

CICA HOIST SECTOR FAQS - RELEVANT STANDARDS / REGULATIONS

A. How do I find Australian Standards for cranes?

Summary: SAI Global is the publisher for Australian Standards, <http://infostore.saiglobal.com/store/>. CICA Members have FREE access through SAI Global to Australian Standards that relate to hoists, bridge and gantry cranes, and lifting equipment as part of membership.

The first place everyone looks today is Google. A search of “Australian Standards for cranes” will result in a relevant list.

SAI Global is the publisher for Australian Standards. Their website for searching standards is <http://infostore.saiglobal.com/store/>. Any Australian Standard and relevant International Standard can be searched from this website.

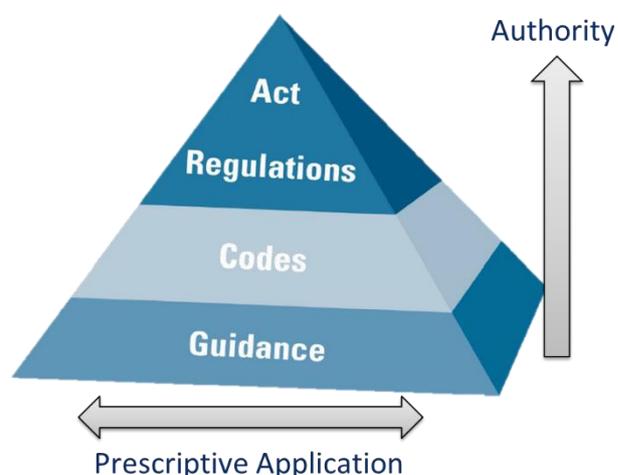
Australian Standards are copyright protected. On SAI Global’s website standards can be purchased in hardcopy or electronic form and for individual or corporate use.

CICA Members have FREE access to over 25 Australian Standards that relate to cranes and lifting equipment as part of membership. This includes Australian Standards for Hoists and Bridge and Gantry Crane Design and Safe Use.

B. Hierarchy of Standards / Regs?

Summary: The regulatory framework in Australia is easily viewed geometrically as a pyramid following the order of ACT, Regulations, Codes of Practice and Guidance.

At the top of the pyramid is the National Work Health and Safety Act. The Act has been adopted in ACT, NSW, QLD, NT, SA and TAS. VIC and WA retained their existing OHS Acts.



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*This Act is governs the intent and scope of Work Health and Safety in Australia. It has the highest level of Authority, but also provides the least amount of information for employers and employees to understand how Work Health and Safety should be implemented. One layer below the Act are the WHS Regulations. The Act and Regulations are publicly available from Safe Work Australia's website:
<http://www.safeworkaustralia.gov.au/sites/swa/about/publications/pages/model-whs-regulations>*

The Regulations give more detail and prescription about how the Act is intended to be implemented. The fines associated with not following the regulations are also provided in each section of the regulation. The Act and Regulations are law.

As we get closer to the base of the pyramid the Codes of Practice provide further guidance to users on what State WHS Regulators expect in their interpretation of the Act and Regulation. Codes of Practice are not law, but in court they carry evidentiary status and can be used to prosecute. Codes of Practice have traditionally only been developed and issues by WHS Regulators.

*At the bottom of the pyramid is guidance. Guidance can come from several sources. Regulators can provide guidance, CICA as the industry body can provide guidance, and Australian Standards can provide guidance. All are considered state of knowledge and any deviation requires justification by way of an equivalent or lower risk alternative. Link to Safe Work Australian Guidances:
<http://www.safeworkaustralia.gov.au/sites/swa/about/publications/pages/guidance-cranes>*

If a Standard is referred to in a Regulation it becomes a requirement, not guidance, as is the case in the WA OHS Regulation 4.54 and SA WHS Regulation Section 739.

C. What Standards apply to what with respect to Hoists / Fixed Cranes?

Summary: Common standards for hoist and fixed cranes are AS2550.1, AS2550.3 for safe use; AS1418.1, AS1418.3 and AS1418.18 for design.

Definitions (from AS2549):

Crane: *An appliance intended for raising or lowering a load and moving it horizontally, but does not include an industrial lift truck, earthmoving machinery, amusement structure, a tractor, an industrial robot, a conveyor, a suspended scaffold or a lift;*

Hoist: *An appliance intended for raising and lowering a load or people vertically and without slewing which includes a mast climbing work platform, personnel and*

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materials hoist, scaffolding hoist and serial hoist but does not include a lift or building maintenance equipment.

Shall: Indicates that compliance with a statement is mandatory for compliance with the objectives and intent of the Standard.

Should: Indicates a recommendation. Neither following nor ignoring the recommendation results in non-compliance with the Standard.

The AS1418 set governs the design and commissioning of all cranes, hoists and winches.

The AS2550 set governs the safe use of all cranes, hoists and winches.

AS1418.1 and 2550.1 are the “general purpose” standards which apply to all cranes, hoists and winches. These should be used where other Standards do not specifically govern the item or function you are looking at.

<i>Known As</i>	<i>Type</i>	<i>Design Standard</i>	<i>Operating Standard</i>
<i>Chain Block</i>	<i>Serial Hoist</i>	<i>AS1418.2</i>	<i>AS2550.3</i>
<i>Powered Hoist</i>			
<i>Monorail (not including the hoist)</i>	<i>Monorail</i>	<i>AS1418.18</i>	
<i>Runway of an Overhead Crane</i>	<i>Runway</i>		
<i>Collector systems for electric overhead travelling cranes</i>	<i>Collector Systems</i>	<i>AS1418.12</i>	<i>N/A</i>
<i>Bridge Crane</i>	<i>Overhead Travelling Crane</i>	<i>AS1418.3</i>	<i>AS2550.3</i>
<i>Gantry Crane</i>			
<i>Jib Crane</i>	<i>Slewing crane</i>		
<i>Portal Crane</i>	<i>Portal</i>		
<i>Container Crane</i>			
<i>Steel Wire Rope - Use, operation and maintenance Specifies procedure</i>	<i>Steel wire rope</i>	<i>N/A</i>	<i>AS2759</i>

*For information on different type of cranes, refer to [CICA FAQs – Types of Cranes/ Crane Definitions](#)

Safe Work Australian Guidelines provide information on how to manage the risks at a workplace associated with the inspection, maintenance and operation of cranes and other plant types.

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Title
05 Guide to Inspecting and Maintaining Cranes
06 Bridge and Gantry Cranes Information Sheet

There are several other Standards that are related to crane design and regulation, these standards are on CICA's Standard watch list.

D. Do I use Australian Standard 2550.1 or 2550.3?

Summary: Both. The individual part of the standard (i.e., for Bridge Cranes, that would be AS2550.3-2002), overrides the General Requirements of AS2550.1-2011, but AS2550.1 has general information for safely using cranes that is relevant to fixed cranes.

The Crane Standard 2550 was designed to cover a wide range of cranes and their applications. It is made up of the following parts:

- a. 2550.1 – 2011: Cranes, hoists and winches – Safe use – General requirements
- b. 2550.3 – 2002: Cranes, hoists and winches – Safe use – Bridge, gantry, portal (including container cranes), jib and monorail cranes
- c. 2550.4 – 2004: Cranes, hoists and winches – Safe use – Tower cranes
- d. 2550.5 – 2002: Cranes, hoists and winches – Safe use – Mobile cranes
- e. 2550.6 – 1995: Cranes – Safe use – Guided storing and retrieving appliances
- f. 2550.7 – 1996: Cranes – Safe use – Builders hoists and associated equipment
- g. 2550.9 – 1996: Cranes – Safe use – Vehicle hoists
- h. 2550.10 -2006 Cranes – Safe use – Elevating work platforms
- i. 2550.11 – 2004 Cranes, hoists and winches – Safe use – Vehicle Loading Cranes
- j. 2550.13 – 1997 Cranes – Safe use – Building maintenance units
- k. 2550.15 – 1994 Cranes – Safe use – Concrete placing equipment
- l. 2550.16 – 1997 Cranes – Safe use – Mast climbing work platforms
- m. 2550.19 – 2007 Cranes, hoists and winches – Safe use – Telescopic handlers
- n. 2550.20 – 2005 Cranes, hoists and winches – Safe use – Self erecting tower cranes

It is acknowledged that the individual part of the standard (i.e., for Bridge Cranes, that would be AS2550.3 2002), overrides the General Requirements of AS2550.1-2011. This

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is supported in the scope of AS2550.3, Section 1.1 where it states: 'It (this standard) is complementary to AS2550.1, but the requirements given herein take precedence'

To provide an example of this:

*In AS2550.1, Table F1 (Recommended Minimum Maintenance and Inspection Service Requirements) lists that Periodic third-party inspections **shall** be performed every 52 weeks. In table 7.2.1 of AS2550.3 (Recommended Maximum Period Between Maintenance/Inspection Services) it states that Third Party Inspections **should** be performed (optional) between 1 and 3 years dependent on the classification of the Crane. In this instance for Overhead Cranes, you would engage AS2550.3 as the primary standard.*

In addition of the above statement, as a reference, 2550.1-2011 is published in 2011 and 2550.3-2002 is published in 2002, 2550.1-2011 may contain more information on recent technology than 2550.3-2002.

E. Why should I follow Australian Standards?

Summary: Australian Standards are considered by Regulators and Legal Bodies as the minimum benchmark of a common "state of knowledge" for an industry.

Australian Standards are considered by Regulators and Legal Bodies as the minimum benchmark of a common "state of knowledge" for an industry. While following Australian Standards is not required, the burden of proof lies with the accused to provide evidence why Australian Standards were not followed.

Australian Standards are developed by a diverse committee of industry experts that consider what standard of design and safe use is applicable in Australia. Furthermore, Australian Standards are reviewed during development by the general public.

F. What standards are legislated?

Summary: Standards are legislated when they are referenced in a State OHS/WHS Regulations, for example, AS1418 is referenced in SA and WA regulations.

As mentioned earlier, Standards are not legislated in the National Work Health and Safety Regulations. Specific items, like Major Inspections, are defined in the Regulations and the content elaborated in Australian Standards.



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Australian Standards are referred to in the WA OHS Act. As an example, Section 4.54 of the WA OHS Regulations refers to AS2550 for the safe use of cranes.

G. Am I allowed to use a product that doesn't conform to Australian Standards?

Summary: It is wise to ensure that all items used in Australia are subject to the minimum requirements of the Australian Standard. External Standards could be used but must provide equivalent or higher level of safety.

The following is an excerpt from Standards Australia website FAQs:

'On their own, Standards have no legal status and no requirement for compliance by manufacturers, consumers or the public, hence the term 'voluntary standard'. Australian (ASA) or joint Australian/New Zealand (AS/NZS) Standards are often called up in State and Commonwealth legislation'

'The Commonwealth, State and Territory governments may choose to incorporate this Australian Standard into their occupational and safety law. The exact manner of incorporation will determine whether the whole document is incorporated. The manner of incorporation will determine which of the Standards requirements ('shall' statements) have been made a legal requirement in a jurisdiction. As a general principle, where an Australian Standard is incorporated by a regulation, the legal status of the Standards requirements and recommendation is made clear by the incorporation provisions of the regulation.

'Jurisdictions may also choose to incorporate this Australian Standard (either in whole or in part) in an Approved Code of Practice made under OH&S law. The purpose of an Approved Code of Practice is to provide practical guidance on how to meet the obligations arising from the enabling OH&S Act or regulations made under the Act.'

It is wise to ensure that all items used in Australia are subject to the minimum requirements of the Australian Standard for the item in question. If the items does not bear the mark of compliance to an Australian Standard but it has been assessed and meets the minimum requirements, then there is potential that the item could be used in Australia. If there was to be an incident with the item, there is the potential that the meeting of the minimum standard would have to be proven within a legal framework.