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Standards

Irish Standard
I.S. EN ISO 10535:2021

Assistive products - Hoists for the transfer of persons - Requirements and test methods (ISO 10535:2021)

I.S. EN ISO 10535:2021

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National Foreword

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EUROPEAN STANDARD

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Assistive products - Hoists for the transfer of persons - Requirements and test methods (ISO 10535:2021)

Produits d'assistance - Lève-personnes pour transférer
des personnes - Exigences et méthodes d'essais (ISO
10535:2021)

Lifter zum Transfer von Menschen mit Behinderungen
- Anforderungen und Prüfverfahren (ISO 10535:2021)

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EN ISO 10535:2021 (E)

Contents	Page
European foreword.....	3

European foreword

This document (EN ISO 10535:2021) has been prepared by Technical Committee ISO/TC 173 "Assistive products" in collaboration with Technical Committee CEN/TC 293 "Assistive products and accessibility" the secretariat of which is held by SIS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2022, and conflicting national standards shall be withdrawn at the latest by May 2022.

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Assistive products — Hoists for the transfer of persons — Requirements and test methods

*Produits d'assistance — Lève-personnes pour transférer des
personnes — Exigences et méthodes d'essais*



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Contents

	Page
Foreword	vii
Introduction	viii
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 General requirements and test methods	8
4.1 General requirements.....	8
4.1.1 Risk management.....	8
4.1.2 Ergonomic factors.....	8
4.1.3 Noise and vibration.....	8
4.1.4 Safety of moving and folding parts.....	9
4.1.5 Prevention of traps for parts of the human body.....	10
4.1.6 V-shaped openings.....	11
4.2 General test methods.....	11
4.2.1 Test conditions.....	11
4.2.2 Apparatus.....	11
4.2.3 Permissible errors of test equipment.....	12
4.2.4 Test report.....	12
4.2.5 Safety and performance requirements.....	16
4.2.6 Test methods for general safety requirements.....	19
4.3 Requirements for body-support units.....	22
4.4 Central suspension point.....	22
4.4.1 Requirements for central suspension point.....	22
4.4.2 Test method for the central suspension point.....	22
4.5 Spreader bar.....	22
4.5.1 Requirements for spreader bar.....	22
4.5.2 Test methods for the spreader bar.....	23
4.6 Performance.....	23
4.6.1 Requirements for performance.....	23
4.6.2 Test methods for performance.....	23
4.7 Rate of movements of the hoist.....	24
4.7.1 Requirements for rate of lifting and lowering.....	24
4.7.2 Test methods for rate of lifting and lowering.....	24
4.7.3 Requirements for rate of powered horizontal movement.....	24
4.7.4 Test methods for rate of powered horizontal movement.....	24
4.8 Operating forces/torques.....	24
4.8.1 Requirements for operating forces/torques.....	24
4.8.2 Test methods for operating forces/torques.....	25
4.9 Durability.....	25
4.9.1 Requirements for durability.....	25
4.9.2 Test methods for durability.....	25
4.10 Hydraulic components.....	27
4.10.1 Requirements for hydraulic components.....	27
4.10.2 Test methods for hydraulic components.....	28
4.11 Pneumatic components.....	28
4.11.1 Requirements for pneumatic components.....	28
4.11.2 Test methods for pneumatic components.....	28
4.12 Machine washable hoists.....	29
4.12.1 Requirements for machine washable hoists.....	29
4.12.2 Test methods for machine washable hoists.....	29
4.13 Requirement for information supplied by the manufacturer.....	30
4.13.1 General.....	30
4.13.2 Instructions for use.....	30

ISO 10535:2021(E)

	4.13.3 Labelling	32
5	Mobile hoists — Specific requirements and test methods	37
	5.1 General requirements	37
	5.2 Static strength	37
	5.2.1 Requirements for static strength	37
	5.2.2 Test methods for static strength	37
	5.3 Static stability	38
	5.3.1 Requirements for static stability	38
	5.3.2 Test methods for static stability	38
	5.4 Immobilizing device (brakes)	38
	5.4.1 Requirements for immobilizing device (brakes)	38
	5.4.2 Test methods for immobilizing device (brakes)	38
	5.5 Moving forces	39
	5.5.1 Requirements for moving forces	39
	5.5.2 Test methods for moving forces	39
	5.6 Requirement for information supplied by the manufacturer	40
	5.6.1 Pre-sale information	40
6	Mobile hoists for transferring a person in standing position— Specific requirements and test methods	41
	6.1 General requirements	41
	6.2 Static strength	41
	6.2.1 Requirements for static strength	41
	6.2.2 Test method for static strength	41
	6.3 Static stability	41
	6.3.1 Requirements for static stability	41
	6.3.2 Test methods for static stability	42
	6.4 Immobilizing device (brakes)	43
	6.4.1 Requirements for immobilizing device (brakes)	43
	6.4.2 Test methods for immobilizing device (brakes)	43
	6.5 Moving forces	43
	6.5.1 Requirements for moving forces	43
	6.5.2 Test methods for moving forces	43
	6.6 Durability	43
	6.6.1 Requirements for durability	43
	6.6.2 Test methods for durability	43
	6.7 Requirement for information supplied by the manufacturer	44
	6.7.1 Pre-sale information	44
7	Stationary hoists — Specific requirements and test methods	44
	7.1 General requirements	44
	7.2 Specific safety requirements	45
	7.2.1 Requirements for specific safety requirements	45
	7.2.2 Test methods for specific safety requirements	45
	7.3 Static strength (free-standing stationary hoists only)	45
	7.3.1 Requirements for static strength (free-standing stationary hoists only)	45
	7.3.2 Test methods for static strength (free-standing stationary hoists only)	45
	7.4 Static stability (free-standing stationary hoists only)	46
	7.4.1 Requirements for static stability (free-standing stationary hoists only)	46
	7.4.2 Test methods for static stability (free-standing stationary hoists only)	46
	7.5 Static strength for all other stationary hoists	47
	7.5.1 Requirements for static strength for all other stationary hoists	47
	7.5.2 Test methods for static strength for all other stationary hoists	47
	7.6 Requirement for information supplied by the manufacturer	47
	7.6.1 User information	47
8	Non-rigid body-support units — Specific requirements and test methods	47
	8.1 General requirements	47
	8.2 Requirements for material and seams of the non-rigid body-support unit	47

8.3	Test methods for non-rigid body-support unit.....	48
8.3.1	Test methods for non-rigid body-support unit designed to be laundered.....	48
8.3.2	Test method for durability for non-rigid body-support unit.....	48
8.4	Requirement for information supplied by the manufacturer.....	48
8.4.1	Pre-sale information.....	48
8.4.2	User information.....	48
8.4.3	Labelling.....	49
9	Rigid body-support units — Specific requirements and test methods.....	49
9.1	General requirements.....	49
9.2	Requirements for backrest.....	50
9.3	Requirements and test methods for durability.....	50
9.4	Requirement for information supplied by the manufacturer.....	50
9.4.1	User information.....	50
9.4.2	Labelling.....	50
10	Bathtub hoists — Specific requirements and test methods.....	51
10.1	General requirements.....	51
10.1.1	General.....	51
10.1.2	Risk analysis.....	51
10.1.3	Ergonomic factors.....	51
10.1.4	Noise.....	51
10.1.5	Safety of moving and folding parts.....	51
10.1.6	Prevention of traps for parts of the human body.....	51
10.1.7	V-shaped openings.....	51
10.2	General test methods.....	52
10.2.1	Test conditions.....	52
10.2.2	Test equipment.....	52
10.2.3	Permissible errors of test equipment.....	52
10.2.4	Test report.....	52
10.3	Safety requirements.....	52
10.3.1	General safety requirements.....	52
10.3.2	Test methods for general safety requirements.....	52
10.4	Body-support units.....	53
10.5	Spreader bar.....	53
10.6	Performance.....	53
10.7	Rate of movements of the hoist.....	53
10.8	Operating forces/torques.....	53
10.9	Durability.....	53
10.9.1	Requirements for durability.....	53
10.9.2	Test methods for durability.....	53
10.10	Static strength and stability.....	54
10.10.1	Requirements for static strength and stability.....	54
10.10.2	
	Test methods for static strength and stability.....	54
10.11	Hydraulic components.....	54
10.12	Pneumatic components.....	55
10.13	Specific safety requirements.....	55
10.13.1	Requirements for specific safety requirements.....	55
10.13.2	
	Test methods for specific safety requirements.....	55
10.14	Non-rigid body-support units.....	55
10.15	Rigid body-support units — Requirements.....	55
10.16	Requirement for information supplied by the manufacturer.....	55
10.16.1	General.....	55
10.16.2	
	Instructions for use.....	55
10.16.3	
	Labelling.....	55

ISO 10535:2021(E)

Annex A (informative) Rationale for specific safety requirements	56
Annex B (informative) Periodic inspection and maintenance.....	58
Annex C (informative) Compatibility of hoist/spreader bar/body-support units	61
Annex D (informative) Guidelines for colour coding for size of non-rigid body-support units.....	74
Bibliography.....	75

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 173, *Assistive products*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 293, *Assistive products and accessibility*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 10535:2006), which has been technically revised.

The main changes are as follows:

- aspects on hoists with robotic features has been included;
- guidelines regarding compatibility of hoists/body-support units have been included;
- the informative annex on Inspection has been further developed;
- lowering of minimum capacity of a mobile hoist from 120 kg to 100 kg;
- requirement of emergency lowering device for mobile hoist and standing/raising hoists has been included.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

ISO 10535:2021(E)

Introduction

It appears from studies that the nursing and caring profession involves many physically burdening factors in the caring for and nursing of persons with disabilities. A hoist offers a safe means of supportive lifting and moving, either assisted or independently.

This document specifies requirements and test methods that are relevant to hoists for the transfer of persons with disabilities. This document addresses further needs in terms of providing safety for both the person with a disability and the attendant, while taking into account the potential new development within robotic technology on hoist solutions.

Assistive products — Hoists for the transfer of persons — Requirements and test methods

1 Scope

This document specifies requirements and test methods for hoists and body-support units intended for the transfer of persons with disabilities. The document applies to the following products classified in ISO 9999:—¹⁾.

- 12 36 03 Mobile hoists for transferring a person in sitting position with sling seats;
- 12 36 04 Mobile hoists for transferring a person in standing position;
- 12 36 06 Mobile hoists for transferring a person in sitting position with solid seats;
- 12 36 09 Mobile hoists for transferring a person in lying position;
- 12 36 12 Stationary hoists fixed to walls, floor or ceiling;
- 12 36 15 Stationary hoists fixed to, or mounted in or on, another product;
- 12 36 18 Stationary free-standing hoists;
- 12 36 21 Body-support units for hoists.

This document covers different types of mobile and stationary hoists. Some of the requirements and test methods are general and others are only valid for specific product types.

[Annexes A, B and C](#) provide general recommendations.

This document does not apply to devices that transport persons between two levels (floors) of a building.

It does not include methods for the determination of ageing or corrosion of such hoists and units.

It does not include methods to qualify individual units prior to use.

The requirements of this document are formulated with regard to the needs of both the persons being hoisted and the attendant using the hoist.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3746, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Survey method using an enveloping measurement surface over a reflecting plane*

ISO 3758, *Textiles — Care labelling code using symbols*

ISO 10993-1, *Biological evaluation of medical devices — Part 1: Evaluation and testing within a risk management process*

ISO 14971, *Medical devices — Application of risk management to medical devices*

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