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Identification and/or determination of the quantity of waste

National foreword

This British Standard is the UK implementation of [EN 14803:2020](#), which supersedes [BS EN 14803:2006](#), which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/508/1, Waste containers and associated lifting devices on refuse collection vehicles.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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EUROPEAN STANDARD

EN 14803

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2020

ICS 13.030.40

Supersedes EN 14803:2006

English Version

Identification and/or determination of the
quantity of waste

Identification et/ou détermination
de la quantité de déchets

Identifikation und/oder
Mengenbestimmung von Abfall

This European Standard was approved by CEN on 27 April 2020.

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European foreword

This document (EN 14803:2020) has been prepared by Technical Committee CEN/TC 187 "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of an identical text or by endorsement, at the latest by December 2020, and conflicting national standards shall be withdrawn at the latest by December 2020.

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.

This document supersedes EN 14803:2006.

The main changes compared with the previous edition are listed below:

- a) The Introduction has been deleted.
- b) Clause 2 "Normative References" and Clause 3 "Terms and definitions" have been revised.
- c) 4.2.1.2.4 "Optical data carrier position (dot code/ bar code) for automatic reading", 4.2.1.2.5 "Optical data carrier (dot code/bar code) position for manual reading", Table 2 "Test requirements and acceptance criteria for bar code/dot code stickers", 4.5 "Data processing centre (DPC)" and 4.6.1.2 "Bar code/dot code" have been deleted.
- d) Table 4 "Code structure of the unique identification in the transponder" has been updated.
- e) 4.7 "Integrity of data" has been revised.
- f) A.2 "Comb lifting device with identification" has been revised.
- g) Former Annex B "Positions of optical data carriers (dot code/bar code labels) on waste containers" has been deleted.

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1 Scope

This document specifies general requirements and verifications for methods of identification of waste containers and/or determination of the quantity of waste and other reusable materials including:

- safety requirements;
- interface requirements and performances;
- data to be treated and their integrity.

This document is applicable to systems for handling containers conforming to the EN 840 series.

Although this document does not cover systems for handling containers not conforming to the EN 840 series, users are encouraged to apply the requirements of this document to these systems as far as possible.

This document is applicable to systems both for billing and not for billing.

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 840-1](#), *Mobile waste and recycling containers — Part 1: Containers with 2 wheels with a capacity up to 400 l for comb lifting devices — Dimensions and design*

[EN 840-2](#), *Mobile waste and recycling containers — Part 2: Containers with 4 wheels with a capacity up to 1 300 l with flat lid(s), for trunnion and/or comb lifting devices — Dimensions and design*

[EN 840-3](#), *Mobile waste and recycling containers — Part 3: Containers with 4 wheels with a capacity up to 1 300 l with dome lid(s), for trunnion and/or comb lifting devices — Dimensions and design*

[EN 840-4](#), *Mobile waste and recycling containers — Part 4: Containers with 4 wheels with a capacity up to 1 700 l with flat lid(s), for wide trunnion or BG- and/or wide comb lifting devices — Dimensions and design*

[EN 840-5](#), *Mobile waste and recycling containers — Part 5: Performance requirements and test methods*

[EN 840-6](#), *Mobile waste and recycling containers — Part 6: Safety and health requirements*

EN 1501 (all parts), *Refuse collection vehicles — General requirements and safety requirements*

[EN 45501](#), *Metrological aspects of non-automatic weighing instruments*

EN 60068-2-6, *Environmental testing — Part 2-6: Tests — Test Fc: Vibration (sinusoidal) (IEC 60068-2-6)*

EN 60068-2-27, *Environmental testing — Part 2-27: Tests — Test Ea and guidance: Shock (IEC 60068-2-27)*

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

EN ISO 7250-1, *Basic human body measurements for technological design — Part 1: Body measurement definitions and landmarks (ISO 7250-1:2017)*

[ISO 11784](#), *Radio frequency identification of animals — Code structure*

OIML R 51, *Automatic catchweighing instruments*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

**3.1
identification
ID**

process which consists in accurately recognising and verifying a waste container by reading a data carrier

**3.2
determination of the quantity of waste
DQW**

determination of the weighing of the waste mass and/or counting of emptying operations

**3.3
data carrier**

device carrying data which can be recognised by an electro-magnetic, optical or other reading device

**3.4
interface
IF**

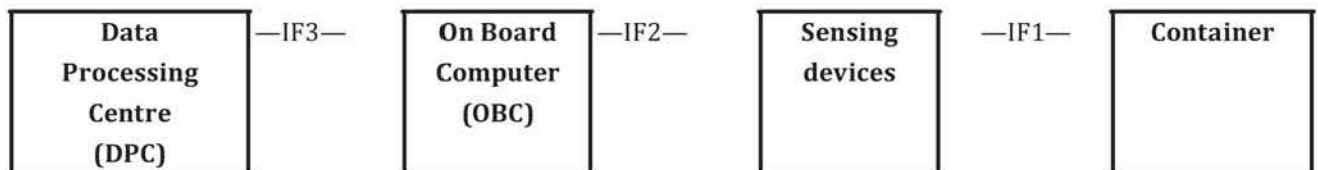
boundary linking two systems

Note 1 to entry: The interface could be a mechanical interface, a data interface, an electrical interface etc.

Note 2 to entry: IF2 now corresponds to [EN 16815](#) "CleANopen – Application profile for municipal vehicles".

Note 3 to entry: For the purposes of this document, interfaces (IF) are numbered as follows in [Table 1](#):

Table 1 — Data flow and interfaces



**3.5
malfunction**

non-deliberate modification, addition, omission or suppression of signals or data

3.6 Data processing

**3.6.1
storage**

recording of data relating to the collection of waste

**3.6.2
transfer**

process or method of transmitting data relating to the collection of waste

**3.6.3
read**

process of retrieving data from some machine-readable medium and, as appropriate, the contention and error control management, and channel and source decoding required to recover and communicate the data entered at source

3.6.4
read only
RO

distinguishing a transponder in which the data is stored in an unchangeable manner and can therefore only be read

3.6.5
read/write
R/W

applied to a radio frequency identification system, it is the ability both to read data from a transponder and to change data (write process) using a suitable programming device

3.6.6
write once/read many
WORM

distinguishing a transponder that can be partly or totally programmed once by the user, and thereafter only read

3.6.7
sensing device

system with one or more sensors which detects and/or processes and transfers signals and/or data

3.6.8
encryption

means of securing data, often applied to a plain or clear text, by converting it to a form that is unintelligible in the absence of an appropriate decryption key

3.7 Identification systems

3.7.1
transponder

data carrier (also called "electromagnetic label") associated with the object to be identified

NOTE The transponder is intended to receive a radio frequency signal and to return a different radio frequency signal containing relevant information.

3.7.2
positioning system by geographical co-ordinates
GNSS

identification of a location with geographical co-ordinates

3.7.3
antenna

electronic component which emits or receives energy to/from a data carrier within a radio frequency spectrum

NOTE Antennas are also used to receive data from GNSS satellites.

3.7.4
transponder reader

sensing device which, with an antenna, transmits a radio signal according to a given frequency towards one or more transponders and receives a signal back

NOTE The reader is used to establish dialogue without contact with the transponder and to exchange data.

3.8 Systems for the determination of the quantity of waste (DQW systems)

3.8.1
weighing

determination of the waste mass

3.8.2

automatic weighing instrument

instrument that weighs without the intervention of an operator and follows a pre-determined program of automatic process characteristic of the instrument

[SOURCE: International Organization of Legal Metrology (OIML R51), 2010, *Automatic catchweighing instruments – Part 1: Metrological and technical requirements – Tests* (§ T.1.1)]

3.8.3

non-automatic weighing instrument

instrument that requires the intervention of an operator during the weighing process, for example to deposit on or remove from the receptor the load to be measured and also to obtain the result

[SOURCE: EN 45501]

3.8.4

On Board Computer OBC

electronic device for storing and receiving data and performing calculations, and which is fitted on the refuse collection vehicle, and which transfers data from/to sensing devices and to/from the data processing centre (DPC)

3.8.5

data processing centre DPC

electronic device for storing, receiving and giving back data and performing calculations separate from the vehicle; the DPC transfers data from/to OBCs

4 Requirements

4.1 General requirements on safety and health

4.1.1 Every component and procedure for identification (ID) and/or determination of the quantity of waste (DQW) shall not influence the safety and/or on the correct operation of the refuse collection vehicle (RCV) including the lifting device.

4.1.2 The fitting of components to the waste container shall not have any influence on the safe use of the waste container.

4.1.3 All components for ID and DQW, when used on vehicles conforming to EN 1501 (all parts), shall conform to the EMC requirements as defined in EN 1501 (all parts).

4.1.4 If an existing RCV or lifting device is modified by fitting an ID or DQW system then the conformity with EN 1501 (all parts) and relevant standards shall be checked again.

If the fitting of the sensing devices changes one or more characteristics of the RCV and its associated lifting device (maximum permissible mass, operating, etc.), new characteristics shall be included in the documentation of the RCV and of the lifting device.

A lifting device equipped with systems for ID and DQW shall fulfil the requirements defined in [Annex C](#).

NOTE Attention is drawn to the conformity with the requirements of the Machinery Directive (98/37/EC) and the EMC Directives (89/336/EC, 95/54/EC) if an existing refuse collection vehicle or lifting device is modified by fitting an ID or DQW system.

4.1.5 The system consisting of the OBC and the sensing devices for ID and for DQW shall be galvanically separated from the controlling unit of the lifting device and shall not negatively affect the functions of the chassis, bodywork and lifting device.

4.1.6 The components for ID or DQW shall be fitted in such a way that they do not generate any risk for any person (driver, operator, other person) under normal and emergency situations.

4.1.7 Where handling of elements by persons is necessary, dimensions of related devices shall be based on EN ISO 7250-1.

4.1.8 All electrical systems shall conform to EN 60204-1.

4.1.9 Every component shall be installed in accordance with the instructions of its manufacturer.

4.2 Data carriers

4.2.1 Positioning on the container

4.2.1.1 Manufacturer's instructions

The manufacturer of ID devices shall provide detailed instructions on the assembly of fitting of data carriers on the containers in particular regarding dimensions, tolerances and orientation.

4.2.1.2 Position

4.2.1.2.1 General

The position of data carriers on containers shall be such that safe and unambiguous communication with the reader is possible and that the risk that the data carrier is damaged is minimal.

4.2.1.2.2 Transponder position for automatic reading or writing

If containers are lifted by the comb lifting device defined in [Annex A \(A.2\)](#), the position of transponders shall be such that the axis of the transponders are aligned with the position indicated in [Annex A \(A.3\)](#). If containers are not lifted by the comb lifting device defined in [Annex A \(A.2\)](#), other positions can be used, for which recommendations are given in [Annex B](#).

4.2.1.2.3 Transponder position for manual reading or writing

The transponder position shall conform to ergonomic recommendations to allow the reading and the writing in a proper position for the operator. The positions defined in [Annex A \(A.3\)](#) conform to ergonomic recommendations.

4.2.2 Performance

4.2.2.1 Transponders shall fulfil the requirements of [Table 2](#), and continue to function correctly after the tests

4.2.2.2 Transponders shall remain securely fastened to the waste container and continue to function correctly, after the waste container with the data carrier attached is tested in accordance with [EN 840-5](#).

4.2.2.3 Requirements and tests for transponders

Table 2 — Requirements and tests for transponders

Characteristic	Glass or plastic encapsulated transponder
Operating temperature; RO, R/W and WORM	-25 °C to + 70 °C

Characteristic	Glass or plastic encapsulated transponder
mechanical shock EN 60068-2-27, test Ea	200 g, half sine, 3 ms, 2 axes 6 shocks per axis
Vibration EN 60068-2-6, test Fc	10 g, 10 Hz to 500 Hz, 2 axes, 10 test cycles /axe
protection class	IP 67

4.3 Sensing devices

4.3.1 General requirements for all sensing devices for ID and DQW

4.3.1.1 Sensing devices including their wiring shall withstand the normal strains applied to their support.

4.3.1.2 The manufacturer of sensing devices shall provide detailed mounting instructions for the sensing devices in particular regarding dimensions, tolerances and orientation, electrical specifications, information on when during the lifting cycle and position of the lifting device the measuring takes place, and any other information necessary for correct installation and operation.

4.3.1.3 Sensing devices shall be protected in such a way that any electrical short circuit does not result in more damage.

4.3.1.4 Power supply

4.3.1.4.1 After a short electrical power interruption or electrical burst as defined in [EN 45501](#), all sensing devices shall resume their normal function. When such a power interruption occurs, only the weighing and identification cycle taking place during the interruption may be influenced. All other data before shall remain unchanged.

4.3.1.4.2 If a power interruption longer than that defined in [4.3.1.4.1](#) occurs during ID or DQW operations, the malfunction shall be indicated to the operator, and the sensing devices shall be automatically put out of service. The return to normal operation shall only be possible after a reset operation of the ID and DQW system by the operator. If power interruption occurs but not during ID or DQW operations, automatic return to normal functioning shall take place.

4.3.1.4.3 The sensing devices shall continue to function correctly during the variations in the power supply given in [EN 45501](#).

4.3.1.4.4 Sensing devices operated from battery power shall indicate whenever the voltage drops below the minimum required value and shall under those circumstances either continue to function correctly, or be automatically put out of service.

4.3.1.5 Sensing devices except contact-less optical readers with cameras shall have a degree of protection of at least IP 65. Contact-less optical readers with cameras shall have a degree of protection of at least IP 68.

4.3.1.6 Sensing devices shall continue to function correctly when tested in accordance with [Table 3](#).

Table 3 — Test requirements for sensing devices

Characteristic	Devices mounted on the vehicle body, excluding lifting device	Devices mounted on the lifting device
Operating temperature	-10 °C to + 40 °C	Requirements shall be defined in collaboration between manufacturer and supplier of the vehicle.
Mechanical shock EN 60068-2-27	20 g to 40 g, 10 ms, 6 shocks/axis	
Vibration EN 60068-2-6	5 g to 10 g/axle, 10 Hz to 300 Hz, 10 to 20 cycles/axis	

4.3.2 Additional requirements for identification systems

4.3.2.1 General requirements for all identification systems

The ID system shall have provisions that, upon each lift operation, the unique identification of the data carrier is checked via the reader system’s internal firmware and tested for validity. The unique identification is then passed to the OBC for further validity checks. Depending on the result of the check, the system generates a status, OBC shall store this status and also generate a signal that could be used to stop the lifter. This signal shall be generated by the OBC and shall be selectable whether it stops the lifting cycle or not.

A procedure for further handling of detected errors shall be defined in agreement between the supplier of the ID system and the operator.

4.3.2.2 Additional requirements for contact-less transponder readers

The frequency at which the radio frequency identification system operates shall be one of the following frequencies:

Low frequency	< 135 kHz
Medium frequency	13,56 MHz
High frequency	2,45 GHz

4.3.2.3 Additional requirements for contact-less optical readers

Contact-less optical readers shall operate with wavelengths outside the range of the visible light.

4.3.3 Additional requirements for DQW systems

4.3.3.1 General requirements for all DQW systems

The DQW system shall have provisions that if any error is detected, the DQW result is marked automatically, and this marking information is transferred to the DPC together with the associated DQW results.

The DQW system shall have no characteristics likely to facilitate fraudulent use, whereas possibilities for unintentional misuse shall be minimal. Components that influence the correct working of the system shall be secured against such actions.

4.3.3.2 Additional requirements for weighing systems

The maximum permissible errors on the weighing result shall be in accordance with either [EN 45501](#), for non-automatic weighing instruments or 2.2 or 2.3 of OIML R 51 for automatic weighing instruments.

Attention is drawn to the fact that weighing instruments for this purpose may be subject to additional national regulations, especially in case of weight price trading. Depending on the country of use, this may lead to for example requirements for certification of the weighing instruments and full applicability of [EN 45501](#) for non-automatic weighing instruments or OIML R 51 for automatic weighing instruments. If all the requirements of [EN 45501](#) or OIML R 51 as appropriate are fulfilled, the requirements of [4.3.1](#) are automatically fulfilled.

4.4 On Board Computer (OBC)

4.4.1 The OBC shall serve as central monitoring unit for all sensing devices and report important malfunctions of the sensing devices (e.g. a defect load cell or reading device), with the exception of weighing systems where the OBC is not part of the approval of the weighing system.

4.4.2 The OBC shall safely store data up to the moment that the safe transfer to the DPC is confirmed. The storage capacity of the OBC shall be enough for storing the data of at least 10 000 bin emptying operations.

4.4.3 The OBC shall monitor itself regarding any manual interference. If this is detected, the stored information shall be marked.

4.4.4 The OBC shall have a degree of protection of at least IP 54.

4.5 Data structure and transfer

4.5.1 Data in the data carriers

4.5.1.1 Transponder

The information in the first 64 user bits in the transponder shall form the unique identification of the transponder and shall conform to [Table 4](#).

NOTE For RO transponders, these are the first 64 bits. For programmable transponders, these are the first 64 bits in the programmable area, i.e. excluding header, page design, etc, where applicable.

Whatever the transponder technology used (e.g. RO, WORM, R/W), this unique identification shall be present in the transponder, non-erasable, non-modifiable, accessible for all reading devices, without encryption and/or password in reading. This format should be used in all interfaces, displays and printed form.

Whatever the transponder technology used (e.g. RO, WORM, R/W), this unique identification shall be the link between the waste container, and the database allowing its invoice management.

4.5.2 Data transfer from container to sensing devices for ID on the vehicle (interface IF 1)

The minimum data to be transferred shall be the unique identification.

4.5.3 Data transfer from the OBC of the refuse collection vehicle to the DPC (interface IF 3)

The minimum data to be transferred shall be: the unique identification, date and time. Optional are weight, volume, position (GNSS) and others if applicable.

Table 4 — Code structure of the unique identification in the transponder

NOTE Bit No 1 in the code is the most significant Bit (MSB); bit No 64 is the least significant Bit (LSB).

1	33	64
1 Bit	31 Bits	32 Bits
	Application code	Manufacturer/supplier code and serial number

1 Bit no	2 Number of Bits	3 Information	4 Contents	5 Comment
1	1	Animal/non- animal	0 (non-animal)	Based on ISO 11784
2	1	Type of transponder	X	0 = read only 1 = multi page
3 to 32	30	reserved	000 0000 1000 0000 0000 0000 0000 000	Application identifier for waste management
33 to 42	10	Manufacturer/supplier code	xxxx xxxx xx	Code assigned by the registration authority
43 to 64	22	Serial number	xxxx xxxx xxxx xxxx xxxx xx	Serial number issued by the manufacturer/supplier

Bit No 1: Shall be set to zero (0).
 (one (1) is reserved for animal ID as defined in [ISO 11784](#)).
 Bit No 2: This Bit shall be set in accordance with the type of transponder (0 = read only, 1 = multi page).
 Bit No 3 to 32: these Bits shall be set in the above mentioned way. (Bit no 10 shall be set 1 all the others 0).
 Bit No 33 to 42: manufacturer/supplier code.
 This unique code is assigned by the registration authority.
 Bit No 43 to 64: serial number issued by manufacturer/supplier, who shall be responsible for the uniqueness of this number.

- General requirements:
- a) The unique identification format is Hex string.
 - b) The number of digits is 16 in printed form.
 - c) The storage space required is 64 bits.
 - d) The orientation is from MSB to LSB.
 - e) Cutting or modifying of the unique identification is not allowed.
 - f) A sample string looks like this "00400000FB0208C9".

The manufacturer/supplier and the registration authority shall conform to [Annex D](#).

NOTE At the date of publication of this document, the registration authority for this document is: AFNOR Standardization, 11 rue Francis de Pressensé 93571 La Plaine Saint-Denis Cedex (FRANCE).

4.6 Integrity of data

The level of the data protection for the data transfer between:

- data carriers and devices that read the data,
- carrier, identification systems and OBC,
- DQW systems, and
- OBC and DPC

shall be defined by the supplier according to COMMON CRITERIA (ISO 15408, Part 1 to Part 3).

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Annex A
(normative)

Positions of transponders on waste containers to be handled by the comb lifting device with identification

A.1 General

Dimensions in this Annex are in millimetres and have tolerances of ± 3 mm, except where specified otherwise.

A.2 Comb lifting device with identification

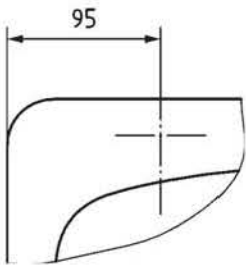
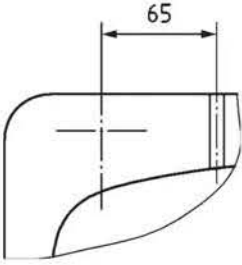

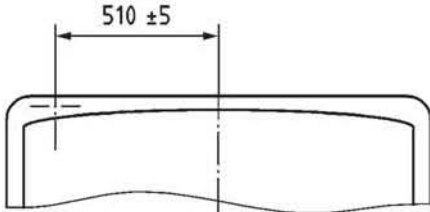
For specifications of the comb and guide system for containers see [EN 1501-5^{1\)}](#), Figures A.2 and A.3.

A.3 Transponder positions on waste containers with frontal receiver

[Table A.1](#) gives the specifications for transponder positions.

Table A.1 — Transponder positions

Dimensions in millimetres

Frontal receiver form ^a	Transponder positions on waste containers	
	Containers with 2 wheels	Containers with 4 wheels
A, B		
C		
<p>NOTE The view is from below.</p> <p>^a Shall be in accordance with the EN 840 series.</p>		

1) Under preparation. Stage at the time of publication FprEN 1501-5:2019.

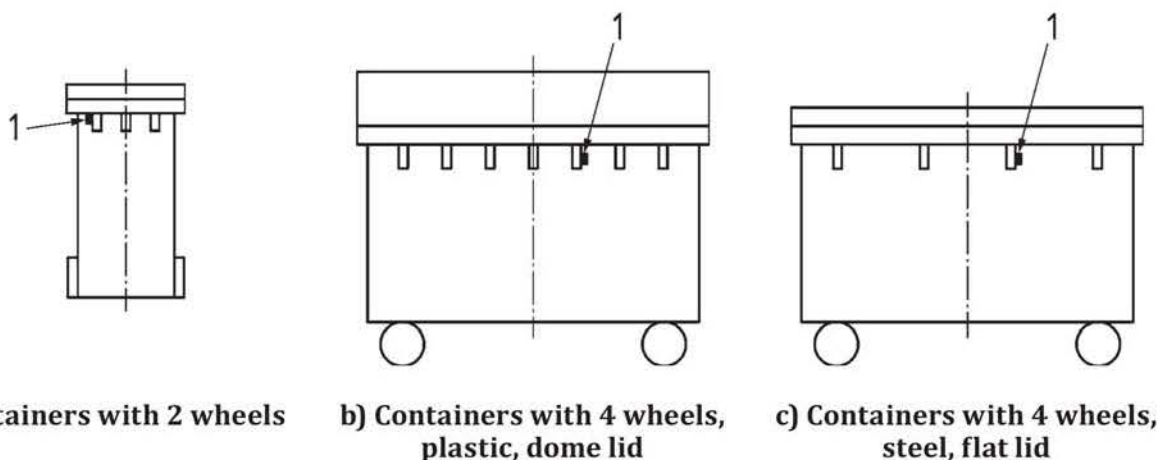
Annex B (informative)

Recommended positions of transponders on waste containers to be handled by lifting devices other than the comb lifting device defined in A.2

B.1 Comb lifting devices other than the comb lifting device defined in A.2

B.1.1 Transponder position (I)

Figure B.1 shows the recommended positions of transponders attached to a rib.



Key

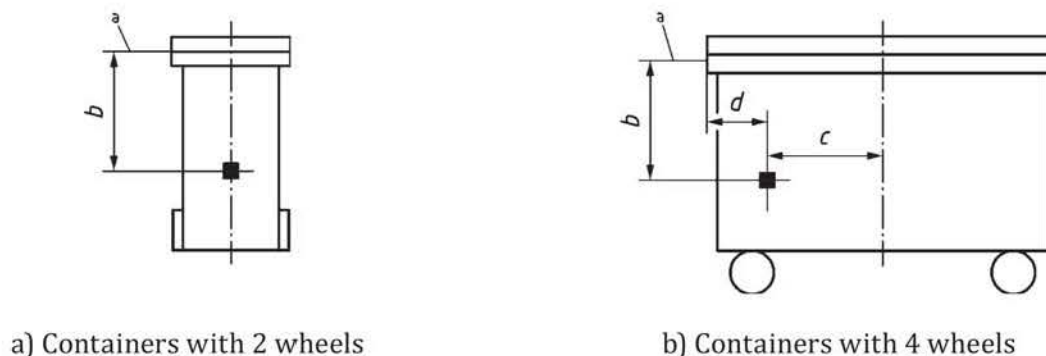
1 Transponder

Figure B.1 — Transponder attached to a rib

B.1.2 Transponder positions (II, III, IV)

Figure B.2 shows the recommended positions of transponders attached to the waste container body.

Dimensions in millimetres
Dimensions in millimetres



Option	b	c	d
II	322	290	-
III	455	0	-
IV	350	-	250

Key

a Lifting level

Figure B.2 — Transponder attached to the waste container body

B.2 Lifting devices other than comb lifting devices

B.2.1 Transponder position for trunnion or other lifting device (I)

Figure B.3 shows the recommended positions of transponders attached to waste containers for trunnions or other lifting devices.

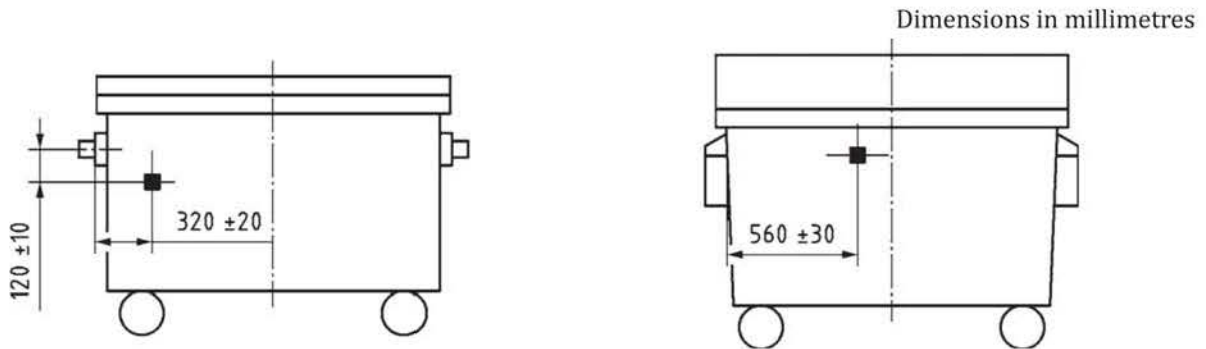


Figure B.3 — Transponder position on waste containers for trunnion or other lifting device (I)

B.2.2 Transponder positions for trunnion lifting device (II)

Figure B.4 shows the recommended positions from the left side of transponders attached to waste containers for trunnions.

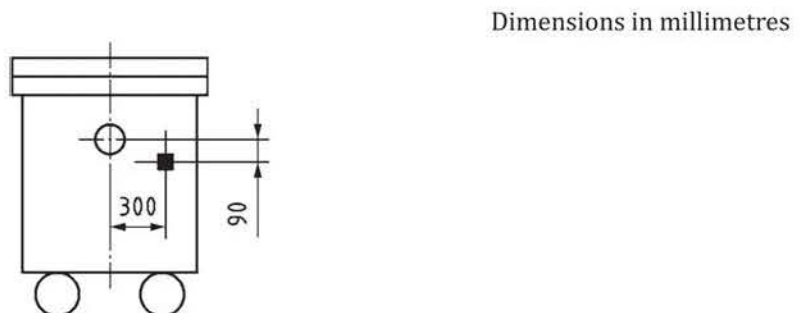


Figure B.4 — Transponder position on waste container for trunnion lifting device (II), view from the left side

B.2.3 Transponder positions for BG lifting device (in accordance with EN 840-4)

Figure B.5 shows the recommended positions of transponders attached to BG lifting devices.

Dimensions in millimetres

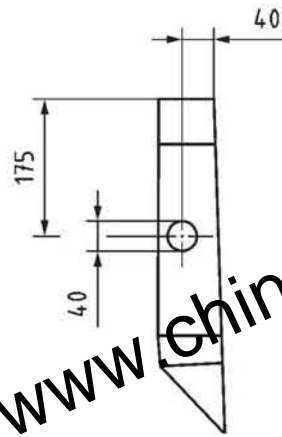


Figure B.5 — Transponder position on BG receiver

Annex C
(normative)

**Integration of systems for ID and DQW on lifting devices
requirements**

Before and after installation, the lifting device equipped with systems for ID and/or DQW shall undergo a visual inspection with the intention to:

- a) verify that the lifting device equipped with systems for ID and/or DQW present neither damage nor visible defects;
- b) verify that the manufacturing characteristics of the lifting device equipped with systems for ID and/or DQW are those declared by the manufacturer and or integrator;
- c) verify the functioning of the systems for ID and/or DQW;
- d) compare the condition of the lifting device before and after installation.

Annex D (normative)

Application and registration procedures for manufacturers/suppliers

D.1 Application procedure for assignment of a manufacturer/supplier code

- a) "applicant" manufacturer/supplier shall apply in writing to the registration authority (RA) for the assignment of a manufacturer/supplier code (see [Table 4](#)).
- b) RA shall assign an unused manufacturer/supplier code to any company or organization that fulfils the criteria in [D.2](#).
- c) in unforeseen cases there could be a need for a manufacturer/supplier to consult the TC as an appeal procedure against the decision of the RA. In this case the consulting party shall make a written request for clarification to the TC 183-Chairman, through the TC 183-Secretariat. The TC 183-Chairman may then delegate the resolution of this request to the relevant Working Group.
- d) manufacturer/supplier may request several manufacturer/supplier codes. This may be granted by the RA. Each manufacturer/supplier code shall than be handled as belonging to a separate manufacturer/supplier.
- e) issued manufacturer/supplier codes shall never be reused.

D.2 Criteria for approval of an application for a manufacturer/supplier code

Applications for a manufacturer/supplier code shall meet the criteria for approval below:

- a) applicant shall be a single entity with a legal status;
- b) applicant shall use the manufacturer/supplier code for an agreed use within the intended scope of this document;
- c) applicant shall pay any fees required by the RA according to the rules in [D.6](#).

D.3 Responsibilities of the manufacturer/supplier

The responsibilities of the manufacturer/supplier shall be:

- a) to comply fully with the numbering system and the requirements of this document and its Annexes, a manufacturer/supplier may NOT issue a number that has not been allocated to it by the RA;
- b) to retain the letter of authorization of its manufacturer/supplier code by the RA;
- c) to issue unique identifications with serial numbers using the manufacturer/supplier code number assigned to them by the RA, and in accordance with the requirements of this document;
- d) to communicate to the RA any proposed changes that would alter material facts contained within the original registration;
- e) to keep a register of unique identifications with serial numbers within the limits of its intended use, and to maintain such records in a secure place and in accordance with the requirements for data protection in the country/countries where the register is maintained;

- f) to pay fees in accordance with agreements with the RA based on the guidelines in [D.6](#);
- g) to use different supplier codes for different transponder products, especially for different frequencies.

D.4 Responsibilities RA for manufacturer/supplier register

The responsibilities of a RA shall be:

- a) to ensure that the application fully complies with the procedures for application for manufacturer/supplier code in this document;
- b) to verify that the applicant has declared the use of numbering structures for unique identifications with serial numbers compliant with the requirements of this document;
- c) to process, within 60 days of receipt of the applications, the applications for a manufacturer/supplier code;
- d) to send notification to the applicant in writing, within the same period of 60 days of receipt of the application, as to the disposition of their application;
- e) to assign an unambiguous manufacturer/supplier code to each approved manufacturer/supplier;
- f) to maintain a register providing details of all registered manufacturer/suppliers together with their "manufacturer/supplier code";
- g) to retain a copy of each application.

D.5 Register of manufacturers/suppliers

D.5.1 Publication and availability

The RA shall publish a manufacturer/supplier register. The register shall be published in both numerical (manufacturer/supplier code) and alphabetical (manufacturer/supplier name) order.

The final issue of the unique identifications with serial numbers shall remain private and shall not be declared to the RA and shall therefore not appear on any published register whatsoever.

The register of manufacturers/suppliers shall be a publicly available document. The register may be available at the cost of reproduction, or the RA may choose to publish it on the Internet.

D.5.2 Contents

The manufacturer/supplier register shall contain the following information:

- a) name of manufacturer/supplier;
- b) address and communication address (e.g. tel., fax., e-mail) of manufacturer/supplier and principal contacts within organization;
- c) manufacturer/supplier code assigned to the manufacturer/supplier by the RA;
- d) date of issuing and date of end of issuing, if any.

D.6 Costs aspects

The costs of the entire registration procedure will be recovered on the basis of nominal cost. An issuer will pay a registration fee and an annual renewal fee to the RA. The registration fees may be set to cover a free public Internet access to the RA registry. The charges for issuing of documents shall be at the cost recovery basis.

D.7 Disclaimer

The following declaration by the RA should be used to protect its position against possible misuse of the coding structure by bodies outside their control.

“IMPORTANT INFORMATION REGARDING YOUR NUMBER ASSIGNMENT”

This manufacturer/supplier code is issued with the understanding that this code will be used in accordance with the requirements in [EN 14803](#). The use of this number or any other number by a party that chooses not to comply with the provisions of this document with or without the knowledge of the RA is beyond the control of the RA. Therefore, the RA cannot guarantee the sole and unambiguous use of this identifier to your organization. The operation of the RA is a voluntary non-profit service to issuers of unique identifications with serial numbers complying with [EN 14803](#) and its success depends, in part, on the co-operation of issuers of unique identifications with serial numbers. The RA will not be held financially liable for errors in the registration, reservation or assignment of codes or the publication of those identifiers and the name and addresses of the parties to which they are assigned.

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