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Australian Standard®

Structural steel

Part 2: Welded sections

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Welded I sections
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production and supply of
welded I sections for general
structural and engineering
purposes.
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STANDARDS AUSTRALIA



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Australian Institute of Steel Construction
AUSTROADS
Bureau of Steel Manufacturers of Australia
Confederation of Australian Industry
Institute of Steel Service Centres of Australia
Metal Trades Industry Association of Australia
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Structural steel

Part 2: Welded sections

First published as AS 3679.2—1991.

PREFACE

This Standard was prepared by the Standards Australia Committee on Structural Steel to become Part 2 of AS 3679. It was decided to produce the Standard to complete the series of product-based Standards on structural steel sections.

This Standard is based on specific parts of AS 1554.1, AS 3678 and AS 3679.1 to cover a general purpose product.

This has enabled a suitable meshing of both specific welding practices, steel types and manufacturing tolerances in order to maintain consistency with existing products produced by a manufacturing process where the end use is not known at the time of manufacture.

CONTENTS

	<i>Page</i>
1 SCOPE	3
2 REFERENCED DOCUMENTS	3
3 DEFINITIONS	3
4 DESIGNATION	4
5 CHEMICAL COMPOSITION	4
6 DIMENSIONS	4
7 DENSITY	4
8 MANUFACTURING TOLERANCES	4
9 PRODUCTION WELDING	11
10 TESTS FOR TENSILE AND IMPACT SPECIMENS	11
11 MECHANICAL TEST REQUIREMENTS	11
12 FREEDOM FROM DEFECTS	11
13 ROUNDING OF NUMBERS	12
14 MARKING	12
APPENDICES	
A PURCHASING GUIDELINES	13
B MEANS FOR DEMONSTRATING COMPLIANCE WITH THIS STANDARD	14
C MEASUREMENT OF CAMBER AND SWEEP IN WELDED SECTIONS	17

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STANDARDS AUSTRALIA

Australian Standard Structural steel

Part 2: Welded sections

1 SCOPE This Standard specifies technical requirements for the production and supply of welded I-type steel sections for structural and engineering purposes in—

- (a) ordinary weldable grades; and
- (b) weather resistant weldable grades.

This Standard does not cover the following:

- (i) Structural steel—Hot-rolled bars and sections (see AS 3679.1).
- (ii) Structural steel—Hot-rolled plates, floorplates and slabs (see AS 3678).
- (iii) Carbon steels and carbon-manganese steels—Hot-rolled bars and semi-finished products (see AS 1442).
- (iv) Structural steel hollow sections (see AS 1163).
- (v) Steel reinforcing bars for concrete (see AS 1302).

NOTES:

- 1 For guidelines on information to be supplied at the time of enquiry or order, see Appendix A.
- 2 Alternative means for demonstrating compliance with this Standard are given in Appendix B.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

- 1050 Methods for the analysis of iron and steel
- 1163 Structural steel hollow sections
- 1171 Methods for magnetic particle testing of ferromagnetic products and components
- 1199 Sampling procedures and tables for inspection by attributes
- 1213 Iron and steel—Methods of sampling
- 1302 Steel reinforcing bars for concrete
- 1365 Tolerances for flat-rolled steel products
- 1399 Guide to AS 1199—Sampling procedures and tables for inspection by attributes
- 1442 Carbon steels and carbon-manganese steels—Hot-rolled bars and semi-finished products
- 1554 SAA Structural Steel Welding Code
- 1554.1 Part 1: Welding of steel structures
- 2062 Methods for non-destructive penetrant testing of products and components
- 2490 Sampling procedures and charts for inspection by variables for percent defective
- 2706 Numerical values—Rounding and interpretation of limiting values
- 3678 Structural steel—Hot-rolled plates, floorplates and slabs
- 3679 Structural steel
- 3679.1 Part 1: Hot-rolled bars and sections
- 3900 Quality systems—Guide to selection and use
- 3901 Quality systems for design/development, production, installation and servicing
- 3902 Quality systems for production and installation
- 3903 Quality systems for final inspection and test
- 3904 Quality management and quality system elements
- K1 Methods for the sampling and analysis of iron and steel

ISO

Guide 44 General rules for ISO or IEC international third-party certification schemes for products

AWRA Technical Note 5—Flame Cutting of Steels

3 DEFINITIONS For the purpose of this Standard, the definitions below apply.

3.1 Sections—I-type sections produced by automatic welding processes from three individual plate components with trimmed edges and dimensions as shown in Figures 1 and 2.