
SECTION SP60 STRUCTURAL STEEL PRODUCTS

1 GENERAL

1.1 CONTENTS

OUTLINE: Section SP60 sets out the technical requirements for the manufacture and supply of structural steel products, for application in buildings, civil works, rail and similar public infrastructure, either loose or incorporated in fabrications or other finished products.

1.2 STANDARDS

PRODUCTS: The structural steel products and their Standards included herein are:

- [S1] Cold-formed structural steel hollow sections: AS/NZS 1163;
- [S2] Hot-rolled steel flat products: AS/NZS 1594;
- [S3] Structural steel - Hot-rolled plates, floor plates and slabs: AS/NZS 3678;
- [S4] Structural steel - Hot-rolled bars and sections: AS/NZS 3679.1;
- [S5] Structural steel - Welded I sections: AS/NZS 3679.2.

1.3 PACKAGING, STORAGE AND TRANSPORT

REQUIREMENT: At all times, all structural steel to be protected against damage and be accessible for inspection, sampling and identification purposes.

1.4 TERMS & DEFINITIONS

CONFORMITY: Wherever possible, terms from ISO/IEC Directives, Part 2 [see SG-006] are adopted.

AUSTRALIAN DISTRIBUTOR: An entity (corporation or otherwise) based in Australia, including but not limited to an Australian manufacturer, overseas manufacturers local representative, wholesaler, importer, primary distributor (stockist) or contractor, which has the responsibility for verifying that the products comply with Section SP60.

PRODUCT ACRONYMS: The following acronyms are examples of products included in the Standards:

- S1 Products: cold formed hollow sections, rectangular (RHS), circular (CHS), square (SHS)
- S2 & S3: No acronyms in common use.
- S4 Products: hot-rolled universal beams (UB), universal columns (UC), equal angles (EA)
- S5 Products: welded beams (WB), welded columns (WC)

2 CONFORMITY

2.1 QUALITY MANAGEMENT SYSTEM

STANDARD: To ISO 9001 and the following with the certifier accredited by JAS-ANZ or recognized by JAS-ANZ through the IAF multilateral recognition arrangement:

- Verification or validation at the external providers' premises is required. (Clause 8.4.3f).
- The scope of certification to include 'delivery'. (Clause 8.5.1h).
- Traceability is required. (Clause 8.5.2).
- Scope of certification to include the provision of products relevant to the procurement objectives.

2.2 CONFORMITY ASSESSMENT

REQUIREMENT: To 'ATIC Scheme 10, 2nd Edition'.

Accepted Certification Body: The accredited Certification Bodies [CB] for ATIC Scheme 10, are posted on the following website:

Joint Accreditation System of Australia and New Zealand [JAS-ANZ] www.jas-anz.org/register

AUSTRALIAN DISTRIBUTOR: To provide the following:

- Manufacturer's test certificate(s) as required by the Standard(s)
- Identification and traceability of product(s) to the Standard(s) and the test certificate(s).
- Signed and dated approval by a verifying officer, including position, company and contact details.

ADDITIONAL SAMPLING & TESTING: Customer may specify in the Project Specifics [see Clause 5.4].

3 MATERIALS

3.1 GENERAL

REQUIREMENT: To the Standards listed in Clause 1.2 for each structural steel type or form.

3.2 RADIOACTIVE CONTAMINATION

REQUIREMENT: All raw materials or scrap steel used to be within the radioactive limits recommended by the IAEA Safety Guide RS-G-1.7, as selectively shown in Table 1. The becquerel (Bq/g), the SI unit of activity, is defined as one decay per second per gram.

**TABLE 1
ACTIVITY CONCENTRATION FOR RADIONUCLIDES**

Common Radionuclide Contaminates	Specific Activity Concentration (Bq/g)
Cobalt, Co-60	0.1
Caesium, Cs-137	0.1
All nuclides of natural origin	1.0

4 MANUFACTURE

4.1 GENERAL

REQUIREMENTS: To Section SP60 and the Standards listed in Clause 1.2 for each structural steel type or form.

4.2 MARKINGS

REQUIREMENTS: To be traceable back to the manufacturer.

5 SCHEDULES

5.1 REFERENCED DOCUMENTS

STANDARDS:

Where the issue date of a Standard is omitted below, the latest version shall be adopted. Also for ISO Standards, for clarity in the text, the prefixes 'AS/NZS', 'AS' are omitted.

- AS/NZS 1163 - Cold-formed structural steel hollow sections
- AS/NZS 1594 - Hot-rolled steel flat products
- AS/NZS 3678 - Structural steel – Hot-rolled plates, floor-plates and slabs
- AS/NZS 3679 - Structural steel
 - .1 - Hot-rolled bars and sections
 - .2 - Welded I sections

ISO 9001:2016 - Quality management systems - Requirements
(AS/NZS)

OTHER DOCUMENTS:

Safety Guide - International Atomic Energy Agency (IAEA) Safety Standards Series,
No. RS-G-1.7 Application of the Concepts of Exclusion, Exemption, and Clearance

SG-006 - Standardisation Guide 006: Rules for the Structure and Drafting of Australian
Standards [Based on, but not equivalent to, ISO/IEC Directives, Part 2]

ATIC Scheme 10 - Structural Steel Products - Conformity Assessment
2019 (Ed 2)

[Note: The following steel products may later be included herein or in other SP Sections:

- Steel reinforcing (AS/NZS 4671)
- Steel prestressing (AS/NZS 4672)
- Railway track material – Steel rails (AS 1085.1)
- Steel sheet and strip (AS 1397)
- Cold-rolled, unalloyed, steel sheet and strip (AS/NZS 1595)
- Structural and pressure vessel steel – Quenched and tempered plate (AS 3597)
- Fasteners, all types (see ATIC-SPEC, Section SP39)]

5.2 COMPONENT SUPPLY

GENERAL: [For later use, as required.]

5.3 PROJECT SPECIFICS

[Note: For each structural steel product required, select from, add to, or modify the following, and insert in project specs and/or purchase orders.]

STRUCTURAL STEEL: Supply the nominated products to the following and in compliance with Section SP60:

ITEM	PROJECT REQUIREMENTS
Common name/form of structural steel products [eg: S1: cold formed RHS, CHS SHS S2: plate, floor plate, sheet, strip, slit strip S3: hot-rolled plate, floorplate, slab S4: hot-rolled UB, UC, UA S5: welded WB, WC]	
Standards [see Clause 1.2]	
Steel grade [check in nominated Standard]	
Sizes and dimensions	
Corrosion protection: [eg: precoat for plates]	
Any additional sampling & testing	
Components to be included [see Clause 5.2]	
Description of any fabrications required	
Conformity Assessment to ATIC Scheme 10	
Manufacturer’s test compliance certificates	Australian Distributor to supply [see Clause 2.2]
Australian Distributor’s verification	Australian Distributor to supply [see Clause 2.2]

5.4 AGENCY PRACTICES

GENERAL: [For later use, as required.]

Agency	Item	Requirement
RMS		
Qld DTMR		
VicRoads		
NSW Public Works		
NSW RailCorp		