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

GB/T 18029.8-2024

Replacing GB/T 18029.8-2008

**Wheelchairs - Part 8: Requirements and test methods for static,
impact and fatigue strengths**
(English Translation)

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References

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is Part 8 of GB/T (Z) 18029 Wheelchairs. GB/T (Z) 18029 has published the following parts.

- Part 1: Determination of static stability;
- Part 2: Determination of dynamic stability of electric wheelchairs;
- Part 3: Determination of braking performance;
- Part 4: Determination of theoretical energy consumption of electric wheelchairs and electric scooters;
- Part 5: Determination of size, mass and operating space;
- Part 6: Determination of the maximum speed of electric wheelchairs;
- Part 7: Measurement of seat and wheel dimensions;
- Part 8: Requirements and test methods for static strength, impact strength and fatigue strength;
- Part 9: Climatic test methods for electric wheelchairs;
- Part 10: Determination of obstacle surmounting capability of electric wheelchairs;
- Part 11: Test dummies;
- Part 13: Determination of coefficient of friction of test surfaces;
- Part 14: Requirements and test methods for power and control systems for electric wheelchairs and electric scooters;
- Part 15: Requirements for information release, document issuance and identification;
- Part 16: Flame retardancy of body positioning devices;
- Part 19: Wheeled mobile devices that can be used as seats in motor vehicles;
- Part 21: Electromagnetic compatibility requirements and test methods for electric

wheelchairs, electric scooters and battery chargers;

--- Part 22: Adjustment procedures;

--- Part 25: Batteries and chargers for electric wheelchairs;

--- Part 26: Terminology;

--- Part 28: Requirements and test methods for stair climbing equipment;

--- Part 30: Test methods and requirements for wheelchairs that change the occupant's posture.

This document replaces GB/T 18029.8-2008 "Wheelchairs - Part 8: Requirements and test methods for static strength, impact strength and fatigue strength" Compared with GB/T 18029.8-2008, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

--- Increased the number of parts that can be adjusted and replaced during fatigue testing and the number of times they can be adjusted and replaced (see 4.1);

--- Added brake fatigue strength test (see 10.5);

--- Added adjustment to the impact block size of the multi-roll fatigue tester, clarifying that wheels of different diameters use impact blocks of different sizes (see 5.8);

--- Added more precise provisions for the reference configuration adjustment method of adjustable wheelchairs (see 6.1);

--- Added strength requirements for electric scooters (see 8.11).

This document is equivalent to ISO 7176-8:2014 "Wheelchairs - Part 8: Requirements and test methods for static strength, impact strength and fatigue strength" Test Methods.

This document has been modified to include the following minimal editorial changes.

--- ISO 16840-3 was added to the normative references in Chapter 2;

--- Add the reference to Appendix B in Note 1 of 8.8;

--- Add the reference to Appendix D in Note 2 of 9.2;

--- Added item introduction in Chapter 10;

--- Modify 10.3.4d) in 10.3.3e) to 10.3.3;

--- Delete the requirements in Principle B.1 of Appendix B.

Introduction

GB/T (Z)18029 "Wheelchairs" is a standard that ensures the performance and quality of wheelchairs and accurately provides these performance and quality to relevant parties.