

Australian Standard™

Powered industrial trucks

**Part 13: Brake performance and
component strength**

This Australian Standard was prepared by Committee ME-026, Industrial Trucks. It was approved on behalf of the Council of Standards Australia on 25 February 2005. This Standard was published on 17 March 2005.

The following are represented on Committee ME-026:

Australian Chamber of Commerce and Industry
Australian Council of Trade Unions
Australian Electrical and Electronic Manufacturers Association
Australian Industrial Truck Association
Australian Industry Group
Australian Retailers Association
Construction and Mining Equipment Association of Australia
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PREFACE

This Standard was prepared by the Standards Australia Committee ME-026, Industrial Trucks.

This Standard is identical with and has been reproduced from ISO 6292:1996, *Powered industrial trucks and tractors—Brake performance and component strength*. Safety considerations for users of industrial trucks when applying the brakes are not addressed in the ISO 6292, therefore, additional guidance for Australia is given in Appendix ZA.

The objective of this Standard is to provide designers, manufacturers and operators of powered industrial trucks with methods for assessing and testing the performance and components of brakes fitted to industrial trucks with rated capacities up to and including 50 000 kg (100 000 lb) and industrial tractors with rated capacities up to and including 20 000 N (4 500 lbf).

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AUSTRALIAN STANDARD

Powered industrial trucks

Part 13:

Brake performance and component strength

1 Scope

This International Standard specifies performance, test methods, controls, control forces and component strengths for brakes fitted to powered industrial trucks with rated capacities up to and including 50 000 kg (110 000 lb) and industrial tractors with rated capacities up to and including 20 000 N (4 500 lbf).

It is applicable to the following types of industrial trucks:

- high-lift, low-lift and non-lifting powered industrial trucks with electric or internal combustion engine power and controlled by a seated or standing rider or a pedestrian;
- stacking lift trucks with elevating operating platform;
- lateral-stacking trucks.

NOTE — Remote-controlled trucks will be included at a later date.

2 Definition

For the purposes of this International Standard, the following definition applies.

2.1 braking capacity, C_b : Ratio expressed as a percentage, of either

- the fully developed braking deceleration, a , in metres per second squared, of the industrial truck under test to the acceleration of free fall, g , in metres per second squared, i.e.

$$C_b = \frac{a}{g} \times 100$$

or

- the braking force, F_b , in newtons, developed by the industrial truck under test to the gravitational force on the mass of the industrial truck under test, where m , in kilograms, equals the gross mass of the industrial truck including the rated capacity load, where applicable, i.e.

$$C_b = \frac{F_b}{m \times g} \times 100$$