

AS 1449—1994

Australian Standard[®]

**Wrought alloy steels—Stainless
and heat-resisting steel plate,
sheet and strip**

[Defence Title allocated by Codification and Standardisation Authority:
METAL PLATE, SHEET, STRIP (STAINLESS AND HEAT
RESISTING STEEL IN COILS AND CUT LENGTHS
NATO Supply classification 9515]

This Australian Standard was prepared by Committee MT/1, Iron and Steel. It was approved on behalf of the Council of Standards Australia on 27 October 1993 and published on 17 January 1994.

The following interests are represented on Committee MT/1:

Australian Chamber of Commerce and Industry
Australian Chamber of Manufactures
Australian Foundry Institute
Australian Institute of Steel Construction
Bureau of Steel Manufacturers of Australia
Department of Defence
Institute of Metals and Materials Australasia
Metal Trades Industry Association of Australia
Railways of Australia Committee
Society of Automotive Engineers, Australasia

Review of Australian Standards. To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

This Standard was issued in draft form for comment as DR 92181.

AS 1449—1994

Australian Standard[®]

**Wrought alloy steels—Stainless
and heat-resisting steel plate,
sheet and strip**

First published as AS G31—1971.
Revised and redesignated AS 1449—1978.
Second edition 1980.
Third edition 1994.

Incorporating:
Amdt 1—1994

PUBLISHED BY STANDARDS AUSTRALIA
(STANDARDS ASSOCIATION OF AUSTRALIA)
1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 8723 7

PREFACE

This Standard was prepared under the direction of the Multitechnics Standards Policy Board by the Standards Australia Committee on Iron and Steel to supersede AS 1449—1980. In this edition several alloys have been added to meet the requirements of industry.

The alloy compositions and mechanical properties specified in this Standard are equivalent to their counterparts in ASTM A240:90, *Standard specification for heat-resisting chromium and chromium-nickel stainless steel plate, sheet, and strip for pressure vessels*. The unified numbering system (UNS) alloy designations have been included for information purposes and to bring the Standard into alignment with the requirements of AS 1210—1989, *SAA Unfired Pressure Vessels Code*.

The term ‘informative’ has been used in this Standard to define the application of the appendix to which it applies. An ‘informative’ appendix is only for information and guidance.

© Copyright — STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

CONTENTS

	<i>Page</i>
1 SCOPE	4
2 REFERENCED DOCUMENTS	4
3 DEFINITIONS	5
4 DESIGNATION OF GRADE	5
5 CONDITION OF STEEL ON DELIVERY	6
6 CHEMICAL COMPOSITION	7
7 FREEDOM FROM DEFECTS	7
8 MECHANICAL PROPERTIES	7
9 MECHANICAL TESTS	7
10 INTERGRANULAR CORROSION TEST FOR AUSTENITIC STAINLESS STEELS	8
11 MANUFACTURING TOLERANCES	8
12 ROUNDING OF TEST RESULT VALUES	9
13 MARKING	9
 APPENDICES	
A PURCHASING GUIDELINES	21
B MEANS FOR DEMONSTRATING COMPLIANCE WITH THIS STANDARD	22
C SURFACE FINISHES AVAILABLE FOR ROLLED STAINLESS AND HEAT-RESISTING STEELS	24
D TYPICAL MECHANICAL PROPERTIES OF STEEL IN THE SOFTENED CONDITION FOR GRADES LISTED IN TABLE 7	26

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-