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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 18029.4-2009

**Wheelchairs -- Part 4: Energy consumption of electric
wheelchairs and scooters for determination of theoretical
distance range**

(English Translation)

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Foreword

GB/T 18029 "wheelchair" is divided into 26 parts.

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This section identical with ISO 7176-4:1997 "Wheelchairs - Part 4. Determination of electric wheelchairs and electric scooters energy theory" (In English).

For ease of use, this standard made the following editorial changes.

--- "This standard" to "in this section."

--- Normative documents referenced in this section uses national standards with international standards equivalent.

This section proposed by the People's Republic of China Ministry of Civil Affairs.

This part of the National Rehabilitation and special equipment Standardization Technical Committee on Persons with Disabilities (SAC/TC148) centralized.

This part mainly drafted by. National Research Center for Rehabilitation Technical Aids.

Introduction

Energy consumption is influenced by many factors, such as ambient temperature, the user weight, terrain, road, tires and batteries. Thus, according to GB/T 18029 the results of this Part shall be made, can not be exported as specific wheelchairs and users of accurate actual distance traveled basis. However, the the test results can be used as the basis between the different wheelchair and scooter for comparison. And inspection agencies of the same model number the test results show that the car wheelchairs, different test track length accuracy of the test results had no effect.

GB/T 18029.4-2009/ISO 7176-4:1997 Wheelchairs - Part 4. electric wheelchairs and Determination of electric scooter energy theory

1 Scope

This section GB/T 18029 gives the theoretical distance traveled expressed occupant mass not exceeding 100kg of electric wheelchairs and electric Determination travel vehicle energy consumption.

This section applies to a maximum speed of 15km/h, carrying only take one person's wheelchair and scooter.

2 Normative references

The following documents contain provisions which, through reference GB/T 18029 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, we are encouraged to reach agreement under this section all parties that proposed to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 14729 Wheelchairs term (GB/T 14729-2000, eqvISO 6440.2000) GB/T 18029.6 Wheelchairs - Part 6. electric wheelchairs maximum speed, acceleration and deceleration measured (GB/T 18029.6-2009, ISO 7176-6:2001, IDT) GB/T 18029.7 Wheelchairs - Part 7. Measurement of seating and wheel sizes (GB/T 18029.7-2009, ISO 7176-7.

1998, IDT)

GB/T 18029.15 Wheelchairs - Part 15. For the release of information, the production of documents and the use of labeling requirements (GB/T 18029.15-2008, ISO 7176-15:1996, IDT)

3 Terms and Definitions

GB/T 14729 and established in the following terms and definitions apply to this part of the GB/T 18029 of.

The maximum mass specified by the manufacturer of wheelchair users.

Wheelchair car manufacturer pre-pre-file information.

Electric wheelchairs or electric scooters.

Principle 4

At top speed along the test track with wheelchairs, traveling clockwise 10 laps, 10 laps counterclockwise with measured power consumption.

5 Test Equipment

5.1

Test plane, can be maintained at a temperature (18 ~ 25) °C, flat, rigid, horizontal surface of the non-ventilated area. On the test plane Draw a rectangle test track.

Test track width 2m, centerline length 50m ~ 100m. Long sides should be long enough wheelchairs can reach a maximum speed, see Figure 1.

Note: for the production or use of indoor recreational ground floor of the building ordinary greater, such as cement, asphalt or wooden ground level. Any flat or micro level Small deviations by testing the first 10 laps after the reverse offset, in the same position as the track start, stop testing.

GB/T 18029.4-2009/ISO 7176-4:1997