INTERNATIONAL STANDARD

ISO 7176-22

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Wheelchairs —

Part 22: Set-up procedures

Fauteuils roulants —

Partie 22: Modes opératoires de réglage

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Contents

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO 7176 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 7176-22 was prepared by Technical Committee ISO/TC 173, *Technical systems and aids for disabled or handicapped persons*, Subcommittee SC 1, *Wheelchairs*.

ISO 7176 consists of the following parts, under the general title *Wheelchairs*:

— *Part 1: Determination of static stability*

— *Part 2: Determination of dynamic stability of electric wheelchairs*

— *Part 3: Determination of efficiency of brakes*

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

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

— *Part 6: Determination of maximum speed, acceleration and deceleration of electric wheelchairs*

— *Part 7: Measurement of seating and wheel dimensions*

— *Part 8: Requirements and test methods for static, impact and fatigue strengths*

— *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 control systems for electric wheelchairs — Requirements and test methods*

— *Part 15: Requirements for information disclosure, documentation and labelling*

— *Part 16: Resistance to ignition of upholstered parts — Requirements and test methods*

— *Part 22: Set-up procedures*

The following parts are also on the programme of work:

— *Part 19: Wheeled mobility devices for use in motor vehicles*

— *Part 20: Determination of the performance of stand-up wheelchairs*

— *Part 21: Electromagnetic compatibility of electrically powered wheelchairs and motorized scooters — Requirements and test methods*

— *Part 23: Attendant-operated stair-climbing devices — Requirements and test methods*

— *Part 24: User-operated stair-climbing devices — Requirements and test methods*

A technical report will also be made available giving a simplified explanation of these parts of ISO 7176.

Annex A forms a normative part of this part of ISO 7176. Annex B is for information only.

Introduction

Many wheelchairs have adjustable or optional features which, depending upon their setting, can have significant effects on the results from test methods specified in other parts of the ISO 7176 series.

When used in combination with other parts of ISO 7176, this procedure will produce test results which permit comparison between different wheelchairs and give reproducibility results between different test laboratories.

Wheelchairs —

Part 22:
Set-up procedures

1 Scope

This part of ISO 7176 specifies a set-up procedure to be used in the preparation of adjustable wheelchairs for testing in accordance with the ISO 7176 series. This procedure gives methods to be used where there are no manufacturers' instructions for setting the wheelchair adjustments.

This part of ISO 7176 is applicable to manual wheelchairs and electric wheelchairs (including scooters) intended to provide indoor and/or outdoor mobility.

Other parts of ISO 7176 may give specific requirements for the adjustment of the wheelchair. In such cases, that individual part of ISO 7176 takes precedence over this part of ISO 7176.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 7176. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 7176 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

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

ISO 7176-7, *Wheelchairs — Part 7: Measurement of seating and wheel dimensions.*

ISO 7176-8, *Wheelchairs — Part 8: Requirements and test methods for static, impact and fatigue strengths.*

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

ISO 7176-15, *Wheelchairs — Part 15: Requirements for information disclosure, documentation and labelling.*

3 Terms and definitions

For the purposes of this part of ISO 7176, the terms and definitions given in ISO 6440, ISO 7176-7, ISO 7176-8, ISO 7176-11 and ISO 7176-15 and the following apply.

3.1
negative camber
inclination of a wheel towards the opposite wheel so that its top is closer to the other wheel than its bottom

See Figure 1.