AS 2074—1982

Australian Standard®

STEEL CASTINGS

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Australasian Institute of Metals
Australian Foundry Institute
Bureau of Steel Manufacturers of Australia
Confederation of Australian Industry
Department of Defence
Department of Industry and Commerce
Institute of Steel Service Centres of Australia
Metal Trades Industry Association of Australia
Railways of Australia Committee
Society of Automotive Engineers— Australasia

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PREFACE

This edition of this standard was prepared under the direction of the Association's Committee on Iron and Steel by its subcommittee on steel castings, to supersede AS 2074—1977. It applies in particular to carbon, low alloy and high alloy steel in the form of castings, intended for use in pressure vessels, railway and general engineering applications.

In this edition, several new grades have been included for use at elevated temperatures and are applicable to the SAA Boiler Code (AS 1200). In this regard, cognizance was taken of BS 1504, Steel Castings for Pressure Purposes. Provision has also been made for an additional precipitation hardening grade (AS 2074/H7B), and both grades conform to ASTM A 747, Precipitation Hardening Stainless Steel Castings. The subcommittee considered the inclusion of an appendix dealing with non-destructive examination of castings in relation to quality, and categorizing quality levels as is done in BS 1504. However, it was decided to defer this inclusion until the draft Australian standard dealing with non-destructive testing of steel castings was finalized.

Appendix A presents purchasing guidelines and directs attention to matters requiring consideration at the time of enquiry and/or order. Appendix B provides guidance on the selection of grades for specific applications and summarizes the chemical composition and tensile properties of the grades. For the general principles and procedures which should be followed in welding steel castings, reference should be made to AS 1988, Code of Practice for Fusion Welding in the Production, Rectification and Repair of Steel Castings.

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