Prügikogumissõidukid ja nendega ühendatud tõstemehhanismid. Põhi- ja ohutusnõuded. Osa 2: Külglaadimisega prügikogumissõidukid

Refuse collection vehicles and associated lifting devices - General requirements and safety requirements - Part 2: Side loaded refuse collection vehicles

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1501-2:2005+A1:2010 sisaldab Euroopa standardi EN 1501-2:2005+A1:2009 ingliskeelset teksti.	This Estonian standard EVS-EN 1501-2:2005+A1:2010 consists of the English text of the European standard EN 1501-2:2005+A1:2009.
Standard on kinnitatud Eesti Standardikeskuse 31.01.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 31.01.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 18.11.2009.	Date of Availability of the European standard text 18.11.2009.
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EUROPEAN STANDARD

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English Version

Refuse collection vehicles and associated lifting devices - General requirements and safety requirements - Part 2: Side loaded refuse collection vehicles

Bennes de collecte des déchets et leurs lève-conteneurs associés - Exigences générales et exigences de sécurité - Partie 2: Bennes à chargement latéral

Abfallsammelfahrzeuge und die dazugehörigen Schüttungen - Allgemeine Anforderungen und Sicherheitsanforderungen - Teil 2: Seitenlader

This European Standard was approved by CEN on 25 March 2005 and includes Amendment 1 approved by CEN on 10 October 2009.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

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Foreword

This document (EN 1501-2:2005+A1:2009) has been prepared by Technical Committee CEN/TC 183 “Waste management”, the secretariat of which is held by DIN.

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 2010, and conflicting national standards shall be withdrawn at the latest by May 2010.

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

This document includes Amendment 1, approved by CEN on 2009-10-10.

This document supersedes EN 1501-2:2005.

The start and finish of text introduced or altered by amendment is indicated in the text by tags ⟦A1⟩ ⟨A1⟧.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

⟦A1⟩ For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. ⟨A1⟧

The minimum essential criteria are considered to be of primary importance in providing safe, serviceable, economical, and practical side loaded refuse collection vehicles.

This European Standard is the second one of the series of co-ordinated standards of EN 1501 about “Refuse collection vehicles and their associated lifting devices” comprising the following parts:

— Part 1: Rear-end loaded refuse collection vehicles

— Part 2: Side loaded refuse collection vehicles

— Part 3: Front loaded refuse collection vehicles

— Part 4: Noise measurement protocol for refuse collection vehicles

— Part 5: Lifting devices for refuse collection vehicles (in preparation)

— Part 6: Electromagnetic compatibility (EMC) (in preparation)

— Amendment EN 1501-1/A1: Footboards

This European Standard is the second one of a series of standards dealing with specification, design, safety and testing of side loaded refuse collection vehicles (side loaded RCVs) and associated lifting devices.

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

Introduction

This European Standard is a type C standard as stated in EN ISO 12100-1.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this European Standard.

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

The series of standards should be read in conjunction with the documents developed by CEN/TC 183/WG 1 for mobile waste containers (series of standards EN 840), for stationary waste containers (series of standards EN 12574) and for selective collection containers emptied by the top (Type B of EN 13071) that are compatible with the lifting devices specified in these standards.

While producing this European Standard it was assumed that:

— only persons who have been appropriately trained will operate the side loaded RCV;

— components without specific requirements are designed in accordance with the usual engineering practice and calculation codes, including all failure modes, of sound mechanical and electrical construction and made of materials with adequate strength and of suitable quality;

— harmful materials, such as asbestos, are not used as part of the machine;

— components are kept in good repair and working order, so that the required characteristics remain despite wear within the specified limits as stated in the maintenance manual;

— by design of the load bearing elements, a safe operation of the machine is assured for loading ranging from zero to 100 % of the rated capacities and during the tests;

— the equipment shall be designed for operation with an ambient temperature between -10 °C and +40 °C;

— negotiation occurs between the manufacturer and the user concerning the specific uses and places of use of the machinery;

— the locations for use of the side loaded RCV are safe (e.g. tarmac road).

The standard is designed for careful consideration by designers, manufacturers, suppliers and users of side loaded RCVs.

1 Scope

This European Standard specifies the technical requirements to minimise the hazards listed in Clause 5 which can arise during the operation and the maintenance of side loaded refuse collection vehicles (side loaded RCVs) used for the collection, transportation and unloading of solid wastes and as intended by the manufacturer or his authorised representative.

This European Standard deals with:

— side loaded refuse collection vehicles as defined in Clauses 3 and 4;

— lifting devices for side loaded refuse collection vehicles.

Examples for basic types of side loaded refuse collection vehicles are given in Annex B.

This European Standard does not establish the additional requirements for:

— design and equipment of the chassis, considered as meeting all road traffic requirements;

— operation in severe conditions (e.g. extreme environmental conditions such as: temperatures below –10 °C and above +40 °C, corrosive environment, tropical environment);

— operation subject to special rules (e.g. potentially explosive atmospheres, contaminating environments);

— static electricity problems;

— transportation of passengers, lifting of persons;

— loading by crane;

— loading by a satellite vehicle;

— containers other than those manufactured according to EN 840, EN 12574 and EN 13071;

— handling of loads the nature of which could lead to dangerous situations (e.g. hot wastes, acids and bases, radioactive materials, especially fragile loads, explosives);

— hazards occurring during construction, transportation, commissioning, decommissioning;

— hazards occurring in relation to traffic on public roads;

— wind velocity in excess of 75 km/h;

— direct contact with foodstuffs;

— hazards due to the noise of the side loaded RCV.

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 294:1992, *Safety of machinery — Safety distances to prevent danger zones being reached by the upper limbs*

EN 349:1993, *Safety of machinery — Minimum gaps to avoid crushing of parts of the human body*

EN 418:1992, *Safety of machinery — Emergency stop equipment, functional aspects — Principles for design*

EN 457:1992, *Safety of machinery — Auditory danger signals — General requirements, design and testing (ISO 7731:1986, modified)*

EN 563:1994, *Safety of machinery — Temperatures of touchable surfaces — Ergonomics data to establish temperature limit value for hot surfaces*

EN 574:1996, *Safety of machinery — Two-hand control devices — Functional aspects — Principles for design*

EN 894-1:1997, *Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 1: General principles for human interactions with displays and control actuators*

EN 894-2:1997, *Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 2: Displays*

EN 894-3:2000, *Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 3: Control actuators*

EN 953:1997, *Safety of machinery — Guards — General requirements for the design and construction of fixed and movable guards*

EN 954-1:1996, *Safety of machinery — Safety related parts of control systems — Part 1: General principles for design*

EN 982:1996, *Safety of machinery — Safety requirements for fluid power systems and their components — Hydraulics*

EN 1037:1995, *Safety of machinery — Prevention of unexpected start-up*

EN 1050:1996, *Safety of machinery — Principles for risk assessment*

EN 1088:1995, *Safety of machinery — Interlocking devices associated with guards — Principles for design and selection*

〉A1〈 EN 1501-4:2007, *Refuse collection vehicles and their associated lifting devices – General requirements and safety requirements — Part 4: Noise test code for refuse collection vehicles* 〉A1〈

EN 60204-1:1997, *Safety of machinery — Electrical equipment of machines — Part 1: General requirements (ISO 60204-1:1997)*

EN 60529:1991, *Degrees of protection provided by enclosures (IP code) (IEC 60529:1989)*

EN ISO 12100-1:2003, *Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology (ISO 12100-1:2003)*

EN ISO 12100-2:2003, *Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles (ISO 12100-2:2003)*

ISO 7000:2004, *Graphical symbols for use on equipment — Index and synopsis*

IEC 60417-DB:2002, *Graphical symbols for use and equipment — Index, survey and compilation of single sheets*