
International Standard



2175

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Industrial wheels for non-powered equipment — Dimensions and nominal load capacities

Roues de manutention pour engins de manutention non automoteurs — Dimensions et capacités nominales de charge

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Descriptors : handling equipment, industrial trucks, castors, loads (forces), dimensions, specifications, classifications, inspection.

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 2175 was developed by Technical Committee ISO/TC 110, *Industrial trucks*, and was circulated to the member bodies in October 1980.

It has been approved by the member bodies of the following countries :

Australia	Germany, F. R.	South Africa, Rep. of
Austria	India	Spain
Brazil	Ireland	Sweden
Czechoslovakia	Italy	United Kingdom
Egypt, Arab Rep. of	Korea, Rep. of	USA
Finland	Netherlands	
France	Romania	

The member body of the following country expressed disapproval of the document on technical grounds :

Belgium

This second edition cancels and replaces the first edition (i.e. ISO 2175-1972).

Industrial wheels for non-powered equipment — Dimensions and nominal load capacities

1 Scope and field of application

This International Standard specifies the dimensions and nominal load capacities of industrial wheels, which are classed in four categories (see clause 4).

It applies to industrial wheels used for non-powered equipment.¹⁾

2 References

ISO 3, *Preferred numbers — Series of preferred numbers.*

ISO 2163, *Industrial trucks — Wheels and castors — Vocabulary.*

ISO 2184, *Industrial castors — Dimensions of top-plates — Part 1 : Oblong top-plates with 4 bolt holes.*

ISO 3101, *Wheels and castors — Triangular top plates with three fixing holes.*

ISO 3102, *Wheels and castors — Off-set for swivel castors.*

3 Definition

nominal load capacity : The nominal load capacity of an industrial wheel or castor is the load which can be carried by this wheel or castor in the following operating conditions :

- at a speed of 4 km/h with interruptions to travelling;

- at an ambient temperature of 20 ± 10 °C;
- on a hard and horizontal surface of travelling, with obstructions the height of which should not exceed :
 - 5 % of the wheel diameter for wheels with soft tread (shore hardness $A \leq 90$);
 - 2,5 % of the wheel diameter for wheels with hard tread (shore hardness $A > 90$).

4 Classification of wheels

The wheels are classed in four categories : A, B, C, D (see the table). They define four increasing values of the nominal load capacity for the main dimensions (hub diameter and length) of the wheels, taking the material of the tread, its dimensions and the operating conditions into account.

Example : For the wheel 200 mm in diameter, 60 mm hub length, the categories A, B, C, D define the following nominal load capacities :

Category	A	B	C	D
Nominal load capacity, kg	160	250	400	630

1) Subject to conditions in individual countries, the maximum speed of this equipment is limited to 25 km/h.