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## SAA CRANE CODE Part 9—VEHICLE HOISTS



**STANDARDS ASSOCIATION OF AUSTRALIA**  
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This Australian standard was prepared by Committee ME/5, Cranes. It was approved on behalf of the Council of the Standards Association of Australia on 11 February 1987 and published on 6 April 1987.

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The following interests are represented on Committee ME/5:

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Australian Crane Marketers Association Inc.  
Australian Institute of Building  
Bureau of Steel Manufacturers of Australia  
Confederation of Australian Industry  
Construction Equipment Importers and Manufacturers of Australia  
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**AUSTRALIAN STANDARD**

**CRANES (INCLUDING HOISTS AND  
WINCHES)  
known as the  
SAA CRANE CODE  
Part 9  
VEHICLE HOISTS**

**AS 1418.9—1987**

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## PREFACE

This standard was prepared by the Association's Committee on Cranes. It covers specific requirements for vehicle hoists and is to be read in conjunction with AS 1418.1, SAA Crane Code, Part 1—General Requirements.

In the preparation of the standard, cognizance was taken of comparable current standards in the United Kingdom and the United States of America.

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STANDARDS ASSOCIATION OF AUSTRALIA

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**Australian Standard**  
for  
**CRANES (INCLUDING HOISTS AND WINCHES)**

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**PART 9—VEHICLE HOISTS**

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SECTION 1. SCOPE AND GENERAL

**1.1 SCOPE.** This standard sets out requirements for the design, construction, and testing of wheel-supporting, axle-supporting, and frame-supporting vehicle hoists as defined in AS 2549, such hoists being capable of raising vehicles in a substantially horizontal plane to a height of not less than 0.5 m and not more than 2 m clear of the floor.

Other types of hoists used for the same purpose may be manufactured using other methods and systems of lifting. Such hoists would be expected to comply with the intent of these requirements. Movable type vehicle hoists, i.e. non-fixed hoists, shall not be used to transport loads.

The standard does not apply to vehicle jacks (AS 2693), trolley jacks (AS 2615), and vehicle roll-over equipment.

It is complementary to AS 1418.1, but the requirements specified herein take precedence over corresponding requirements in that standard.

**1.2 TYPES.** Vehicle hoists are normally fixed or movable types, with or without a platform(s), comprising a combination of at least one of each of the following features:

- (a) Structure—
  - (i) single post
  - (ii) two post
  - (iii) multipost
  - (iv) single and multicylinder.
- (b) Vehicle supporting medium—
  - (i) wheel
  - (ii) axle
  - (iii) frame.
- (c) Operating medium—
  - (i) hydraulic
  - (ii) pneumatic
  - (iii) mechanical
  - (iv) electrical.

**1.3 REFERENCED DOCUMENTS.** The following standards are referred to in this standard:

AS 1000 The International System of Units (SI) and Its Application

AS 1170	SAA Loading Code Part 2—Wind Forces
AS 1210	SAA Unfired Pressure Vessels Code
AS 1318	SAA Industrial Safety Colour Code
AS 1403	Design of Rotating Steel Shafts
AS 1418.1	SAA Crane Code Part 1—General Requirements
AS 1470	Health and Safety at Work—Principles and Practices
AS 1532	Short Pitch Transmission Precision Roller Chains and Chain Wheels
AS 1657	SAA Code for Fixed Platforms, Walkways, Stairways, and Ladders
AS 2549	Cranes—Glossary of Terms
AS 2615	Trolley Jacks
AS 2693	Vehicle Jacks
AS 2752	Preferred Numbers and Their Use.

**1.4 DEFINITIONS.** For the purposes of this standard, the definitions given in AS 2549 apply.

NOTE: Hoists of combined types and differing operating media have not been defined because of the multiplicity of combinations, but descriptions should generally be in accordance with Clause 1.2.

**1.5 RATING VALUES.** The nominal magnitude of the various performance characteristics of the vehicle hoists should comply with the R 10 series of preferred numbers specified in AS 2752, i.e. the following values and multiples of 10 thereof should be used:

1.00	3.15
1.25	4.0
1.6	5.0
2.0	6.3
2.5	8.0

**1.6 SAFE WORKING LOAD (SWL).** The safe working load, hoisting, where applicable, shall be expressed in tonnes, or in kilograms for values less than 1 t.

**1.7 RANGE OF HOISTING.** The nominal range of hoisting where applicable shall be expressed in metres.

**1.8 WORKING VELOCITIES.** The nominal working velocities where applicable shall be expressed in metres per second.