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Australian Standard<sup>®</sup>

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**INDUSTRIAL WHEELS  
AND CASTORS  
(DIMENSIONS AND CAPACITIES)**

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[Title allocated by Defence Cataloguing Authority—  
WHEELS AND CASTORS, INDUSTRIAL (DIMENSIONS AND  
CAPACITIES)]

The following organizations were represented on the committee entrusted with the preparation of this standard:

Institute of Material Handling

Tyre and Rim Association of Australia

Manufacturers of industrial wheels and castors

Users of industrial wheels and castors

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**INDUSTRIAL WHEELS  
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**(DIMENSIONS AND CAPACITIES)**

**(Based on ISO  
Recommendations)**

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## PREFACE

This standard was prepared by the Association's Committee on Industrial Castors as a consolidated metric revision of both AS B282—1968, Industrial Castors, and AS B300—1971, Industrial Wheels for Castors and Mobile Equipment. The standard is intended to cover new industrial wheels and castors as they are introduced. The existing imperial standards AS B282 and AS B300 will not be withdrawn until their usefulness has ceased.

The standard is in exact technical agreement with International standards ISO 2175, 2184, 3101 and 3102, but several topics contained in those documents have been omitted. These include dimensional tolerances, and requirements for acceptance. Editorial rearrangement has been made to align the sections of the four ISO documents, and preferred sizes have been allocated.

It is anticipated that a further ISO standard will be produced to cover testing, and this and other topics will be considered for publication as supplements in due course.

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## STANDARDS ASSOCIATION OF AUSTRALIA

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**Australian Standard Specification**  
**for**  
**INDUSTRIAL WHEELS AND CASTORS**  
**(DIMENSIONS AND CAPACITIES)**  
**(Based on ISO Recommendations)**

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**1 SCOPE.** This specification gives nominal values for wheel diameter, hub length, load capacity and top-plate dimensions for various industrial wheels and castors used for non-powered applications. Wheel diameters are specified from 50 mm to 500 mm. Hub lengths are specified from 30 mm to 120 mm, and loads from 30 kg to 2500 kg in four categories for speeds up to and including 6 km/h. For speeds over 6 km/h up to and including 15 km/h, a reduced load capacity is provided. Offset is specified for swivel castors, and dimensions for rectangular and triangular top-plates. Tolerances, materials, and testing are not covered.

**2 LOAD CLASSIFICATIONS.** Industrial wheels and castors intended for use at speeds up to and including 6 km/h shall be capable of working under the nominal load specified in Table 1 for the wheel diameter, hub length, and appropriate category.

Industrial wheels and castors intended for use at speeds over 6 km/h up to and including 15 km/h shall be capable of working under 70 percent of the nominal loads specified in Table 1.

**3 DIMENSIONS.**

**3.1 Wheel.** The wheel diameter, hub length and bore diameter shall conform to the dimensions in Table 1. Preferred dimensions as indicated by bold type should be selected whenever possible.

**3.2 Swivel Castor Offset.** The offset  $E$  for swivel castors shall conform to the dimensions in Table 2.

**3.3 Top Plate.**

**3.3.1 Rectangular.** Six classifications by size are provided. The dimensions of length, width, bolt hole spacing and bolt hole diameter for a corresponding wheel diameter and hub length shall conform to Table 3. Alternative hole configurations are illustrated. Other configurations may be agreed on between purchasers and suppliers. The length of slotted bolt holes is not specified, but the width shall correspond to the bolt hole diameter  $H$  given in Table 3.