

Powered industrial trucks - Visibility - **T**est methods
and verification - Part 10: Towing and Pushing tractors
and Burden carrier

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 16842-10:2020 sisaldab Euroopa standardi EN 16842-10:2020 ingliskeelset teksti.	This Estonian standard EVS-EN 16842-10:2020 consists of the English text of the European standard EN 16842-10:2020.
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English Version

Powered industrial trucks - Visibility - Test methods and
verification - Part 10: Towing and Pushing tractors and
Burden carrier

Chariots de manutention automoteurs - Visibilité -
Méthodes d'essai et vérification - Partie 10 : Tracteur,
pousseur et transporteur de charge

Kraftbetriebene Flurförderzeuge - Sichtverhältnisse -
Prüfverfahren und Verifikation - Teil 10: Schlepper und
Schubschlepper und Lastentransportfahrzeuge

This European Standard was approved by CEN on 5 July 2020.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 16842-10:2020) has been prepared by Technical Committee CEN/TC 150 "Industrial Trucks - Safety", the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by February 2021, and conflicting national standards shall be withdrawn at the latest by February 2021.

This document is intended to be used in combination with the requirements in EN 16842-1.

EN 16842 consists of the following parts under the general title *Powered industrial trucks – Visibility – Test methods and verification*:

- *Part 1: General requirements;*
- *Part 2: Sit-on counterbalance trucks and rough terrain masted trucks up to and including 10 000 kg capacity;*
- *Part 3: Reach trucks up to and including 10 000 kg capacity;*
- *Part 4: Industrial variable-reach trucks up to and including 10 000 kg capacity;*
- *Part 5: Industrial variable-reach trucks greater than 10 000 kg capacity;*
- *Part 6: Sit-on counterbalance trucks and rough terrain masted trucks greater than 10 000 kg capacity;*
- *Part 7: Variable-reach and masted container trucks handling freight containers of 6 m (20 ft) length and longer;*
- *Part 8: Stand-on counterbalance trucks up to and including 10 000 kg capacity;*
- *Part 9: Order-picking, lateral- and front-stacking trucks with elevating operator position;*
- *Part 10: Towing and Pushing tractors and Burden carrier.*

It is intended to develop additional parts related to the following machinery:

- Pallet-stacking trucks (rider controlled);
- Single side loader;
- Multi-directional forklift truck;
- Articulated counterbalance lift truck;
- Non-Stacking low-lift straddle carriers (as defined in ISO 5053-1:2020, 3.18);
- Stacking high-lift straddle carriers (as defined in ISO 5053-1:2020, 3.19).

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

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This document is a type-C standard as stated in EN ISO 12100.

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (regulators, accident prevention organizations, market surveillance etc.).

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small, medium and large enterprises);
- machine users/employees (e.g. trade unions, organizations for people with special needs);
- service providers, e.g. for maintenance (small, medium and large enterprises);
- consumers (in case of machinery intended for use by consumers).

The above-mentioned stakeholder groups have been given the possibility to participate at the drafting process of this document.

The machinery concerned and the extent to which hazards, hazardous situations or hazardous events are covered are indicated in the Scope of this document.

When requirements of this type-C standard are different from those which are stated in type-A or type-B standards, the requirements of this type-C standard take precedence over the requirements of the other standards for machines that have been designed and built according to the requirements of this type-C standard.”

1 Scope

This document specifies the requirements and test procedures for 360° visibility of sit-on and stand-on self-propelled

- towing and pushing tractors in accordance with ISO 5053-1:2020, 3.1 and 3.2 without load and without trailer;
- burden carriers in accordance with ISO 5053-1:2020, 3.25 without load; and
- baggage and equipment tractors with driver's accommodation in accordance with EN 12312-15, without load and without trailer

(herein after referred to as trucks) and is intended to be used in conjunction with EN 16842-1.

Where specific requirements in this part are modified from the general requirements in EN 16842-1, the requirements of this part are truck specific and are used for sit-on and stand-on self-propelled Towing and Pushing tractors and Burden carriers.

This part of EN 16842 deals with all significant hazards, hazardous situations or hazardous events relevant to the visibility of the operator for applicable machines when used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer.

This document does not apply to personnel carriers in accordance with ISO 5053-1:2020, 3.25.

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.

EN 12312-15, *Aircraft ground support equipment - Specific requirements - Part 15: Baggage and equipment tractors*

EN 16842-1:2018, *Powered industrial trucks - Visibility - Test methods and verification - Part 1: General requirements*

EN ISO 3691-1:2015, *Industrial trucks - Safety requirements and verification - Part 1: Self-propelled industrial trucks, other than driverless trucks, variable-reach trucks and burden-carrier trucks (ISO 3691-1:2011, including Cor 1:2013)*

EN ISO 3691-6:2015, *Industrial trucks - Safety requirements and verification - Part 6: Burden and personnel carriers (ISO 3691-6:2013)*

ISO 5053-1:2020, *Industrial trucks - Vocabulary - Part 1: Types of industrial trucks*

EN ISO 5353, *Earth-moving machinery, and tractors and machinery for agriculture and forestry - Seat index point (ISO 5353:1995)*