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Refuse collection vehicles — Safety of manual and rear-loaded refuse collection vehicles

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National foreword

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ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword ..... **iv**
Introduction ..... **v**
1 Scope **1**
2 Normative references **1**
3 Terms and definitions **1**
4 Structural and operational safety guidance and preventive measures **4**
4.1 Loading system 4
4.1.1 Loading system controls 4
4.1.2 Load opening height 4
4.1.3 Capacity of the hopper and dimensions 5
4.1.4 Rotating plate loading system 5
4.1.5 Compression plate loading system 6
4.2 Discharge system 6
4.2.1 Tailgate controls 6
4.2.2 Operating conditions for tipping discharge system 7
4.2.3 Operating conditions for ejection plate discharge system 7
4.2.4 Operating conditions for rotating drum discharge system 7
4.3 Tailgate structure for fall and opening prevention 7
Annex A (informative) **Components of the vehicle** **9**
Bibliography **11**

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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.

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This document was prepared by Technical Committee ISO/TC 297, *Waste collection and transportation management*.

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.

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Introduction

Manual and rear-loaded refuse collection vehicles (RCVs) are used for waste collection when waste is loaded into vehicles manually, without lifting devices.

Manual and rear-loaded RCVs present specific risks to humans. Accidents have been reported during the operation of manual and rear-loaded RCVs, such as operators' bodies getting caught in vehicle parts while handling waste or maintaining the vehicle. Thus, there is a need for information on safety methods specifically for manual and rear-loaded RCVs. While there are International Standards on safety of machinery which provide safety requirements, there are alternative methods for when such International Standards do not fit with the situation and/or conditions of the operation of manual and rear-loaded RCVs.

This document provides support, advice and guidance to owners, waste-service providers, vehicle manufacturers, suppliers, maintenance providers, consultants, authorities and others related to manual and rear-loaded RCVs to improve the safety of waste-collection operators.

NOTE National or regional standards can specify more detailed requirements for specific markets.

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TECHNICAL SPECIFICATION **ISO/TS 24159:2022**

Refuse collection vehicles — Safety of manual and rear-loaded refuse collection vehicles

1 Scope

This document provides general requirements, recommendations and examples of safety methods to ensure the safety of operation of manual and rear-loaded refuse collection vehicles (RCVs).

This document applies to manual and rear-loaded RCVs with rotating plate loading systems, compression plate loading systems and rotating drum loading systems, and covers methods for ensuring safety with regard to the loading systems and discharge systems.

This document applies to the design and manufacture of manual and rear-loaded RCVs to ensure that they can be operated, adjusted and maintained such that they function properly.

This document is not applicable to the handling of loads the nature of which can lead to dangerous situations (e.g. hot refuse, acids and bases, radioactive materials, contaminated refuse, especially fragile loads, explosives).

2 Normative references

ISO 24161,[1)]*Waste collection and transportation management — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 24161 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
bodywork
assembly of all components fitted to the chassis of a refuse collection vehicle, which includes the *body* (3.4) itself

Note 1 to entry: The bodywork can be fixed or interchangeable. The bodywork also includes either a loading system or a footboard(s) or any combination of the two.

[SOURCE: EN 1501-1:2021, 3.4, modified — Note 1 to entry revised.]

3.2
cab
enclosure mounted on the chassis in front of the *bodywork* (3.1) where the operator drives and controls the refuse collection vehicle and where other potential operator(s)can sit

[SOURCE: EN 1501-1:2021, 3.3]

1) Under preparation. Stage at the time of publication: ISO/DIS 24161:2021.

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