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МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Wheelchairs —

Part 10 :

Determination of obstacle-climbing ability of electric wheelchairs

Fauteuils roulants —

Partie 10 : Détermination de l'aptitude des fauteuils roulants électriques à gravir les obstacles

Reference number
ISO 7176-10 : 1988 (E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 7176-10 was prepared by Technical Committee ISO/TC 173, *Technical systems and aids for disabled or handicapped persons*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Wheelchairs —

Part 10 : Determination of obstacle-climbing ability of electric wheelchairs

0 Introduction

ISO 7176 at present consists of the following parts :

Part 1 : Determination of static stability.

Part 2 : Determination of dynamic stability of electric wheelchairs.

Part 3 : Determination of efficiency of brakes.

Part 4 : Determination of energy consumption of electric wheelchairs.

Part 5 : Determination of overall dimensions, mass and turning space.

Part 6 : Determination of maximum speed, acceleration and retardation of electric wheelchairs.

Part 7 : Determination of seating dimensions — Definitions and measuring methods.

Part 8 : Static, impact and fatigue strength for manual wheelchairs.

Part 9 : Climatic tests for electric wheelchairs.

Part 10 : Determination of obstacle-climbing ability of electric wheelchairs.

Part 11 : Test dummies.

Part 13 : Determination of coefficient of friction of test surfaces.

Part 14 : Power and controls.

1 Scope and field of application

This part of ISO 7176 specifies a method for determining the obstacle-climbing ability of electric wheelchairs.

2 References

ISO 6440, *Wheelchairs — Nomenclature, terms and definitions*.

ISO 7176-11, *Wheelchairs — Part 11 : Test dummies*.¹⁾

ISO 7176-13, *Wheelchairs — Part 13 : Determination of coefficient of friction of test surfaces*.¹⁾

ISO 7930, *Wheelchairs — Type classification based on appearance characteristics*.

3 Definitions

For the purposes of this part of ISO 7176, the definitions given in ISO 6440 apply.

4 Principle

Performance of a number of tests for determination of the ability of electric wheelchairs to negotiate obstacles such as kerbs and steps.

5 Test equipment

5.1 Test plane

The tests shall be carried out on a flat and hard plane. The surface of the plane shall have a coefficient of friction as defined in ISO 7176-13.

¹⁾ At present at the stage of draft.