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NSAI Standards

Irish Standard
I.S. EN 1501-5:2011

Refuse collection vehicles - General requirements and safety requirements - Part 5: Lifting devices for refuse collection vehicles

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This document replaces:
EN 1501-1:1998+A2:2009

This document is based on:	*Published:*
EN 1501-5:2011	29 August, 2011
EN 1501-1:1998+A2:2009	18 November, 2009

This document was published under the authority of the NSAI and comes into effect on:
29 August, 2011

ICS number:
43.160

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1501-5

August 2011

ICS 43.160

Supersedes EN 1501-1:1998+A2:2009

English Version

Refuse collection vehicles - General requirements and safety requirements - Part 5: Lifting devices for refuse collection vehicles

Bennes de collecte des déchets - Exigences générales et exigences de sécurité - Partie 5: Lève-conteneurs pour bennes de collecte des déchets

Abfallsammelfahrzeuge und die dazugehörigen Schüttungen - Allgemeine Anforderungen und Sicherheitsanforderungen - Teil 5: Schüttungen für Abfallsammelfahrzeuge

This European Standard was approved by CEN on 11 June 2011.

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Foreword

This document (EN 1501-5:2011) 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of an identical text or by endorsement, at the latest by February 2012, and conflicting national standards shall be withdrawn at the latest by February 2012.

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 together with EN 1501-1:2011 supersedes EN 1501-1:1998+A2:2009.

It also updates and improves the description of and the requirements for the lifting devices of EN 1501-2:2005+A1:2009 (3.14 to 3.20 and 6.4), EN 1501-3:2008 (3.15 to 3.17, 4.4 and 6.5) and EN 14803:2006 (Figure A.1).

This document 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).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

The minimum essential criteria are considered to be of primary importance in providing safe, serviceable, economical and practical lifting devices.

This European Standard is one part of the series of co-ordinated standards EN 1501 about "Refuse collection vehicles — General requirements and safety requirements" dealing with specification; design, safety and testing of refuse collection vehicles (RCVs) and their associated lifting devices comprising the following parts:

— *Part 1: Rear loaded refuse collection vehicles;*

— *Part 2: Side loaded refuse collection vehicles;*

— *Part 3: Front loaded refuse collection vehicles;*

— *Part 4: Noise test code for refuse collection vehicles;*

— *Part 5: Lifting devices for refuse collection vehicles.*

The European Standards EN 1501-2:2005+A1:2009 and EN 1501-3:2008 will be revised after adoption of EN 1501-1 and this part of EN 1501.

For waste container lifting devices mounted on rear loaded RCVs, this Part 5 of the European Standard EN 1501 shall be enforced at the same time as Part 1 of this series.

In this document Annexes A and C are normative, Annexes B and ZA are informative.

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, Croatia, 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.

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Introduction

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

The machinery concerned and the extent to which hazards, hazardous situations and hazardous 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 requirements of the other standards, for machines that have been designed and built according to the requirements of this type C standard.

This European Standard should be read in conjunction with:

— the documents developed for refuse collection vehicles (EN 1501-1, EN 1501-2 and EN 1501-3) that are compatible with the waste container lifting devices specified in this standard;

— the documents developed for mobile waste containers (series of standards EN 840), for stationary waste containers (series of standards EN 12574) and for selective collection containers (series of standards EN 13071) that are compatible with the lifting devices specified in this European Standard;

— the documents developed for diamond and skip containers.

While producing this European Standard it was assumed that:

— only persons who have been appropriately trained will operate the lifting device;

— the guidelines issued by the chassis manufacturer have been taken into account;

— the guidelines issued by the RCV manufacturer have been taken into account;

— 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 lifting device;

— components are kept in good repair and working order, so that the required characteristics remain despite wear;

— this European Standard is designed for careful consideration by designers, manufacturers, suppliers and users of lifting devices and RCVs.

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1 Scope

This European Standard deals with all significant hazards, hazardous situations and events relevant to lifting devices used for the emptying of designated waste containers into RCVs and their fitting onto the RCVs when they are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer throughout their foreseeable lifetime as defined in Clause 4.

This European Standard is applicable to the design and construction of the waste container lifting devices and the mounting of other lifting devices so as to ensure that they are fitted for their function and can be operated, adjusted and maintained during their entire lifetime. It is not applicable to the end of life of the lifting devices.

This European Standard describes and gives the safety requirements of the lifting devices for emptying waste containers and their interfaces with the corresponding parts of the RCVs and shall be used in conjunction with Parts 1, 2 and 3 of EN 1501 for the rear, side and front loaded RCVs. It refers to EN 1501-4 for the noise test code.

This European standard is not applicable to:

— operation in severe conditions e.g. extreme environmental conditions such as:

  — temperatures below – 25° C and above + 40°C;

  — tropical environment;

  — wind velocity in excess of 75 km/h;

— contaminating environment;

— corrosive environment;

— operation in potentially explosive atmospheres;

— lifting and transportation of persons;

— emptying waste containers other than those manufactured according to EN 840, EN 12574, EN 13071, and those described as paladin, diamond, skip containers;

— loading bulky waste by means of platform or forks;

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

— operation on ships;

— fitting and operation on stationary compactors.

This European Standard is not applicable to machinery which is manufactured before the date of its publication by CEN.

2 Normative references

The following referenced documents are indispensable for the application 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 349:1993+A1:2008, *Safety of machinery — Minimum gaps to avoid crushing of parts of the human body*

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