SLOVENSKI STANDARD
SIST EN 840-3:2000

01-december-2000

Mobilni zbiralniki odpadkov - 3. del: Zbiralniki na ģtirih kolesih s prostornino od 770 l do 1300 l in pomiļ nim pokrovom za iztresalnike z rokama in/ali glavnikom - Mere in oblikovanje

Mobile waste containers - Part 3: Containers with 4 wheels with a capacity from 770 l to 1300 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 Volumen von 770 l bis 1300 l mit Schiebedeckel(n), für Schüttungen für Zapfenaufnahme und/oder für Kammschüttungen - Maße und Formgebung

Conteneurs roulants a déchets - Partie 3: Conteneurs a 4 roues de capacités comprises entre 770 l et 1300 l a couvercle(s) bombé(s), pour leve-conteneurs par tourillon et/ou a peigne - Dimensions et conception

Ta slovenski standard je istoveten z: EN 840-3:1997

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

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English version

Mobile waste containers - Part 3: Containers with 4 wheels with a capacity from 770 l to 1300 l with dome lid(s), for trunnion and/or comb lifting devices - Dimensions and design

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This European Standard was approved by CEN on 1996-12-22. 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.

The European Standards exist 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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart,36 B-1050 Brussels

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Foreword

This European Standard 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 July 1997, and conflicting national standards shall be withdrawn at the latest by July 1997.

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

Part 1: Mobile waste containers - Part 1: Containers with 2 wheels with a capacity from 80 l to 390 l for comb lifting devices, dimensions and design

Part 2: Mobile waste containers - Part 2: Containers with 4 wheels with a capacity from 500 l to 1200 l with flat lid(s), for trunnion and/or lifting devices, dimensions and design

Part 3: Mobile waste containers - Part 3: Containers with 4 wheels with a capacity from 770 l to 1300 l with dome lid(s), for trunnion and/or comb lifting devices, dimensions and design

Part 4: Mobile waste containers - Part 4: Containers with 4 wheels with a capacity from 750 l to 1700 l with flat lid(s), for wide trunnion or BG and/or wide comb lifting devices, dimensions and design

Part 5: Mobile waste containers - Part 5: Performance requirements and test methods

Part 6: Mobile waste containers - Part 6: Safety and health requirements

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This part of EN 840 specifies dimensions and design requirements of mobile waste containers with 4 wheels, with dome lid(s) and capacity from 770 l 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 this publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest editions of the publication referred to applies.

EN 840-1:1997 Mobile waste containers - Dimensions and design - Part 1: Containers with 2 wheels with a capacity from 80 l to 390 l for comb lifting device

EN 840-2:1997 Mobile waste containers - Part 2: Containers with 4 wheels with a capacity from 500 l to 1200 l with flat lid(s), for trunnion and/or comb lifting devices, dimensions and design

EN 840-5 Mobile waste containers - Dimensions and design - Part 5: Performance requirements and test methods

EN 840-6 Mobile waste containers - Dimensions and design - Part 6: Safety and health requirements

prEN 1501-1 Refuse collection vehicles and their associated lifting devices - General requirements and safety requirements - Part 1: Rear-end loaded refuse collection vehicles

3 Definitions

Terms for components of mobile waste containers and lifting devices in three languages are given in annex A of EN 840-1:1997.
For the purposes of this European Standard, the following definitions apply:

3.1 Mobile waste containers

An appropriate designed container fitted with wheels intended to store waste temporarily.

3.2 Lifting device

A structure which picks-up, tilts and empties containers.

3.3 Comb lifting device

A lifting device of 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

A lifting device of 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

The total space inside the container when the lid is closed.

3.6 Nominal Volume

The volume given in table 1 without tolerances.

3.7 Capacity

The volume given in table 1.

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

3.8 Nominal Load

The load, which is calculated as given in clause 6.

3.9 Total Permissible Mass

The mass of the container plus the nominal load.

4 Volumes

The volume of the containers are 770 l, 1100 l and 1300 l. The tolerance on the nominal volume is ± 5 %.

5 Dimensions and design

5.1 The design of the containers need not to correspond to the drawings given in figures 1 A to 1C. The dimensions given in table 1 shall be respected. Recommendations for manufacturers of lifting devices (see EN 840-2, Annex A and prEN 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 has to 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 proposals given in figure 2 (Form A, B or C).

5.3 The lid(s) shall fit the body. It 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, Item No 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 830-5. The container shall have facilities for mounting the castor platine according to at least on 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 be conform to EN 840-5.

6 Nominal Load

The container shall be constructed strongly enough for a load of 0,4 kg/dm³ x nominal volume. Containers with a nominal volume of more than 1100 l shall be constructed strongly enough for a load with a minimum 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 fulfill the performance requirements and the tests of EN 840-5.

9 Marking

9.1 Each container complying with the requirements of this European Standard shall be durable marked on the body in a visible part with:

- the number of this European Standard (840-3)
- the nominal volume
- manufacturers name or trademark
- total permissible mass in kg
- year and month of manufacturing

9.2 Furthermore signs of quality, recycling, etc. are allowed.

10 Designation

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

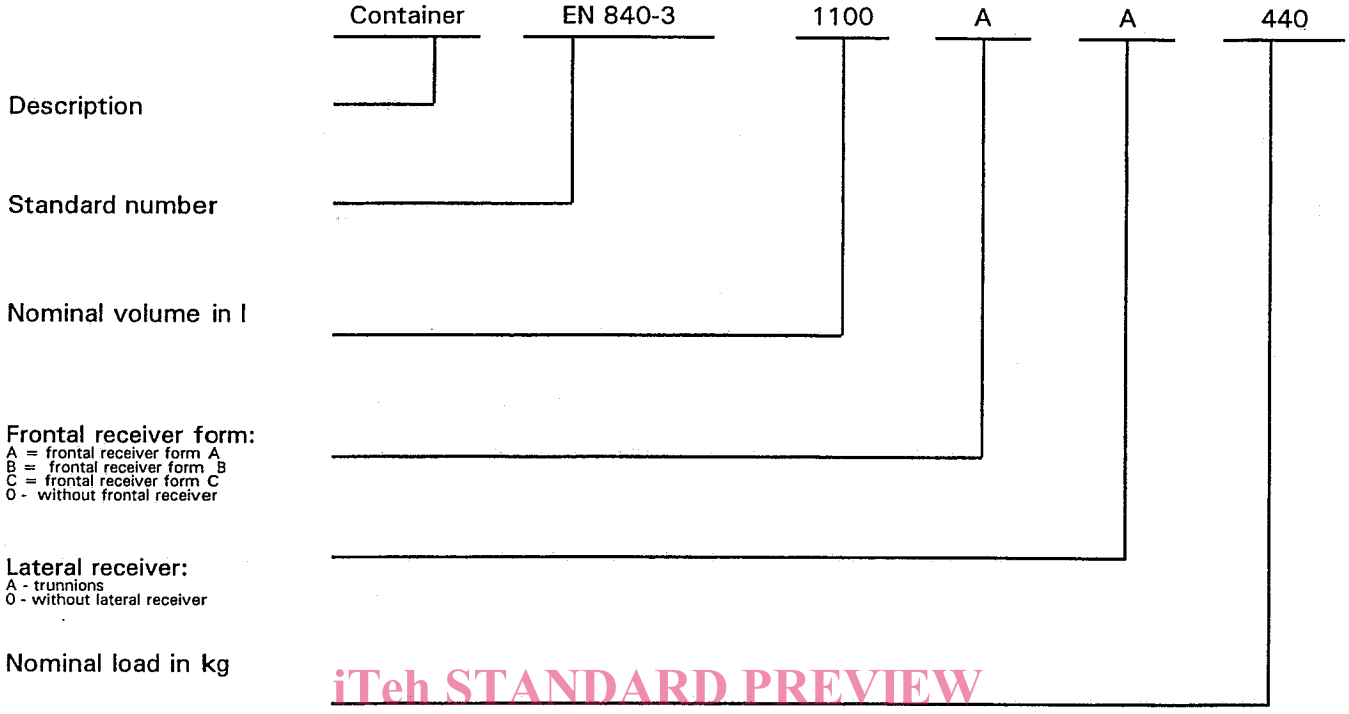


Table 1: Dimensions

Dimensions in mm

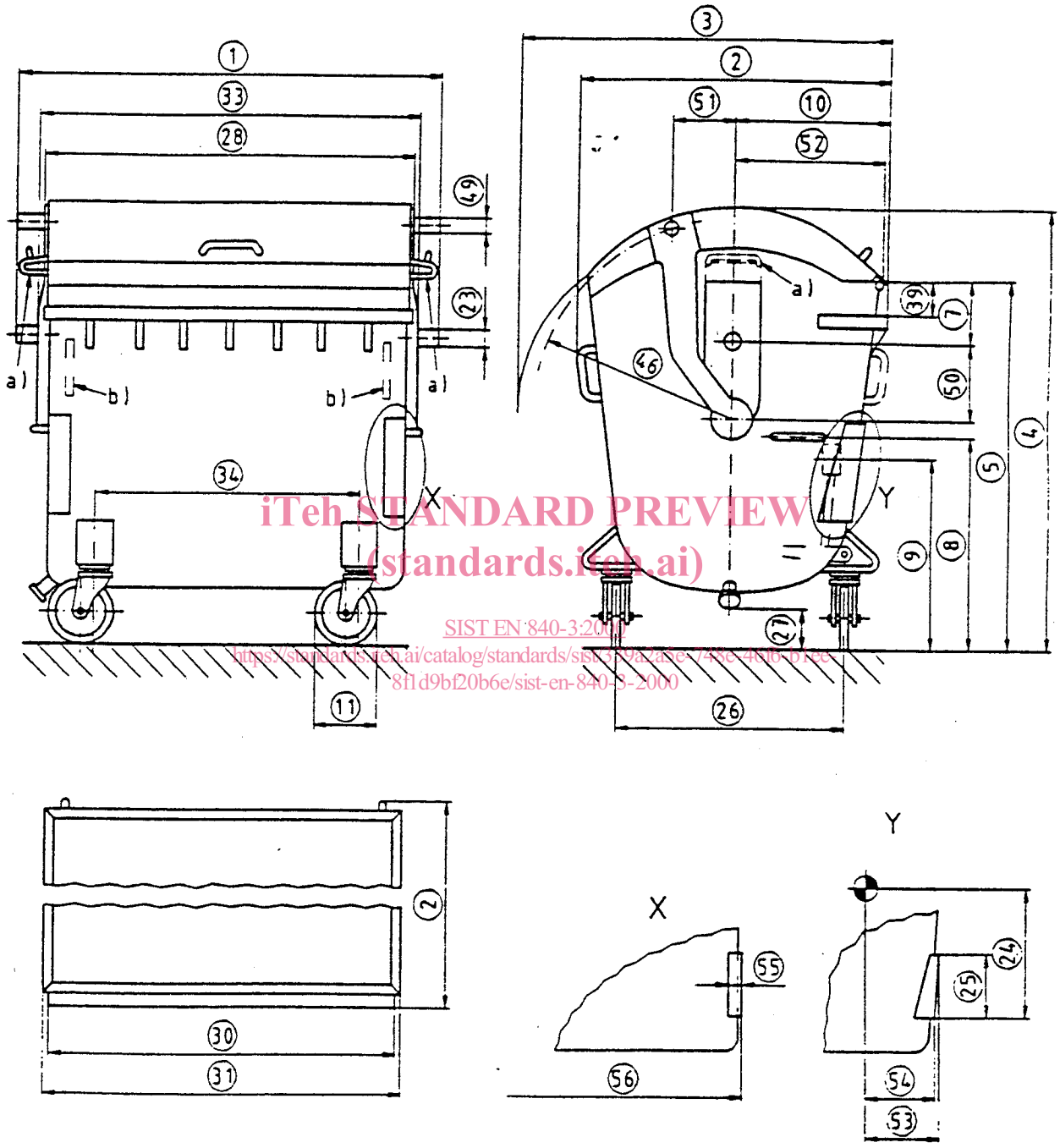
Item No	770 l	1100 l	1300 l	Remarks
1	1370 ± 10	1370 ± 10	1370 ± 10	
2	820 max.	1115 max.	1115 max.	
3	1100 max.	1245 max.	1245 max.	
4	1425 max.	1470 max.	1480 max.	
5	1290 max.	1290 max.	1290 max.	Tipping edge
6	-	855 ± 50	855 ± 50	Only design B
7	250^{+30}_{-10}	195^{+85}_{-15}	195^{+85}_{-15}	
8	700 to 850	700 to 850	700 to 850	Handle position
9	600 to 850	600 to 850	600 to 850	Lock position
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
12	19 min.	19 min.	19 min.	
13	13^{+5}_{-3}	13^{+5}_{-3}	13^{+5}_{-3}	
14	22^{+1}_{-3}	22^{+1}_{-3}	22^{+1}_{-3}	
15	20^{+3}_{-1}	20^{+3}_{-1}	20^{+3}_{-1}	
16	26 ± 1	26 ± 1	26 ± 1	
17	58 max.	58 max.	58 max.	
18	20 min.	20 min.	20 min.	
19	130 max.	130 max.	130 max.	When ribs are fitted
20	15 max.	15 max.	15 max.	
21	33^{+8}_{-1}	33^{+8}_{-1}	33^{+8}_{-1}	
22	40^{+5}_{-7}	40^{+5}_{-7}	40^{+5}_{-7}	
23	Ø 40 ± 2	Ø 40 ± 2	Ø 40 ± 2	
24	670^{+30}_{0}	670^{+30}_{0}	670^{+30}_{0}	
25	350 ± 10	350 ± 10	350 ± 10	Clearance for lifting device
26	535 ± 85	750^{+50}_{-40}	750^{+50}_{-40}	
27	130 min.	130 min.	130 min.	Ground clearance
28	1275 max.	1275 max.	1275 max.	Lid
29	1185 min.	1185 min.	1185 min.	Inside operating length of frontal receiver
30	1200^{+15}_{0}	1200^{+15}_{0}	1200^{+15}_{0}	Overall frontal receiver
31	1265 max.	1265 max.	1265 max.	Overall length of the body rim or handles

(continued)

Table 1 (concluded)

Dimensions in mm

Item No	770 l	1100 l	1300 l	Remarks
32	$5\ ^{+8}_{0}$	$5\ ^{+8}_{0}$	$5\ ^{+8}_{0}$	Optional (see annex A of EN 840-2:1997)
33	$1260\ ^{+20}_{-10}$	$1260\ ^{+20}_{-10}$	$1260\ ^{+20}_{-10}$	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	1090 ± 70	1090 ± 70	1090 ± 70	
36	150 ± 3	150 ± 3	150 ± 3	When ribs are fitted (cntrs)
37	7 max.	7 max.	7 max.	When ribs are fitted
38	$6\ ^{+2}_{-3}$	$6\ ^{+2}_{-3}$	$6\ ^{+2}_{-3}$	
39	130 max.	130 max.	130 max.	
40	R 4 max.	R 4 max.	R 4 max.	
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	
46	$635\ ^{+10}_{-15}$	$635\ ^{+10}_{-15}$	$635\ ^{+10}_{-15}$	
47	-	0 to 40	0 to 40	Only design B
48	-	0 to 25	0 to 25	Only design B
49	Ø 40 ± 2	Ø 40 ± 2	Ø 40 ± 2	
50	240 ± 5	$215\ ^{+30}_{0}$	$215\ ^{+30}_{0}$	
51	205 ± 10	205 ± 10	205 ± 10	For design A and C
	-	260 ± 10	260 ± 10	For design B
52	$450\ ^{+5}_{-35}$	$500\ ^{0}_{-40}$	$500\ ^{0}_{-40}$	
53	$395\ ^{+10}_{-30}$	440 ± 5	440 ± 5	Braket position
54	$360\ ^{+10}_{-30}$	400 ± 5	400 ± 5	Braket position
55	$80\ ^{+10}_{0}$	$80\ ^{+10}_{0}$	$80\ ^{+10}_{0}$	Braket position
56	$1200\ ^{+10}_{-20}$	$1200\ ^{+10}_{-20}$	$1200\ ^{+10}_{-20}$	Braket position
57	50 ± 5	-	-	Only design C



a) Requirements for handle if it is above trunnion (see figure 3).
b) Handles to be fitted if the container is without comb.

Figure 1 A: System dimensions design A