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SAA INDUSTRIAL TRUCK CODE Part 2—OPERATION



STANDARDS ASSOCIATION OF AUSTRALIA
Incorporated by Royal Charter



THE FOLLOWING SCIENTIFIC, INDUSTRIAL AND GOVERNMENTAL ORGANIZATIONS and departments were officially represented on the committee entrusted with the preparation of this standard:

Australian Chamber of Commerce
Australian Industrial Truck Association
Australian Road Transport Federation
Association of Employers of Waterside Labour
Confederation of Australian Industry
Department of Defence
Department of Industrial Relations, N.S.W.
Department of Labour and Industry, Victoria
Department of Productivity
Federal Chamber of Automotive Industries
Metal Trades Industry Association of Australia
Port of Melbourne Authority

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AUSTRALIAN STANDARD

**DESIGN, MANUFACTURE AND
OPERATION OF INDUSTRIAL TRUCKS
(known as the
SAA INDUSTRIAL TRUCK CODE)**

**Part 2
OPERATION**

AS 2359, Part 2—1980

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PREFACE

This standard was prepared by the Association's Committee on Industrial Trucks. It supersedes AS 1280—1972.

The preparation of this standard was prompted by the need for a nationally accepted standard covering the operation and maintenance of industrial trucks. It is complementary to AS 2359, Part 1, which covers the design and manufacture of industrial trucks.

Operation on rough terrain surfaces is not included in this standard, but will be the subject of another standard.

An appendix has been included to give guidance on atmosphere contaminants.

Reference is made in this standard to the following standards:

- AS 1158 SAA Public Lighting Code
- AS 1269 SAA Hearing Conservation Code
- AS 1318 SAA Industrial Safety Colour Code
- AS 1319 Rules for the Design and Use of Safety Signs for the Occupational Environment
- AS 1425 The Use of LP Gas in Internal Combustion Engines
- AS 1482 Protection by Ventilation of Electrical Equipment for Explosive Atmospheres
- AS 1596 SAA LP Gas Code
- AS 1680 Code of Practice for Interior Lighting and the Visual Environment
- AS 1735 SAA Lift Code
- AS 1742 Manual of Uniform Traffic Control Devices
- AS 1763 Glossary of Terms for Industrial Trucks, Attachments and Movements
- AS 1940 SAA Flammable and Combustible Liquids Code
- AS 2359 SAA Industrial Trucks Code
Part 1—Design and Manufacture
- AS 3000 Part 1—SAA Wiring Rules
- BS 2050 Electrical Resistance of Conducting and Antistatic Products Made From Flexible Polymeric Material

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CONTENTS

	<i>Page</i>
FOREWORD	4
SECTION 1. SCOPE	4
SECTION 2. DEFINITIONS.....	5
SECTION 3. OPERATION	
3.1 Qualifications of Operators	7
3.2 Authorization of Operators	7
3.3 Operating Procedures	7
3.4 Training of Operators	7
3.5 Lifting of Industrial Trucks	7
3.6 Fuel Handling and Storage	7
3.7 Battery Charging and Changing for Electric Industrial Trucks	8
SECTION 4. SAFETY PRACTICES FOR OPERATORS	
4.1 Pre-operating Check	9
4.2 General Practices	9
4.3 Unattended Industrial Trucks	9
4.4 Travelling	10
4.5 Loading and Unloading	10
4.6 Loading and Unloading Road Vehicles and Railcars	10
4.7 Elevating Personnel	11
4.8 Suspended Loads	11
4.9 Simultaneous use	11
4.10 Use of Lifts	11
4.11 Refuelling and Recharging	11
SECTION 5. SPECIAL APPLICATIONS	
5.1 Use of Work Platforms	13
5.2 Stacking of Mast Tilted Forward	13
5.3 Using a Jib Attachment	13
SECTION 6. SITE CONDITIONS FOR OPERATION	
6.1 Hazards	14
6.2 Hazardous Areas	14
6.3 Warning Signs	14
6.4 Warning Devices	14
6.5 Guards	14
6.6 Lighting	14
6.7 Noise Levels	14
6.8 Atmospheric Pollution	14
6.9 Services	15
6.10 Ground and Floor Surfaces	15
6.11 Inclines	15
6.12 Aisles	15
6.13 Loading Docks	15
6.14 Bridgeplates and Dockboards	15
6.15 Lifts	15
SECTION 7. MAINTENANCE, REPAIR AND MODIFICATION	
7.1 Servicing	16
7.2 Records	16
7.3 Safe Maintenance Practices	16
7.4 Operating Condition	16
7.5 Maintenance of Fork Arms	17
7.6 Replacement Parts	17
7.7 Modification	17
APPENDIX A. ATMOSPHERIC CONTAMINANTS.....	18

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
for
DESIGN, MANUFACTURE AND OPERATION OF
INDUSTRIAL TRUCKS

PART 2—OPERATION

FOREWORD

This standard is intended to prescribe uniform requirements, within Australia and Australian territories, for the operation, maintenance, repair and modification of industrial trucks and their attachments.

It is an authoritative source of fundamental principles for application by responsible and competent persons and organizations. It has no legal authority in its own right, but may acquire legal standing in one or other of the following ways:

- (a) Adoption by a Statutory Authority.
- (b) Reference to compliance with the standard as a contract or employment condition.

It is not intended that the standard impose unnecessary restrictions on the use of new or unusual methods.

Many accidents involving powered industrial trucks are due to the human element. Trucks must be operated at all times in a sensible and responsible manner and within their performance capabilities.

The operation of powered industrial trucks on gradients is completely dependent upon the type, size and purpose of the particular truck. Each application has to be treated on its merits with the industrial truck manufacturer or distributor recommending what limitations need to be applied to the conditions of use.

The requirements in the standard dealing with qualifications of operators and identification of authorized operators of powered industrial trucks were the subject of controversy during the preparation of the standard. These requirements place a responsibility on the user (see Clause 2.9.5) to authorize only employees with adequate skill, knowledge and sense of responsibility to operate any powered industrial truck.

SECTION 1. SCOPE

This standard prescribes requirements for the operation, maintenance, repair and modification of industrial trucks and their attachments as defined by AS 1763.

The standard does not apply to operation on rough terrain.

SECTION 2. DEFINITIONS

2.0 APPLICATION. For the purpose of this standard, the definitions given in AS 1763 and the following definitions apply.

2.1 SHALL AND SHOULD—'shall' is taken to be mandatory; 'should' as advisory.

2.2 APPROVED AND APPROVAL—approved by, or with the approval of, the Statutory Authority.

2.3 STATUTORY AUTHORITY.—an authority, of the State or Territory of the Commonwealth of Australia in which the industrial truck is to be operated, which has statutory powers to control the design, manufacture, and operation of industrial trucks.

2.4 TRUCK—an industrial truck.

2.5 MECHANICAL COMPONENTS.

2.5.1 Carriage—a support structure for forks or attachments, generally roller-mounted and travelling vertically along the mast.

2.5.2 Load backrest—that portion of the carriage and forks that support the load when it is tilted rearward or upward.

2.5.3 Load backrest extension—a device extending vertically from the fork carriage frame (load backrest) to support that portion of the load above the load backrest when it is rearward or upward.

2.5.4 Mast—the support member providing the guideways that permit vertical movement of the carriage.

2.5.5 Maintenance or work platform—a platform that is designed for mounting on a high-lift industrial truck or other elevating device to provide a safe area for persons elevated by and working from the platform.

2.5.6 Operator platform—a platform or area from which a person controls the functions of an industrial truck or other material-handling device.

2.5.7 Overhead guard—a framework, cabin or similar structure fitted to an industrial truck and providing overhead protection for a riding operator.

2.5.8 Parking brake—a brake that restrains a stationary industrial truck from movement.

2.5.9 Service brake—a brake for the purpose of decelerating and stopping a moving industrial truck under all conditions of load.

2.5.10 Removable attachment—an attachment which can be mounted on the forks, or in place of the forks on the carriage, by means of fixings or fasteners, which allows for easy detachment and which does not require the disassembly of any portion of the lifting system during installation or removal.

2.6 BRIDGEPLATE AND DOCKBOARD.

2.6.1 Bridgeplate—a portable device for spanning the gap between two rail cars or between a loading dock or loading platform and any rail or road vehicle.

2.6.2 Dockboard—a portable or fixed device for spanning a gap and compensating for difference in level.

2.7 ELECTRICAL FUNCTIONS.

2.7.1 Electrical control—the function of controlling the electric power supply to an electrical system or component by a control switch or controller that operates under electrical load conditions.

2.7.2 Electrical isolation—the function of interrupting the electric supply to an electrical system or part thereof from its source of electric power supply by an isolating switch that normally operates under electrical no-load conditions, but which may operate under electrical load conditions in an emergency.

2.7.3 Electrical protection—the function of automatically isolating an electrical system or part thereof under fault or overload conditions.

(a) *Overload protection*—the function of automatically interrupting the electric supply to a component which is being subjected to a load in excess of the design application. This type of protection usually is applicable only to the component concerned and usually does not suffice to protect the conductors leading to the component. This type of protection operates before the component has become electrically defective.

(b) *Short-circuit protection*—the function of automatically interrupting the electric supply when a fault has developed in either a component or the conductors leading to that component.

2.8 OPERATION.

2.8.1 Work cycle—a complete series of movements associated with the normal duty of an industrial truck consisting of the following:

- (a) Move to load.
- (b) Pick up load.
- (c) Move with load.
- (d) Deposit load.
- (e) Move away from load.

2.8.2 In-service—the conditions which apply to an industrial truck while it is in actual use or in physical readiness for use and while it is under the control of an industrial truck operator.

2.8.3 Out-of-service—the conditions which apply to an industrial truck while it is not under the control of an operator, i.e. while an industrial truck is parked.

2.8.4 Fail-safe—the feature of an appliance, component or system which obviates any hazard to personnel in the event of power failure, malfunction of the appliance, component or system, or the like.

2.9 PERSONNEL.

2.9.1 Manufacturer—the manufacturer of an industrial truck or attachment, or his representative.