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Australian Standard 1074–1980

STEEL TUBES AND TUBULARS

THREADED OR SUITABLE FOR THREADING WITH PIPE THREADS OF WHITWORTH FORM

STANDARDS ASSOCIATION OF AUSTRALIA
Incorporated by Royal Charter

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THE FOLLOWING SCIENTIFIC, INDUSTRIAL AND GOVERNMENTAL ORGANIZATIONS and departments were officially represented on the committee entrusted with the preparation of this standard:

Australian Gas Association

Bureau of Steel Manufacturers of Australia

Confederation of Australian Industry

Department of Housing and Construction

Department of Local Government, Queensland (Joint Committee)

Departments of Public Works

Federated Master Plumbers of Australia

Metal Trades Industry Association of Australia

Institution of Engineers, Australia

Water Supply Authorities

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AUSTRALIAN STANDARD

STEEL TUBES AND TUBULARS

THREADED OR SUITABLE FOR THREADING WITH PIPE THREADS OF WHITWORTH FORM

AS 1074—1980

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PREFACE

This standard was prepared by the Association's Committee on Steel Pipes and Fittings—Water and Gas to supersede AS 1074—1976.

In this edition provision has been made for two additional methods of test, viz eddy current and ultrasonic testing, to supplement the hydrostatic test which may be specified by the purchaser. The format has also been changed to bring the standard into line with the current SAA editorial style.

Attention is drawn to the fact that 165·1 mm outside diameter is no longer a British or international standard size for plain end tubes and should be used only where threading to AS 1722* is unavoidable. Where 150 mm nominal size is required, 168·3 mm outside diameter should be used, threaded to ANS B2.1†, or API 5B‡, as recommended in ISO 64§, or using other forms of joint.

This standard does not indicate the services for which the tubes are appropriate. Where the use of tubes is not controlled by by-laws or regulations, reference should be made to the appropriate code of practice or application standard. Some codes of practice for building relating to town gas and water, and also the relevant bylaws, preclude the use of light tubes for these services.

The metric units adopted in this standard are those of the International System (SI). Values for pressure and stress are given in pascals (Pa) which is a special name recommended by the International Committee on Weights and Measures for the unit 1 N/m^2.

This standard may require reference to the following:

AS 1000	The International System of Units (SI) and Its Application
AS 1391	Methods for Tensile Testing of Metals
AS 1650	Galvanized Coatings on Ferrous Articles
AS 1722	Pipe Threads of Whitworth Form Part 1—Sealing Pipe Threads
AS 1835	Seamless Steel Tubes for Pressure Purposes
AS 1836	Welded Steel Tubes for Pressure Purposes
AS 2084	Methods for Eddy Current Testing of Metal Bar and Tubular Products
BS 3894	Methods for Converting Elongation Values for Steel Part 1—Carbon and Low Alloy Steels
ISO 50	Metal Pipes—Steel Sockets Screwed According to ISO 7
ISO 65	Steel Tubes Suitable for Screwing in Accordance with International Standard ISO 7.

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* AS 1722, Pipe Threads of Whitworth Form: Part 1—Sealing Pipe Threads.
† ANS B2.1, Pipe Threads.
‡ API 5B, Specification for Line Pipe Threads.
§ ISO 64, Steel Tubes: Outside Diameters.

CONTENTS

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard for STEEL TUBES AND TUBULARS THREADED OR SUITABLE FOR THREADING WITH PIPE THREADS OF WHITWORTH FORM

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This standard specifies requirements for welded and seamless, threaded and socketed steel tubes and tubulars, and to plain end steel tubes suitable for screwing to AS 1722, Part 1, and of nominal sizes 6 to 150 inclusive. Three thicknesses of tube are provided for, as specified in Appendix A and designated Light, Medium and Heavy.

NOTE: Guidelines to purchasers on requirements that must be specified by the purchaser or agreed upon at the time of enquiry or order are given in Appendix C.

1.2 DEFINITIONS. For the purpose of this standard, the following definitions apply:

1.2.1 Tube — a straight tube of uniform internal diameter, as described in Section 2 and specified in Tables A1, A2 and A3 of Appendix A.

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

1.2.2 Socket — the threaded coupling utilized in jointing the tubes together, as described in Section 2 and specified in Table B1 of Appendix B.

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

1.2.3 Tubulars — pieces, nipples, longscrews, bends, springs and return bends, as described in Section 3 and specified in Tables B2 to B6 of Appendix B.

1.2.4 Length:

(a) Of a threaded and socketed 'random length' tube—the overall length when one socket has been screwed on.

(b) Of threaded and socketed 'exact length' tube —the length of the tube exclusive of the socket.

1.2.5 Nominal size — the size reference denoting the approximate internal diameter of the tube. For each size of tube, the outside diameter is fixed by the corresponding screw thread dimensions of AS 1722, Part 1, therefore the actual internal diameter of each size of tube will vary according to the thickness.

1.3 DESIGNATION. The tubes and tubulars shall be designated according to their nominal sizes. Sockets and backnuts shall be designated according to the respective nominal sizes of the tubes for which they are intended.