SLOVENSKI STANDARD
SIST EN 840-3:2004

01-maj-2004

Nadomeġļa:
SIST EN 840-3:2000

Premiļni zabojniki za odpadke - 3. del: Zabojniki na ġtirih kolesih s prostornino do 1300 l in izboļenim(-i) pokrovom(-i) za iztresalnike z rokama in/ali glavnikom - Mere in oblika

Mobile waste 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

Fahrbare Abfallsammelbehälter - Teil 3: Behälter mit 4 Rädern und einem Nennvolumen bis 1300 l mit Schiebedeckel(n), für Schüttungen mit Zapfenaufnahme und/oder für Kammschüttungen - Maße und Formgebung

Conteneurs roulants a déchets - Partie 3: Conteneurs a 4 roues de capacité jusqu' a 1300 l a couvercle(s) bombé(s), pour léve-conteneurs par tourillon et/ou a peigne - Dimensions et conception

Ta slovenski standard je istoveten z: **EN 840-3:2004**

ICS:

13.030.40	Naprave in oprema za odstranjevanje in obdelavo odpadkov	Installations and equipment for waste disposal and treatment

SIST EN 840-3:2004 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 840-3

March 2004

ICS 13.030.40

Supersedes EN 840-3:1997

English version

Mobile waste 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

Conteneurs roulants à déchets - Partie 3: Conteneurs à 4 roues de capacité inférieure ou égale à 1300 l à couvercle(s) bombé(s), pour léve-conteneurs par tourillon et/ou à peigne - Dimensions et conception

Fahrbare Abfallsammelbehälter - Teil 3: Behälter mit 4 Rädern und einem Nennvolumen bis 1300 l mit Schiebedeckel(n), für Schüttungen für Zapfenaufnahme und/oder für Kammschüttungen - Maße und Formgeb

This European Standard was approved by CEN on 10 December 2003.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN 840-3:2004) 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 September 2004, and conflicting national standards shall be withdrawn at the latest by September 2004.

This document supersedes EN 840-3:1997.

This draft European Standard is one part of the series of standards of EN 840 about "Mobile waste containers" comprising the following parts:

Part 1: Containers with 2 wheels with up to 400 l for comb lifting devices - Dimensions and design.

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.

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.

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.

Part 5: Performance requirements and test methods.

Part 6: Safety and health requirements.

Annexes A and B 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This European Standard specifies dimensions and design requirements of mobile waste containers with 4 wheels, with dome lid(s) and capacity up to 1300 l to be used by trunnion and/or comb lifting device.

2 Normative references

This European Standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 840-1:2004, *Mobile waste containers – Part 1: Containers with 2 wheels with a capacity up to 400 l for comb lifting device - Dimensions and design.*

EN 840-2:2004, *Mobile waste 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 840-5, *Mobile waste containers – Part 5: Performance requirements and test methods.*

EN 840-6, *Mobile waste containers – Part 6: Safety and health requirements.*

EN 1501-1, *Refuse collection vehicles and their associated lifting devices – General requirements and safety requirements – Part 1: Rear-end loaded refuse collection vehicles.*

EN ISO 11469, *Plastics – Generic identification and marking of plastics products (ISO 11469:2000).*

3 Terms and definitions

Terms for components of mobile waste containers and lifting devices in three languages are given in annex A of EN 840-1:2004.

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

3.1
mobile waste container
appropriately designed container fitted with wheels intended to temporarily store waste

3.2
lifting device
structure which picks-up, tilts and empties containers

3.3
comb lifting device
lifting device in which the picking-up system consists of a row of teeth and a locking system to retain the container during emptying

3.4
trunnion lifting device
lifting device in which the picking-up system consists of a pair of arms with automatic locking mechanism to fit the trunnion to retain the container during emptying

3.5
volume
total space inside the container when the lid is closed

3.6
nominal volume
volume stated by the manufacturer (see Table 1 without tolerances)

3.7
capacity
for the purpose of this standard nominal volume and capacity are deemed to be the same

NOTE The English term "capacity" and the French term "capacité" are translated in the German version by the term "Nennvolumen".

3.8
nominal load
load mass, which is calculated as given in clause 6

3.9
total permissible mass
mass of the container plus the nominal load

3.10
functional and safety dimensions
essential dimensions which ensure the functionality and interchangeability of the container with the compatible lifting device and which are necessary for the operator's safety and health.

4 Volumes

This part of EN 840 identifies the two classes of containers:

— Class I - small size (nominal volume up to 1 000 l);

— Class II - large size (nominal volume between 1 000 l and 1 300 l).

Within the two above-mentioned classes of containers the following volumes are identified: 770 l, 1 000 l, 1 100 l and 1 300 l. Nominal volumes different from those referenced can be used by agreement between user and manufacturer. The tolerance of the volumes shall be ± 5 % maximum measured according to EN 840-5.

5 Dimensions and design

5.1 The design of the containers need not to correspond to the drawings given in Figures 1a to 1c. The functional dimensions given in Table 1 shall be respected. Recommendations for manufacturers of lifting devices are given in annex A (see also EN 1501-1).

5.2 The container shall be constructed so that when it is unloaded or loaded with a nominal load (see clause 6), it fits on an approved compatible lifting device. It shall be automatically locked safely into the lifting device during the lifting operation. If the container is equipped with a comb receiver, it shall correspond to at least one of the options given in Figure 2 (Form A, B or C).

5.3 The lid(s) shall fit the body. It/they shall be made with at least 2 fixing points and have at least one means for opening.

5.4 Handles fitted in front of the trunnion shall have a measurement over the handles of 10 mm less than the actual measurement in Table 1, dimension N° 33. Also the handles and their location shall be designed so that they do not damage the operator.

5.5 If the container has ribs in the frontal receiver they shall meet the requirements of Figures 2 and 5.

5.6 The container shall have 4 swivel castors. Each swivel castor shall be capable of withstanding 1/3 of the total permissible mass. Each castor shall meet the requirements of EN 840-5. The container shall have facilities for mounting the castor platine according to at least one of the measurements as shown in Figure 6.

5.7 All the surfaces of the container including design features shall be smooth and free of any foreign bodies or flaws.

5.8 The container should have a drain plug.

5.9 When direction locks are fitted they shall be fixed on at least 2 castors.

5.10 The container should be fitted with 2 braked wheels to requirements of EN 840-5. In case of centralized braking and locking system the brake pedal and the lock shall be fixed on a lateral side of the container. The centralized locking shall be able to be unlocked with a standard triangular key as shown in Figure 7. The effectiveness of this centralized braking system shall conform to EN 840-5.

6 Nominal Load

The container shall be constructed strongly enough to carry a load of 0,4 kg/dm³ x nominal volume. Containers with a nominal volume of more than 1 100 l shall be constructed strongly enough to carry a load of 440 kg.

7 Safety and health requirements

The container shall meet the safety and health requirements according to EN 840-6.

8 Testing

The container shall fulfil the performance requirements and the tests of EN 840-5.

9 Marking

9.1 Each container complying with the requirements of this part of EN 840 shall be durably and readably marked on the body in a visible part with:

— number of this European Standard (EN 840-3);

— nominal volume;

— manufacturer's name or trademark;

— total permissible mass, in kilograms;

— year and month of manufacturing.

9.2 Additional marking for quality, recycling, etc. is allowed. Beginning 5 years after the publication of this standard, plastic parts of containers, lids and wheels shall be marked in accordance with EN ISO 11469. The use of recycled materials is allowed, presuming that all requirements of this standard are complied with.

10 Designation

The container complying with the requirements of this European Standard shall be designated as follows:

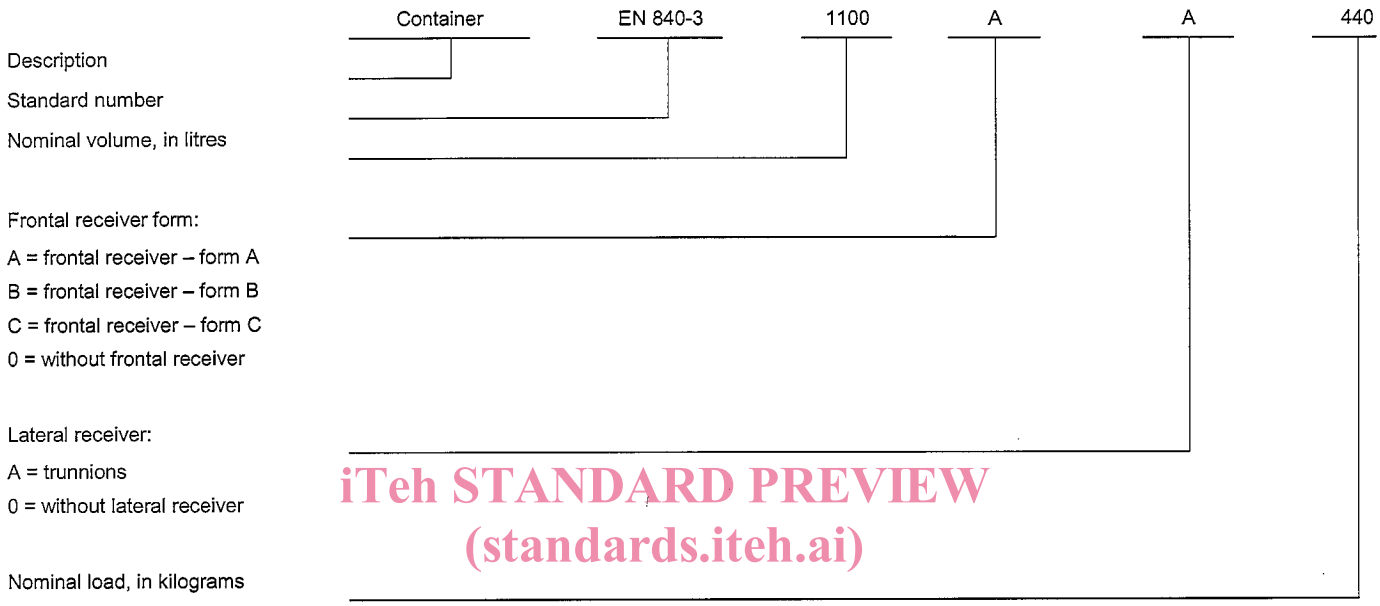

Table 1 — Dimensions

Dimensions in mm

Dimension N°	Class I - Small sizes < 1 000 l	Class II - Large sizes ≥ 1 000 l		Remarks
	770 l	1 100 l	1 300 l	
[a] 1	1 370 ± 10	1 370 ± 10	1 370 ± 10	In case of trunnions
2	820 max.	1 115 max.	1 115 max.	
3	1 100 max.	1 245 max.	1 245 max.	
4	1 425 max.	1 470 max.	1 480 max.	
[a] 5	860 min.; 1290 max.	860 min.; 1290 max.	860 min.; 1290 max.	Tipping edge
6	-	855 ± 50	855 ± 50	Only design B
[a] 7	135 min.; 280 max.	135 min.; 280 max.	135 min.; 280 max.	
[a] 8	700 to 850	700 to 850	700 to 850	Handle position if required
9	600 to 850	600 to 850	600 to 850	Lock position if presented
[a] 10	450^{+25}_{-5}	550^{+10}_{-40}	550^{+10}_{-40}	For design A
	-	500 ± 15	500 ± 15	For design B
11	Ø 200	Ø 200	Ø 200	Nominal
[a] 12	19 min.	19 min.	19 min.	In case of frontal receiver
[a] 13	13^{+5}_{-3}	13^{+5}_{-3}	13^{+5}_{-3}	In case of frontal receiver
[a] 14	21^{+2}_{-2}	21^{+2}_{-2}	21^{+2}_{-2}	In case of frontal receiver
15	-	-	-	This dimension is no more used
[a] 16	26 ± 1	26 ± 1	26 ± 1	In case of frontal receiver
[a] 17	58 max.	58 max.	58 max.	In case of frontal receiver
[a] 18	20 min.	20 min.	20 min.	In case of frontal receiver
[a] 19	130 max.	130 max.	130 max.	When ribs are fitted
20	15 max.	15 max.	15 max.	
[a] 21	33^{+8}_{-1}	33^{+8}_{-1}	33^{+8}_{-1}	In case of frontal receiver. For design B
[a] 22	40^{+5}_{-7}	40^{+5}_{-7}	40^{+5}_{-7}	In case of frontal receiver. For design B
[a] 23	Ø 40 ± 2	Ø 40 ± 2	Ø 40 ± 2	In case of trunnions
[a] 24	670^{+30}_{0}	670^{+30}_{0}	670^{+30}_{0}	
[a] 25	350 ± 10	350 ± 10	350 ± 10	Clearance for lifting device
26	535 ± 85	750^{+50}_{-40}	750^{+50}_{-80}	
27	130 min.	130 min.	130 min.	Ground clearance
[a] 28	1 275 max.	1 275 max.	1 275 max.	Lid
[a] 29	1 185 min.	1 185 min.	1 185 min.	Inside operating length of frontal receiver
[a] 30	$1\,200^{+15}_{0}$	$1\,200^{+15}_{0}$	$1\,200^{+15}_{0}$	Overall frontal receiver

Table 1 (continued)

Dimensions in mm

Dimension N°	Class I - Small sizes < 1 000 l	Class II - Large sizes ≥ 1 000 l		Remarks
	770 l	1 100 l	1 300 l	
[a] 31	1 265 max.	1 265 max.	1 265 max.	Overall length of the body rim or handles
32	5^{+8}_{0}	5^{+8}_{0}	5^{+8}_{0}	Optional (see annex A of EN 840-2:2004)
[a] 33	$1\,260^{+20}_{-10}$	$1\,260^{+20}_{-10}$	$1\,260^{+20}_{-10}$	Around the center lifting trunnion there shall be a radius of 150 mm. there shall not be any projection beyond the trunnion boss (see Figure 3).
34	880^{+20}_{-50}	880^{+20}_{-50}	950 ± 120	
35	1 090 ± 70	1 090 ± 70	1 090 ± 70	
[a] 36	150 ± 3	150 ± 3	150 ± 3	When ribs are fitted (cntrs)
[a] 37	7 max.	7 max.	7 max.	When ribs are fitted
[a] 38	$6^{+2}_{-4,5}$	$6^{+2}_{-4,5}$	$6^{+2}_{-4,5}$	In case of frontal receiver
[a] 39	130 max.	130 max.	130 max.	In case of frontal receiver
[a] 40	R 4 max.	R 4 max.	R 4 max.	In case of frontal receiver
41	10 min.	10 min.	10 min.	
42	Ø 16 max.	Ø 16 max.	Ø 16 max.	
43	$Ø\,6{,}6^{+0{,}2}_{0}$	$Ø\,6{,}6^{+0{,}2}_{0}$	$Ø\,6{,}6^{+0{,}2}_{0}$	
44	$8{,}3^{+0{,}1}_{0}$	$8{,}3^{+0{,}1}_{0}$	$8{,}3^{+0{,}1}_{0}$	
45	≈ 50	≈ 50	≈ 50	
[a] 46	635^{+10}_{-15}	635^{+10}_{-15}	635^{+10}_{-15}	
[a] 47	-	0 to 40	0 to 40	Only design B
[a] 48	-	0 to 25	0 to 25	Only design B
[a] 49	Ø 40 ± 2	Ø 40 ± 2	Ø 40 ± 2	
[a] 50	240 ± 5	215^{+30}_{0}	215^{+30}_{0}	
[a] 51	205 ± 10	205 ± 10	205 ± 10	For design A and C
	-	260 ± 10	260 ± 10	For design B
[a] 52	450^{+5}_{-35}	500^{0}_{-40}	500^{0}_{-40}	
[a] 53	395^{+10}_{-30}	440 ± 5	440 ± 5	Braket position
[a] 54	360^{+10}_{-30}	400 ± 5	400 ± 5	Braket position
[a] 55	80^{+10}_{0}	80^{+10}_{0}	80^{+10}_{0}	Braket position
[a] 56	$1\,200^{+10}_{-20}$	$1\,200^{+10}_{-20}$	$1\,200^{+10}_{-20}$	Braket position
[a] 57	50 ± 5	-	-	Only design C

[a] = Compulsory dimensions for functional and safety reasons.
The other dimensions indicated are suggested recommended values.