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Refuse collection vehicles — Vocabulary, classification and requirements for commercial specifications

Véhicules de collecte de déchets — Vocabulaire, classification et exigences relatives aux spécifications commerciales

Reference number
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Foreword

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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

0.1 General

Refuse collection vehicles (RCV) make a significant contribution in the field of waste collection and transportation management and are widely used globally.

With the rise in global waste generation, the type and quantity of RCVs will continue to grow in the foreseeable future alongside the development of society.

Hence, it is important to agree on a set of harmonized terms and definitions to provide a common basis for communication and information exchange on RCVs. This will help minimize ambiguity, confusion and misunderstanding of terms used in the RCV industry.

This document defines basic terms for vehicles and classification, the main functional components, and for performance indicators of RCV and its related commercial specifications.

The terms and definitions can serve as the basis for a common language for regulations, standards, academia, research, training, etc. in the RCV industry.

0.2 Terminology structure

The organization of terms and definitions in this document is based upon terms corresponding to the categories of “Vehicle and classification”, “Main functional components”, and “Performance indicators” in the RCV field. The organization of terms is illustrated in Figure 1.

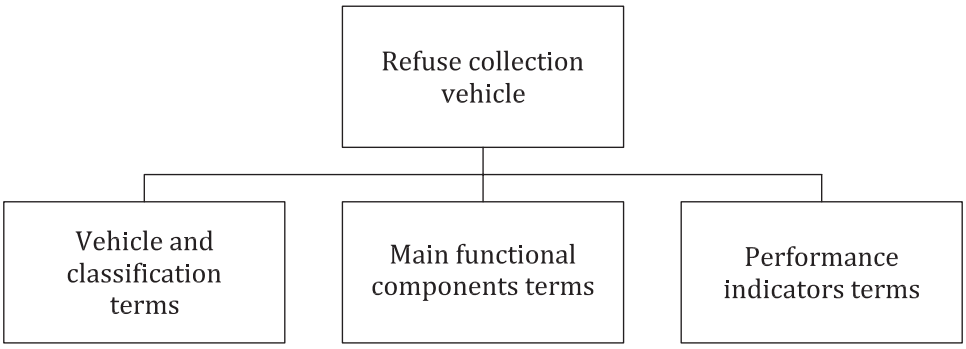


Figure 1 — Terminology structure

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Refuse collection vehicles — Vocabulary, classification and requirements for commercial specifications

1 Scope

This document defines the basic terms of functional components and performance indicators commonly used in the area of refuse collection vehicles (RCV). This document also gives classification and requirements for commercial specifications for RCVs. It aims to align with terminology that are used internationally.

This standard provides further vocabulary to those defined in ISO 24161.

NOTE 'Refuse' and 'waste' are used interchangeably in this document.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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 Vehicle and classification terms

3.1.1
refuse collection vehicle
RCV
purpose-built vehicle for the collecting and transporting of waste or recyclables whereby the refuse or recyclables are transferred via differential air pressure, lifting device, mechanical means or by hand

Note 1 to entry: Most of the time it consists of a *chassis* (3.2.2) or rigid *chassis* (3.2.2) onto which a *bodywork* (3.2.4) is mounted. Sometimes it can also be a truck and trailer combination.

Note 2 to entry: Refuse collection vehicle could be fitted with *leachate tanks* (3.2.71), usually fitted below the RCV's *body* (3.2.5) to contain leachate, for spillage control during transportation. The refuse collection vehicle could also be fitted with Internet-of-Things (IoT)/Smart solutions as part of an integrated waste management system. Waste or recyclables that are collected via RCV would be sent for further processing to a recycling facility, material recovery facility, or to be disposed of at incineration plants or landfill.

[SOURCE: ISO 24161:2022, 3.2.2.6]

3.1.2
rear-loaded refuse collection vehicle
rear-loaded RCV
rear-end loader
waste collection truck designed with an opening at the rear for the collection of waste

Note 1 to entry: In rear-loaded RCVs refuse is transferred manually or mechanically from the rear *rave rail* (3.2.13) into a *hopper* (3.2.9) or *body* (3.2.5). A *compaction mechanism* (3.2.59), if fitted, then transfers and compacts the refuse from the *hopper* (3.2.9) into a fixed or interchangeable *body* (3.2.5) of the rear-loaded RCV.

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Note 2 to entry: Optional, such a truck can be fitted with a fully enclosed *tailgate* (3.2.8) cover at the back of the rear-loaded RCV to mitigate odour and prevent accidental spillage during transportation.

Note 3 to entry: On rear-loaded RCV the container can be a fixed part of the *body* (3.2.5), which is lifted or rotated for emptying or which has an emptying device (e.g. an exchange plate). The *bodywork* (3.2.4) can include a *compaction mechanism* (3.2.59) to compress the material.

[SOURCE: ISO 24161:2022, 3.2.2.5, modified — rear end loader (REL) has been modified to rear-loaded RCV.]

3.1.3
side-loaded refuse collection vehicle
side-loaded RCV
side loader
waste collection truck which waste or recyclables are loaded from the sides

Note 1 to entry: In side-loaded RCVs refuse is transferred manually or mechanically from the side over the *rave rail* (3.2.13) into a *hopper* (3.2.9). A *compaction mechanism* (3.2.59), if fitted, then transfers and compacts the refuse from the *hopper* (3.2.9) into a fixed or interchangeable *body* (3.2.5) of the side-loaded RCV. To discharge, either the *body* (3.2.5) is tilted, rotated or an ejection device is used.

Note 2 to entry: On side-loaded RCV the container can be a fixed part of the *body* (3.2.5), which is lifted for emptying or which has an emptying device (e.g. an exchange plate). The *bodywork* (3.2.4) can include a *compaction mechanism* (3.2.59) to compress the material.

[SOURCE: ISO 24161:2022, 3.2.2.7, modified — side loader has been modified to side-loaded RCV.]

3.1.4
front-loaded refuse collection vehicle
front-loaded RCV
front loader
waste collection truck which waste or recyclables are loaded from the front

Note 1 to entry: In front-loaded RCVs refuse is transferred manually or mechanically from the front over the *rave rail* (3.2.13) into a *hopper* (3.2.9). A *compaction mechanism* (3.2.59), if fitted, then transfers and compacts the refuse from the *hopper* (3.2.9) into a fixed or interchangeable *body* (3.2.5) of the front-loaded RCV. To discharge, either the *body* (3.2.5) is tilted, rotated or an ejection device is used.

Note 2 to entry: On front-loaded RCV the container can be a fixed part of the *body* (3.2.5), which is lifted or rotated for emptying or which has an emptying device (e.g. an exchange plate). The *bodywork* (3.2.4) can include a *compaction mechanism* (3.2.59) to compress the material.

[SOURCE: ISO 24161:2022, 3.2.2.2, modified — front loader has been modified to front-loaded RCV.]

3.1.5
combined refuse collection vehicle
combined RCV
multi-loading mode refuse collection vehicle
multi-loading mode RCV
waste collection truck with a combination of rear-loading, side-loading or front-loading modes

3.1.6
consumer-facing refuse collection vehicle
consumer-facing RCV
refuse collection truck which is designed for the direct loading of refuse material by the waste producer to the vehicle without temporary storage in bins or compactors

Note 1 to entry: Usually requires the waste producer to adhere to a certain waste collection schedule.

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3.1.7
kerbside recycling collection vehicle
refuse collection truck which is fitted with a multi-compartment *body* (3.2.5) and associated assemblies that is used for loading and transporting recyclable materials which may include mechanical devices to lift and unload containers, compact or densify materials and/or loading mechanisms with multiple compartment buckets or troughs for the separate material types

Note 1 to entry: The point of operation is the area(s) around where recyclables are loaded into the vehicle.

[SOURCE: ANSI Z245.1-2017, 3.60]

3.1.8
refuse transfer trailer
truck chassis or trailer chassis with a high volume *body* (3.2.5) mounted, used to move large amounts of wastes or recyclables from one central processing or disposal facility to another

Note 1 to entry: Combinations of refuse transfer truck and trailer(s) are possible.

3.1.9
tanker vehicle
suction vehicle
waste collection truck used for the collection of sewage, sludge and other suckable waste

Note 1 to entry: Combinations of tanker truck and trailer(s) are possible.

3.2 Main functional components terms

3.2.1
cab
enclosure mounted on the *chassis* (3.2.2) in front of the *bodywork* (3.2.4) where the operator drives and controls the *RCV* (3.1.1) and where other potential operator(s) can sit

[SOURCE: ISO/TS 24159:2022, 3.2]

3.2.2
chassis
incomplete vehicle with just a cabin (complete or partial), chassis rails, power train, axles, which is intended to be completed with *bodywork* (3.2.4), customised to the needs of the operation

3.2.3
subframe
frame structure connecting the *bodywork* (3.2.4) to the *chassis* (3.2.2)

3.2.4
bodywork
assembly of all components fitted on the *chassis* (3.2.2) of the *RCV* (3.1.1), which includes the *body* (3.2.5) itself

Note 1 to entry: The bodywork can be fixed or interchangeable. The bodywork also includes either loading system or (a) *footboard(s)* (3.2.73) or any combination of the two.

[SOURCE: ISO/TS 24159:2022, 3.1]

3.2.5
body
part of the *bodywork* (3.2.4) of an *RCV* (3.1.1) that retains the loaded waste

Note 1 to entry: It may be fixed or interchangeable or rotate as part of the loading system.

Note 2 to entry: To discharge the collected waste, the body is either tilted or rotated or an *ejection plate* (3.2.67) system is used.

Note 3 to entry: See Figure A.1.

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[SOURCE: ISO/TS 24159:2022, 3.4, modified — definition revised.]

3.2.6
sewage tank
sludge tank
part of the *bodywork* (3.2.4) of a tanker truck that retains the loaded sewage, sludge and other suckable waste

3.2.7
discharge door
part of the *bodywork* (3.2.4), connected to the *body* (3.2.5) without *compaction mechanism* (3.2.59)

Note 1 to entry: It is designed to be opened to discharge the collected waste.

[SOURCE: EN 1501-1:2021, 3.8, modified — Note 1 to entry, "refuse" has been modified to "waste".]

3.2.8
tailgate
structure connected to the rear of the *body* (3.2.5) that is equipped with a *load opening* (3.2.10) for loading waste and holds back waste retained inside the *body* (3.2.5)

Note 1 to entry: It is designed to be opened to discharge the collected waste.

Note 2 to entry: See Figure A.1.

[SOURCE: ISO/TS 24159:2022, 3.5, modified — Note 1 to entry has been added.]

3.2.9
hopper
compartment where waste is loaded manually or mechanically into the *body* (3.2.5)

Note 1 to entry: See Figure A.1.

Note 2 to entry: The *hopper* (3.2.9) can be a separate compartment or part of the *bodywork* (3.2.4) or *tailgate* (3.2.8).

[SOURCE: ISO/TS 24159:2022, 3.7, modified — definition revised.]

3.2.10
load opening
opening for loading waste into the *hopper* (3.2.9) and/or *body* (3.2.5)

Note 1 to entry: See Figure A.3.

[SOURCE: ISO/TS 24159:2022, 3.6, modified — definition revised.]

3.2.11
load opening edge
perimeter of the *load opening* (3.2.10)

Note 1 to entry: See Figure A.3.

[SOURCE: EN 1501-1:2021, 3.11]

3.2.12
load opening cover
openable and closable cover provided at the *load opening* (3.2.10)

3.2.13
rave rail
fixed bottom part of the *load opening edge* (3.2.11) where the *guide flap* (3.2.14), if installed, is hinged

Note 1 to entry: If the *guide flap* (3.2.14) is folded down, then the rave rail is the *load opening edge* (3.2.11).

Note 2 to entry: See Figure A.1 and Figure A.3.

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3.2.14
guide flap
guide table
removable or foldable extension to the *rave rail* (3.2.13)

Note 1 to entry: See Figure A.1.

[SOURCE: EN 1501-1:2021, 3.13]

3.2.15
interface
connections between two parts and/or systems of the *RCV* (3.1.1)

Note 1 to entry: See Figure A.2.

[SOURCE: EN 1501-1:2021, 3.23]

3.2.16
loading device
mechanism for loading refuse or refuse storage containers into the *body* (3.2.5) or the designated location of the vehicle

EXAMPLE *Refuse container lifting device* (3.2.17), *loader crane* (3.2.44), *hooklift* (3.2.46), *tilt frame/roll-off hoist* (3.2.55), *skip loader* (3.2.50), *tail lift* (3.2.57), *docking hopper/hopper loading device* (3.2.58), *rotating drum* (3.2.68), etc.

3.2.17
refuse container lifting device
mechanism fitted onto an *RCV* (3.1.1) for emptying designated refuse containers

Note 1 to entry: "lifting device" in this document is the abbreviation for "reuse container lifting device".

[SOURCE: EN 1501-5:2021, 3.2.1, modified — Note 1 to entry added.]

3.2.18
split refuse container lifting device(s)
two or more adjacent devices with their own independent danger zone

[SOURCE: EN 1501-5:2021, 3.2.1.1]

3.2.19
combined refuse container lifting device(s)
two or more devices which share a common danger zone

[SOURCE: EN 1501-5:2021, 3.2.1.2]

3.2.20
integrated refuse container lifting device
designed to be permanently attached to the *RCV* (3.1.1)

[SOURCE: EN 1501-5:2021, 3.2.1.3]

3.2.21
demountable refuse container lifting device
designed to be detachable from the *RCV* (3.1.1)

Note 1 to entry: Detachable means for example bolted.

[SOURCE: EN 1501-5:2021, 3.2.1.4]

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3.2.22
interchangeable refuse container lifting device
designed to be capable of being fitted on different designated *RCVs* (3.1.1) provided with a common *interface* (3.2.15)

Note 1 to entry: *Interfaces* (3.2.15) can have mechanical, pneumatic, hydraulic, electrical, dimensional and functional aspects.

[SOURCE: EN 1501-5:2021, 3.2.1.5]

3.2.23
mounting frame
framework used to fit the interchangeable or demountable refuse container lifting device on the *RCV* (3.1.1)

Note 1 to entry: The mounting frame is provided as a fixed opening, a demountable frame, or a swivel hinged frame.

[SOURCE: EN 1501-5:2021, 3.4]

3.2.24
lifting carriage
sub-assembly of the *refuse container lifting device* (3.2.17) onto which the *pick-up system* (3.2.25) is normally fitted

[SOURCE: EN 1501-5:2021, 3.5]

3.2.25
pick-up system
part(s) of the *loading device* (3.2.16) intended to be in contact with the refuse container for receiving its corresponding part with the purpose of holding, lifting and emptying it

Note 1 to entry: Combinations of different pick-up systems are possible.

[SOURCE: EN 1501-5:2021, 3.11]

3.2.26
single side pick-up system
single face pick-up system
mechanism fitted onto the *RCV* (3.1.1) for emptying designated refuse containers by holding one side of a container

3.2.27
comb pick-up system
horizontal row of upward facing teeth and *locking system* (3.2.39) to retain the designated refuse container during emptying

Note 1 to entry: See Figure B.1.

[SOURCE: EN 1501-5:2021, 3.11.1]

3.2.28
diamond pick-up system
triangular shaped element(s) with one corner of the triangle facing upwards and *locking system* (3.2.39) to retain designated diamond refuse container

Note 1 to entry: See Figure B.2.

[SOURCE: EN 1501-5:2021, 3.11.4]

3.2.29
two sides pick-up system
mechanism fitted onto the *RCV* (3.1.1) for emptying designated refuse containers by holding two sides of a container

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3.2.30
trunnion pick-up system
pair of lateral arms with trunnion receiver and locking mechanism to retain the designated refuse container during emptying

Note 1 to entry: See Figure B.3.

[SOURCE: EN 1501-5:2021, 3.11.2]

3.2.31
double trunnion pick-up system
pair of lateral arms with two trunnion receivers and locking mechanism to retain the designated refuse container during emptying

Note 1 to entry: See Figure B.4.

[SOURCE: EN 1501-5:2021, 3.11.3]

3.2.32
BG pick-up system
pair of lateral arms and locking mechanism to retain the designated BG refuse container during emptying

Note 1 to entry: See Figure B.5.

[SOURCE: EN 1501-5:2021, 3.11.5]

3.2.33
pocket pick-up system
pair of lateral arms and locking mechanism to retain the designated refuse container during emptying

Note 1 to entry: See Figure B.6.

[SOURCE: EN 1501-5:2021, 3.11.6]

3.2.34
clamping system
mechanism which holds the designated refuse container(s) by application of jaws

Note 1 to entry: When these jaws overlap, it is called an overlapping clamp.

[SOURCE: EN 1501-5:2021, 3.11.7]

3.2.35
skip pick-up system
framework at the back end of the lifting device to catch and lock the trunnions/pivots or the trunnion bar of the skip container for lifting and/or tipping it

[SOURCE: EN 1501-5:2021, 3.11.8]

3.2.36
two chains skip pick-up system
lifting device with two chains to lift, tip and put back on the ground the skip container by tipping it over against a frontal trunnion

Note 1 to entry: See Figure B.7 a).

[SOURCE: EN 1501-5:2021, 3.11.8.1]

3.2.37
four chains skip pick-up system
lifting device with four chains to lift, tip and put back on the ground the skip container which will be tipped over against a fixed or moveable attachment on it

Note 1 to entry: See Figure B.7 b).

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[SOURCE: EN 1501-5:2021, 3.11.8.2]

3.2.38
guide system
component(s) to laterally locate the *pick-up system* (3.2.25) of the designated refuse container

[SOURCE: EN 1501-5:2021, 3.6]

3.2.39
locking system
mechanism which locks the *pick-up system* (3.2.25) of the designated refuse container to the *refuse container lifting device* (3.2.17) for emptying purpose

[SOURCE: EN 1501-5:2021, 3.7]

3.2.40
pushing pad
component of the *refuse container lifting device* (3.2.17) onto which the front wall of the designated refuse container body rests when it is being lifted

[SOURCE: EN 1501-5:2021, 3.8]

3.2.41
container restraint device
container retention device
system located towards the top of the *load opening* (3.2.10) of the *RCV* (3.1.1) enabling the movement of the designated refuse container to be stopped progressively beyond the emptying angle of the *refuse container lifting device* (3.2.17)

[SOURCE: EN 1501-5:2021, 3.9]

3.2.42
lid opener
device which opens the lid of the designated refuse container during the emptying cycle

[SOURCE: EN 1501-5:2021, 3.10]

3.2.43
extending arm
part of the *refuse container lifting device* (3.2.17) which goes outside of the *RCV* (3.1.1) designed to pick up the designated refuse container

[SOURCE: EN 1501-5:2021, 3.12]

3.2.44
loader crane
power driven crane, designed for being attached to a *chassis* (3.2.2), *subframe* (3.2.3) or *bodywork* (3.2.4), comprising a column, which slews about a base, and a boom system which is attached onto the top of the column, designed to be fitted on a commercial vehicle (including trailer) with a significant residual load carrying capability, and being designed for loading and unloading the vehicle as well as for other duties as specified by the manufacturer in the operator's manual

[SOURCE: EN 1501-5:2021, 3.2.2]

3.2.45
container handling system
lifting accessory assembled to the *loader crane* (3.2.44) consisting of a mechanism to connect the *loader crane* (3.2.44) with the designated refuse container and its opening mechanism if applicable

[SOURCE: EN 1501-5:2021, 3.21]

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3.2.46
hooklift
hoist gear designed for being attached to a *chassis* (3.2.2), achieve the functions of loading, unloading, and lifting of the roll-on roll-off container or mobile compactor by the moving of the hook arm

3.2.47
tilting hooklift
hook arm, which can be moved backwards and forwards by tilting it

Note 1 to entry: See Figure C.1 a).

3.2.48
telescopic hooklift
hook arm can be telescopic forward and backward, and rotate with the central axis

Note 1 to entry: See Figure C.1 b).

3.2.49
hook latch
device to prevent the hook from being disconnected from the container by unintentional operation

3.2.50
skip loader
mechanism fitted onto the *chassis* (3.2.2) for loading skip container

3.2.51
skip container tipping hook
mechanical device which can be hydraulically activated for hooking the skip container as its tipping fulcrum

3.2.52
skip container end position system
system to limit the final position of the tipped skip container

[SOURCE: EN 1501-5:2021, 3.11.8.3]

3.2.53
skip container lock
mechanical device used to fix the position of the skip container during transportation

3.2.54
tarp system
mechanised covering system that are mounted on *hooklift* (3.2.46) trucks for the covering or uncovering of open-top containers

[SOURCE: ISO 24161:2022, 3.2.2.9]

3.2.55
tilt frame
roll-off hoist
tiltable mobile frame mounted on the *chassis* (3.2.2) that acts as a guide to drag and pull the container onto the vehicle, which supports and fixes the container for transport, and can elevate (tilt frame) to unload or remove the container

Note 1 to entry: See Figure C.2.

3.2.56
container loading winch
power driven mechanism located on the *bodywork* (3.2.4) used for pulling, tipping refuse container(s) by means of ropes, chains or belts wound in one or more layers onto a drum

[SOURCE: EN 1501-5:2021, 3.22]

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3.2.57
tail lift
hydraulic lifting platform
platform lift
loading device (3.2.16) intended for installation on or in a wheeled vehicle and which is used for loading and/or unloading this vehicle

Note 1 to entry: The device consists essentially of a platform, a drive system, supporting elements and one or more control positions.

[SOURCE: EN 1756-1:2021, 3.1]

3.2.58
docking hopper
hopper loading device
mechanism fitted onto the *RCV* (3.1.1) for loading refuse into its *body* (3.2.5) with integrated hopper

Note 1 to entry: Docking hopper is designed for docking with small refuse collection vehicle which can discharge the collected waste into the *hopper* (3.2.9), then the waste will be loaded into the *body* (3.2.5).

Note 2 to entry: Docking hopper can also act as a *tailgate* (3.2.8) cover when it is fully retracted.

Note 3 to entry: See Figure C.3.

3.2.59
compaction mechanism
mechanism used to compact and/or transfer waste into the *body* (3.2.5)

[SOURCE: EN 1501-1:2021, 3.17]

3.2.60
packer plate
press plate
plate that compresses waste while scraping and moving it from the *hopper* (3.2.9) into the *body* (3.2.5)

Note 1 to entry: See Figure A.1.

3.2.61
rotating plate
plate that rotates as it scrapes waste in the *tailgate* (3.2.8) upward in preparation to be forced into the *body* (3.2.5) by the *push plate* (3.2.63)

Note 1 to entry: See Figure A.1.

[SOURCE: ISO/TS 24159:2022, 3.9]

3.2.62
carriage plate
sliding plate
plate where the *packer plate* (3.2.60) is fixed to and that moves the *packer plate* (3.2.60) downwards to compress the waste in the *hopper* (3.2.9) and forces the waste with a closed *packer plate* (3.2.60) in an upwards movement into the *body* (3.2.5)

Note 1 to entry: See Figure A.1.

[SOURCE: ISO/TS 24159:2022, 3.12, modified — definition revised.]

3.2.63
push plate
plate that forces waste scraped upward by the *rotating plate* (3.2.61) into the *body* (3.2.5)

Note 1 to entry: See Figure A.1.

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[SOURCE: ISO/TS 24159:2022, 3.10]

3.2.64
push head
swivel
device that pushes the waste holds by the *hopper* (3.2.9) directly into the *body* (3.2.5) to achieve the purpose of compacting of the waste

3.2.65
discharge system
mechanism for emptying the *body* (3.2.5)

EXAMPLE *Ejection plate* (3.2.67), *rotating drum* (3.2.68), tipping system, walking floor.

[SOURCE: EN 1501-1:2021, 3.19]

3.2.66
mechanical discharge
means of forced unloading of the *body* (3.2.5) by using mechanical devices

3.2.67
ejection plate
plate that pushes waste retained in the *body* (3.2.5) out the rear of the *body* (3.2.5) after opening the *tailgate* (3.2.8) or the *discharge door* (3.2.7) if needed for discharge of waste

Note 1 to entry: See Figure A.1.

Note 2 to entry: An ejection plate can also be used to improve the compression ratio.

[SOURCE: ISO/TS 24159:2022, 3.13, modified — definition revised.]

3.2.68
rotating drum
means of emptying of the *body* (3.2.5) by rotation of the drum after opening the *tailgate* (3.2.8) or the *discharge door* (3.2.7) if needed

Note 1 to entry: The rotating drum can also act as a *loading device* (3.2.16) to transfer waste from the *tailgate* (3.2.8) into the *body* (3.2.5) with or without compaction.

Note 2 to entry: With compaction function, rotating drum is also a *compaction mechanism* (3.2.59).

Note 3 to entry: See Figure C.4.

[SOURCE: EN 1501-1:2021, 3.19.2, modified — Notes 1 and 2 to entry have been added.]

3.2.69
pneumatic discharge
means of forced unloading of the *body* (3.2.5) (*sewage tank* (3.2.6)) by differential air pressure

3.2.70
tipping discharge
means of emptying of the *body* (3.2.5) (*sewage tank* (3.2.6)) by tilting the *body* (3.2.5) (*sewage tank* (3.2.6)) after opening the *tailgate* (3.2.8) or the *discharge door* (3.2.7) if needed

[SOURCE: EN 1501-1:2021, 3.19.3, modified — (*sewage tank* (3.2.6)) has been added after the *body* (3.2.5) as an optional item.]

3.2.71
leachate tank
tank for collecting and storing leachate

[SOURCE: ISO 24160:2022, 3.5]

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3.2.72
access door
inspection door
door in the *bodywork* (3.2.4) for maintenance purpose

[SOURCE: EN 1501-1:2021, 3.35]

3.2.73
footboard
platform situated at the rear of the rear loaded *RCV* (3.1.1) on which the operator(s) can stand for riding

[SOURCE: EN 1501-1:2021, 3.27]

3.2.74
safety bar
device to prevent the lifted parts of a *RCV* (3.1.1) from unintentional lowering

[SOURCE: ISO/TS 24159:2022, 3.25, modified — definition revised.]

3.2.75
cab shield
cab guard
cab protector
plate fitted to the front of the *hopper* (3.2.9) for protection of the *cab* (3.2.1) and the space between the *cab* (3.2.1) and the *bodywork* (3.2.4) from falling objects

Note 1 to entry: See Figure A.4.

[SOURCE: ANSI Z245.1-2017, 3.13, modified — Note 1 to entry added.]

3.2.76
stabilizing outrigger
mechanical device supporting the vehicle frame, which extend out and touch the ground during the loading and discharging operation of the *RCV* (3.1.1), which can stabilize the vehicle and prevent it from tipping over

3.2.77
mobile compactor
roll-on, roll-off container with compaction function

3.3 Performance indicators terms

3.3.1
capacity of the body
volume of refuse the *body* (3.2.5) contains, the volume enclosed by the *body* (3.2.5), unloading mechanism and *compaction mechanism* (3.2.59), measured in cubic meters rounded off to one decimal place

Note 1 to entry: See Figure D.1.

Note 2 to entry: The applicable capacity depends on the density of the loaded material and gross vehicle mass of the vehicle.

3.3.2
capacity of the sewage tank
volume that can be contained in the tank, measured in cubic meters rounded off to one decimal place

Note 1 to entry: The applicable capacity depends on the density of the loaded material and gross vehicle mass of the vehicle.

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3.3.3
capacity of the hopper
volume of non-compacted waste the *hopper* (3.2.9) contains, measured in cubic meters rounded off to one decimal place

Note 1 to entry: If compression does affect the capacity of the *hopper* (3.2.9), capacity of the *hopper* (3.2.9) is measured when the *carriage plate* (3.2.62) is in its fully retracted position.

Note 2 to entry: The capacity of the *hopper* (3.2.9) is limited by the horizontal plane at the *rave rail* (3.2.13).

Note 3 to entry: See Figure D.2.

Note 4 to entry: The additional volume created by the *guide flap* (3.2.14) is V3 of Figure D.2.

[SOURCE: ISO/TS 24159:2022, 3.8, modified — Note 1 to entry, the "sliding plate" has been modified to *carriage plate* (3.2.62), Notes 2, 3 and 4 to entry have been added.]

3.3.4
leachate tank capacity
volume that can be contained in the *leachate tank* (3.2.71), measured in litres

3.3.5
maximum permissible lifting mass
maximum lifting capacity allowed by the design of the lifting device under the premise of ensuring safety

3.3.6
maximum vacuum capacity
difference between the minimum absolute pressure and atmospheric pressure that can be generated in the suction device of the sewage suction truck when it is continuously running at the rated working speed

3.3.7
effective suction lift
maximum vertical distance from the horizontal ground where the wheels of the sewage suction truck are located to the surface to be sucked during the suction operation of the sewage suction truck

3.3.8
lifting cycle
duration from the starting position of the lifting device to the ending position of lifting and back to the starting position

Note 1 to entry: The lifting cycle is a succession of sequences to pick up from the ground, lift, hold and empty the designated refuse container and put it back on the ground.

[SOURCE: EN 1501-5:2021, 3.16, modified — term and definition have been revised, and Note 1 to entry has been added.]

3.3.9
suction loading cycle
duration required for the suction device to reach the rated working speed until the suckable waste fills the capacity of the sewage tank in a suction operation

3.3.10
compaction cycle
cycle by discontinuous or continuous compaction system

3.3.11
discontinuous compaction system
components of the compacting equipment, which always traverse the same route curve in the operation in cycles and return to their defined starting position after one cycle

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3.3.12
continuous compaction system
compacting devices which continuously and without reversing follow the direction of movement of individual components after commissioning and which have no defined starting position

3.3.13
discontinuous compaction cycle
duration from the starting position of the discontinuous *compaction mechanism* (3.2.59) to compressing the waste into the *body* (3.2.5) and back to the starting position

3.3.14
absorption speed
speed at which the *compaction mechanism* (3.2.59) presses the waste into the *body* (3.2.5), which is measured by the amount of waste that can be pressed into the *body* (3.2.5) in a unit time

3.3.15
ejection discharge cycle
duration from the starting state of discharging to the ending state, in which all mechanisms involved returned to the starting position, and are ready for the next operation cycle

Note 1 to entry: The ejection discharge cycle includes: opening of the locking mechanism; opening of the *tailgate* (3.2.8) or the *discharge door* (3.2.7); ejection process of the discharge mechanism; closing of the *tailgate* (3.2.8) or the *discharge door* (3.2.7); and the locking time of the locking mechanism. If the discharging mechanism needs to return to the starting position of discharge, its return time is included in the discharge cycle.

3.3.16
tipping discharge cycle
duration from the starting state of discharging to the ending state which all mechanisms involved back to the starting position when the waste is unloaded, and ready for the next operation cycle

Note 1 to entry: The discharge cycle is the sum of the time required for the *body* (3.2.5) to be tipped over, the *body* (3.2.5) to be unloaded, and the *body* (3.2.5) to return to its starting position.

3.3.17
body tipping angle
angle between the bottom surface of the *body* (3.2.5) and the horizontal plane when the *body* (3.2.5) is tilted, measured with an empty vehicle

Note 1 to entry: See Figure D.3 and Figure D.4.

3.3.18
body discharge angle
minimum angle between the bottom surface of the *body* (3.2.5) when tilted and the horizontal plane when the *body* (3.2.5) is tilted, measured with an empty vehicle

Note 1 to entry: See Figure D.3 and Figure D.4.

3.3.19
pneumatic discharge cycle
duration of a continuous process from turning on the pneumatic device to unload, to closing the pneumatic device after unloading completed

3.3.20
maximum discharging air pressure
when unloading by air pressure, the maximum pressure allowed in the tank under working conditions as defined by the manufacturer

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