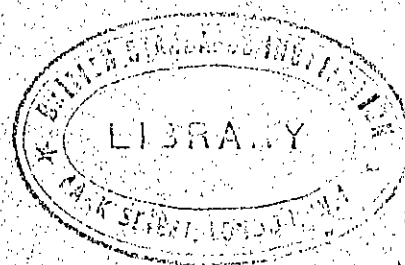


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**Specification for
Dimensions and masses per
unit length of welded and
seamless steel pipes and tubes
for pressure purposes: metric units**



WITHDRAWN

**Gr 6
British Standards Institution**

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Committee reference ISE/63

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- | | |
|---|---|
| British Cast Iron Research Association | Institution of Production Engineers |
| British Constructional Steelwork Association | Institution of Structural Engineers |
| British Ironfounders' Association | *Lloyd's Register of Shipping |
| British Mechanical Engineering Confederation | Ministry of Defence |
| *British Steel Industry | *Ministry of Defence (Army Department) |
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| Institute of Iron and Steel Wire Manufacturers | Tin Research Institute |
| Institute of Marine Engineers | |
| Institution of Mechanical Engineers (Automobile Division) | |

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- | | |
|--|--|
| Association of Hydraulic Equipment Manufacturers | Heating and Ventilating Contractors' Association |
| British Compressed Air Society | Institution of Civil Engineering |
| British Railways Board | Institution of Gas Engineers |
| British Waterworks Association | Institution of Heating and Ventilating Engineers |
| British Welded Steel Tube Manufacturers' Association | Institution of Mechanical Engineers |
| Electricity Council, The Central Electricity Generating Board and the Area Boards in England and Wales | London Transport Executive |
| | Ministry of Defence (Navy Department) |
| | National Coal Board |
| | Water Tube Boilermakers' Association |
| | Welding Institute |
| | Individual firms |

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Telephone 01-629 9000
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Foreword

This standard has been prepared under the authority of the Iron and Steel Industry Standards Committee and is based on international agreements included in the ISO Recommendations that are detailed in Appendix A. The tabular information, covering the dimensions and masses per unit length of welded and seamless steel pipes and tubes for pressure purposes given in this specification, replaces the data given in the imperial unit editions of BS 3601, 'Steel pipes and tubes for pressure purposes. Carbon steel: ordinary duties' (Appendix A), BS 3602, 'Steel pipes and tubes for pressure purposes. Carbon steel: high duties' (Appendices C and D), BS 3603, 'Steel pipes and tubes for pressure purposes. Carbon and alloy steel: low temperature duties' (Appendix B), BS 3604, 'Steel pipes and tubes for pressure purposes. Low and medium alloy steel' (Appendix B) and BS 3605, 'Seamless and welded austenitic stainless steel pipes and tubes for pressure purposes' (Appendix A). The information included in these Appendices is being deleted by amendment action simultaneously with the publication of this standard.

This standard also presents, within a single cover, dimensions and masses which will be applicable to the metric editions of BS 3601 to BS 3605 inclusive when these are published thus ensuring a smooth transitional period between the imperial and metric editions of these standards.

For the purpose of this standard, no difference is intended in the meaning between 'pipe' and 'tube' although idiomatic use prefers sometimes the one and sometimes the other.

British Standard Specification for

Dimensions and masses per unit length of welded and seamless steel pipes and tubes for pressure purposes: metric units

Specification

1. Scope

This British Standard covers the dimensions and masses per unit length applicable to steel pipes complying with the requirements of BS 3601, 3602, 3603, 3604 and 3605. The dimensional limitations for particular manufacturing processes are given in the appropriate standard in the BS 3601 — 5 series.

NOTE 1. The sizes listed in this standard have been selected from ISO Recommendations as appropriate to British practice.

NOTE 2. The dimensions of butt-welded pipes and of service pipes with screwed and socketed form of joint, or with plain ends and suitable for screwing, are covered in BS 1387. The dimensions of tubes for boilers and similar plant are covered in BS 3059.

NOTE 3. This standard does not apply to pipes for oil and natural gas pipelines, which are normally specified to the dimensions shown in API standards, nor to pipes for the petroleum industry for which reference should be made to BS 1600, Parts 1 and 2.

NOTE 4. The titles of the British Standards referred to in this standard are listed on the inside back cover.

2. Nominal pipe sizes

Pipes as detailed in Tables 1, 2 and 3 may be specified by nominal sizes or by outside diameters, but **THE OUTSIDE DIAMETER SHALL ALWAYS BE QUOTED WHEN ORDERING.**

NOTE. It is common practice in standards for various forms of joints, fittings and flanges to designate the pipes by nominal size. The nominal size is a convenient round number for reference purposes which is normally only loosely related to the manufacturing size.

3. Corresponding values

ISO Recommendations for outside diameters and thicknesses of pipes are largely based on imperial dimensions because of the long established use of imperial dimensions internationally.

The dimensions in millimetres and in inches, given in Tables 1, 2 and 3, are considered to be 'corresponding values', although some of them are not exactly equivalent. In all cases, however, the dimensions ensure practical interchangeability.

4. Outside diameters, thicknesses and masses per unit length

The information given in Tables 1 to 5 has been selected from the ISO Recommendations and British Standards as detailed in Appendix A.

5. Inside diameters

In special cases, hot finished, cold finished, and hot finished and machined seamless pipes may be ordered to inside diameter and thickness by agreement between the purchaser and the manufacturer, (see the appropriate pipe standard). In such cases the requirements included in 2 do not apply.

6. Tolerances

The tolerances on diameters, thicknesses and lengths depend on the method of manufacture of the pipes and shall be as specified in the appropriate pipe standard.

Table 1. Welded and seamless carbon and alloy steel pipes. Dimensions and masses per unit length

[illegible]

FOOTNOTES TO TABLE 1.

The use of terms alone should be avoided whenever possible.

* The use of these sizes should be avoided whenever possible.

NOTE 1. Seamless pipes with outside diameters of 114.3 mm (4.500 in) up to and including 457 mm (18.0 in) can also be obtained in thicknesses up to 25 % of the outside diameter.

NOTE 2. Welded pipes with outside diameters greater than 1016 mm (40.0 in) can also be obtained in thicknesses of 28.0 mm (1.10 in), 30.0 mm (1.18 in) or 32.0 mm (1.26 in).

NOTE 3. Pipes for special applications with dimensions other than those listed in this table may be supplied by agreement between the purchaser and the manufacturer.

NOTE 4. The figures in parentheses are not included in ISO/R 336, 'Plain end steel tubes, welded or seamless. General table of dimensions and masses per unit length'.