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

GB/T 18029.14-2012

**Wheelchairs -- Part 14: Power and control systems for
electrically powered wheelchairs and scooter -- Requirements
and test methods**

轮椅车 第14部分：电动轮椅车和电动代步车动力和控制系统 要求和测试方法
(English Translation)

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Table of Contents

Preface	
Introduction	
1 Scope	
2 Normative references	
3 Terms and definitions	
4 Equipment	
5 Is ready to test the wheelchair	
6 Testing Guidance	
7 Single fault safety	
8 Design	
9 Electric shock, burns, fire and explosion protection	
10 Ergonomics	
11 33 Durability	
12 Electrical connections	
13 Environment	
14 Misuse and abuse	
Information provided about 15 with the wheelchair control system	
Inspection Report 38	
17 Publication of the results	
Appendix A (informative) wheelchairs wire size	
References	

Foreword

GB/T 18029 "wheelchair" consists of the following components.

- Part 1. Determination of static stability;
- Part 2. Determination of dynamic stability of electric wheelchairs;
- Part 3. Determination of the brake;
- Part 4. Determination of electric wheelchairs and electric scooters theory energy consumption;
- Part 5. Dimensions, mass and turning space, measured;

Electric wheelchairs maximum speed, acceleration and deceleration measured;. --- Part 6

--- Part 7. Measurement of seating and wheel sizes;

--- Part 8. static strength, impact strength and fatigue strength requirements and test methods;

--- Part 9. climatic test methods of electric wheelchairs;

--- Part 10. Determination of electric wheelchair obstacle capacity;

--- Part 11. Test dummies;

--- Part 13. Determination of the test surface coefficient of friction;

--- Part 14. electric wheelchairs and electric scooters and power control system requirements and test methods;

--- Part 15. release of information, documents and requirements issued identification;

--- Part 16. Block (by) pad flame retardancy requirements and test methods;

--- Part 17. Interface electric wheelchair controller;

--- Part 18. downstairs means;

--- Part 19. Wheeled mobile device for a motor vehicle;

--- Part 20. Determination of standing wheelchairs performance;

--- Part 21. Electromagnetic compatibility requirements and test methods;

--- Part 22. Adjustment Program;

--- Part 23. Requirements and test methods for stair climbing device caregiver operations;

--- Part 24. Requirements and test methods occupant operated stair climbing apparatus;

--- Part 25. Battery and charger requirements and test methods;

--- Part 26. Terminology.

This part identical with ISO 7176-14:2008 "Wheelchairs - Part 14. electric wheelchairs and electric scooters and power control systems System Requirements and test methods "(in English).

Correspondence between the consistency of the standards of international documents and normative references of the following documents.

--- GB/T 7593 motor vehicle driver industrial devices and other display devices controlled by the symbol (GB/T 7593-2008, ISO 3287:1999, IDT)

--- GB/T 18029.3 Wheelchairs - Part 3. Determination of the brake (GB/T 18029.3-2008, ISO 7176-3:2003, IDT)

--- Section 4 GB/T 18029.4 Wheelchairs. Determination of electric wheelchairs and electric scooters energy theory (GB/T 18029.4-2009, ISO 7176-4:1997, IDT)

--- GB/T 18029.6 Wheelchairs - Part 6. Determination of electric wheelchairs maximum speed, acceleration and deceleration (GB/T 18029.6-2009, ISO 7176-6:2001, IDT)

--- GB/T 18029.9 Wheelchairs - Part 9. Climatic tests for electric wheelchairs method (GB/T 18029.9-2008, ISO 7176-9:2001, IDT)

--- GB/T 18029.11 Wheelchairs - Part 11. Test dummies (GB/T 18029.11-2008, ISO 7176-11.

1992, IDT)

--- GB/T 18029.13 Wheelchairs - Part 13. Determination of the test surface coefficient of friction (GB/T 18029.13-2008, ISO 7176-13. 1989, IDT)

--- GB/T 18029.15 Wheelchairs - Part 15. release of information, documents and requirements issued identification (GB/T 18029.15-2008, ISO 7176-15:1996, IDT)

--- GB/T 18029.22 Wheelchairs - Part 22. Adjusting program (GB/T 18029.22-2009, ISO 7176-22:2000, IDT)

--- GB/T 20138 electrical equipment enclosures against external mechanical impact protection rating (IK Code) (GB/T 20138-2006, IEC 62262:2002, IDT)

--- GB 9706.1 Medical Electrical Equipment Part 1. General requirements for safety (GB 9706.1-2007, IEC 60601-1. 1988, IDT)

--- GB/T 16842 protective shell for inspection and test equipment used with (GB/T 16842-2008, IEC 61032:1997, IDT) Please note that some of the content of this document may involve patents. Release mechanism of the present document does not assume responsibility for the identification of these patents.

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 (SCA/TC148) centralized.

This standard was drafted. national rehabilitation aids research center, Foshan Dongfang Medical Equipment Co., Ltd., National Rehabilitation aids Quality Supervision Inspection Center, Shanghai Medical Devices Co., Ltd. each state.

Introduction

GB/T 18029 in this section for wheelchair test on the inclined plane of the test to make some provisions, these tests are not intended Assessment at the maximum slope of wheelchair operability, but in order to detect any operating condition of wheelchairs may occur under fault conditions the changes that the wheelchair ramp is running on time more

likely to be found. For your convenience, you can make fixed inclined plane test Ramp, wheelchair may operate as a representative of the slope use.

This part of the test environment temperature range limits, which are designed to facilitate comparison wheelchair during normal operation and the introduction of so when the performance barrier.

Wheelchairs - Part 14. electric wheelchairs and Scooter power and control systems Requirements and test methods Warning. This section prompts GB/T 18029 in operation if proper precautions are not taken, it may hurt the person. This section Merely provide technical suitability and does not absolve the test execution or entrust those relating to health and safety-related legal obligations. For possible Before the test result appears wheelchair dangerous actions recommended during the test, a full estimate of the results that may arise, for proper safety Row, so to minimize the risk.

1 Scope

This section GB/T 18029 specifies the requirements for electric wheelchairs and electric scooters and power control systems and associated test side law. This section provides the safety and performance requirements for normal use and improper operation and failure conditions. This section also Regulation Given the scope of the required measurement methods to manipulate the controller and the force required to force some action.

GB/T 18029 apply to this section does not exceed the maximum speed of 15km/h, for indoor, outdoor and road type, and limited in A handicapped person riding an electric scooter and electric wheelchair users within the mass range GB/T 18029.11 prescribed.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

Devices and other display devices ISO 3287 industrial motor vehicle operator control symbol (Powered industrial trucks-Symbols for operator controls and other displays) ISO 7176-3 Wheelchairs - Part 3. Determination of the brake (Wheelchairs-Part 3. Determination of effective-ness of brakes) ISO 7176-4 Wheelchairs - Part 4. electric wheelchair and electric scooter theoretical energy measurement (Wheelchairs-Part 4. Energy consumption of electric wheelchairs and scooters for determination of theoretical distance range) ISO 7176-6 Wheelchairs - Part 6. electric wheelchairs maximum speed, acceleration and deceleration determination (Wheelchairs-Part 6. Determination of maximum speed, acceleration and deceleration of electric wheelchairs) Climatic test methods of electric wheelchairs (Wheelchairs-Part 9.. ISO 7176-9 Wheelchairs - Part 9 Climatic tests for electric wheelchairs) ISO 7176-11 Wheelchairs - Part 11. Test dummies