



SLOVENSKI STANDARD
oSIST prEN 13071-3:2018
01-september-2018

**Nepremični zabojniki za odpadke do 5000 l, ki se dvigujejo zgoraj in praznijo
spodaj - 3. del: Priporočeni sistemi za dvigovanje**

Stationary waste containers up to 5 000 l, top lifted and bottom emptied - Part 3:
Recommended lifting connections

Stationäre Abfallsammelbehälter bis 5 000 l, mit Behälteraufnahme an der Oberseite und
Bodenentleerung - Teil 3: Empfohlene Hebesysteme/Lastaufnahmen

Conteneurs fixes à déchets de capacité inférieure ou égale à 5 000 l, levés par le haut et
vidés par le bas - Partie 3 : Pièces intermédiaires de levage recommandées

Ta slovenski standard je istoveten z: prEN 13071-3

ICS:

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

oSIST prEN 13071-3:2018

en,fr,de

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 13071-3

July 2018

ICS 13.030.40

Will supersede EN 13071-3:2011

English Version

**Stationary waste containers up to 5 000 l, top lifted and
bottom emptied - Part 3: Recommended lifting
connections**

Conteneurs fixes à déchets de capacité inférieure ou
égale à 5 000 l, levés par le haut et vidés par le bas -
Partie 3 : Pièces intermédiaires de levage
recommandées

Stationäre Abfallsammelbehälter bis 5 000 l, mit
Behälteraufnahme an der Oberseite und
Bodenentleerung - Teil 3: Empfohlene
Hebesysteme/Lastaufnahmen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 183.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

Page

| | |
|---|----|
| European foreword..... | 3 |
| 1 Scope | 4 |
| 2 Normative references | 4 |
| 3 Terms and definitions | 4 |
| 4 Requirements | 6 |
| 4.1 General requirements | 6 |
| 4.2 Specific requirements..... | 6 |
| 4.2.1 General..... | 6 |
| 4.2.2 Loop..... | 6 |
| 4.2.3 Mushroom..... | 6 |
| 4.2.4 Movement of a locking loop / mushroom..... | 6 |
| 4.2.5 Twin lifting bars | 6 |
| Annex A (normative) Upper shape for loop..... | 8 |
| Annex B (normative) Dimensions of mushroom lifting connection | 9 |
| Bibliography..... | 10 |

(standards.iteh.ai)

SIST EN 13071-3:2019

<https://standards.iteh.ai/catalog/standards/sist/1e341c5d-da92-4388-8634-2383ec78c111/sist-en-13071-3-2019>

European foreword

This document (prEN 13071-3:2018) has been prepared by Technical Committee CEN/TC 183 “Waste management”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 13071-3:2011.

EN 13071 consists of the following parts, under the general title “Stationary waste containers up to 5 000 l, top lifted and bottom emptied”:

- Part 1: General requirements;
- Part 2: Additional requirements for underground or partly underground systems;
- Part 3: Recommended lifting connections.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 13071-3:2019

<https://standards.iteh.ai/catalog/standards/sist/1e341c5d-da92-4388-8634-2383ec78c111/sist-en-13071-3-2019>

1 Scope

This document specifies the requirements for the container lifting connections to be used during the loading and unloading operations of the containers top lifted and bottom emptied.

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 13071-1:2008, *Stationary waste containers up to 5 000 l, top lifted and bottom emptied - Part 1: General requirements*

EN 1677-1, *Components for slings — Safety — Part 1: Forged steel components, Grade 8*

EN 1677-2, *Components for slings — Safety — Part 2: Forged steel lifting hooks with latch, Grade 8*

EN 1677-3:2001,¹ *Components for slings - Safety - Part 3: Forged steel self-locking hooks - Grade 8*

EN 1677-4, *Components for slings — Safety — Part 4: Links, Grade 8*

EN 1677-5, *Components for slings — Safety — Part 5: Forged steel lifting hooks with latch - Grade 4*

EN 1677-6, *Components for slings — Safety — Part 6: Links - Grade 4*

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 <http://www.iso.org/obp>

3.1

container lifting connection

lifting and or opening/closing accessory which is part of the container and which is connected to the container handling system in order to handle the container

Note 1 to entry: See Figure 1.

3.2

container handling system

lifting accessory assembled to the crane consisting of a mechanism to connect the crane and the designated waste container (and its opening mechanism)

Note 1 to entry: See Figure 1.

¹ As impacted by EN 1677-3:2001+A1:2008

3.3**loop**

lifting connection or part of the lifting connection used for operating the container with a container handling system

3.4**fixed loop**

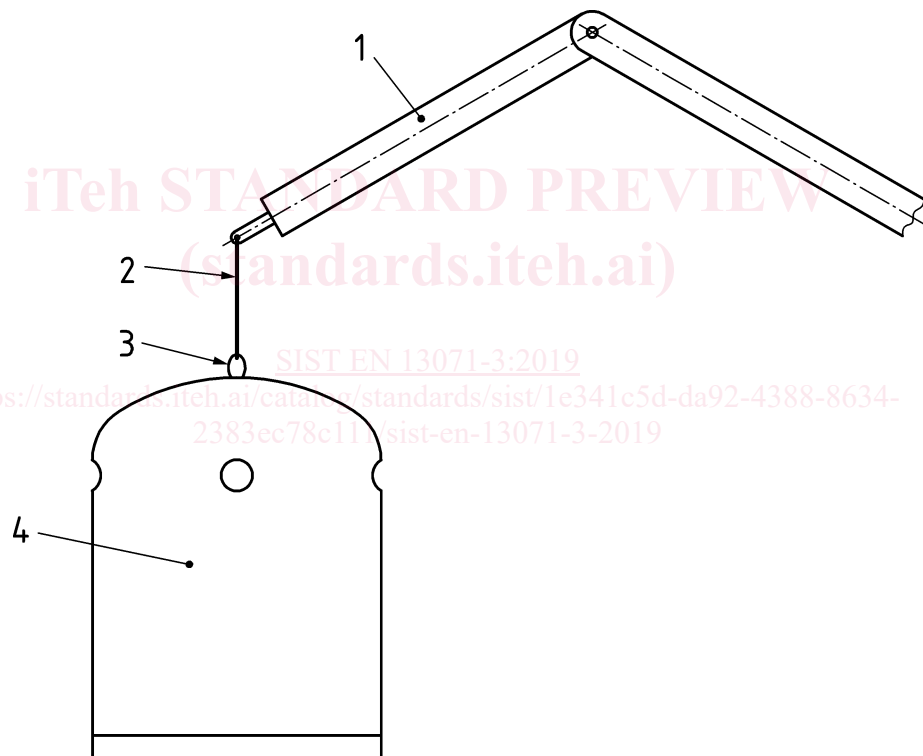
loop whose position does not change relatively to the container

3.5**locking loop**

loop(s) which is (are) used to lock and unlock the bottom hatch(es) of the container during handling operations

3.6**mushroom**

lifting connection used for operating the container with a container handling system

**Key**

- 1 crane
- 2 handling system (see 3.2)
- 3 lifting connection (see 3.1)
- 4 container

Figure 1 — Example of lifting connection

4 Requirements

4.1 General requirements

The general requirements shall be according to EN 13071-1:2008.

4.2 Specific requirements

4.2.1 General

This European Standard provides a list of non-exhaustive examples of recommended lifting connections, with dimensions. See Table 1.

4.2.2 Loop

4.2.2.1 Single loop

Dimensions shall allow the operating of the container by hooks that are covered by EN 1677 (series).

4.2.2.2 Two loops in line

Dimensions shall allow the operating of the container by hooks that are covered by EN 1677 (series). Interaxial distance between the two loops shall be $240 \text{ mm} \pm 10 \text{ mm}$.

4.2.2.3 Two loops parallel

Dimensions shall allow the operating of the container by hooks that are covered by EN 1677 (series). Interaxial distance between the two loops shall be $100 \text{ mm} \pm 40 \text{ mm}$.

4.2.2.4 Three loops in line

Dimensions shall allow the operating of the container by hooks that are covered by EN 1677 (series). Interaxial distance between the loops shall be $280 \text{ mm} \pm 50 \text{ mm}$.

4.2.3 Mushroom

Dimensions shall allow the operating of the container by a specifically designated container handling system. An example is shown in Annex B.

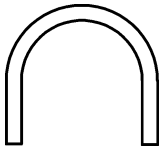
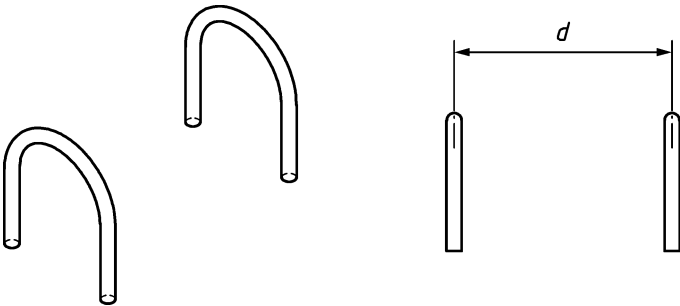
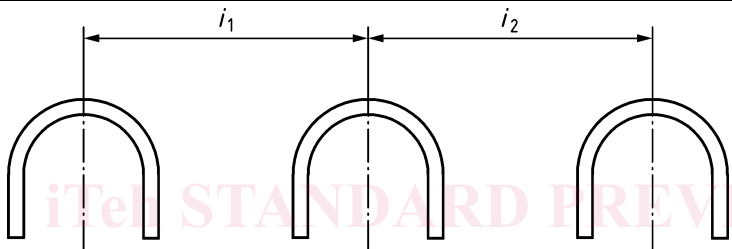
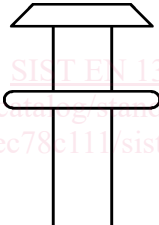
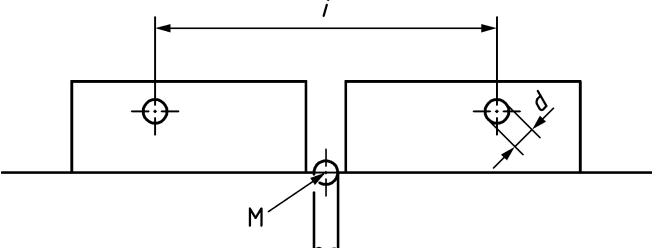
4.2.4 Movement of a locking loop / mushroom

If a locking loop / mushroom is used to lock / unlock the bottom hatch(es) of the container, this movement shall be vertical and not more than 500mm. The upper position of the locking loop / mushroom shall lock the bottom hatch(es); the lower position opens the bottom hatch(es)

4.2.5 Twin lifting bars

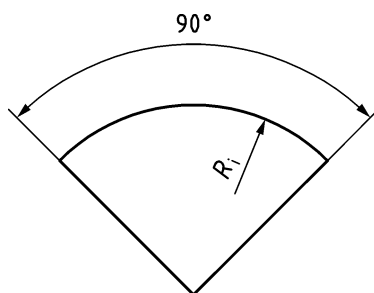
Dimensions shall allow the operating of the container by a specifically designated container handling system. Interaxial distance between the axles shall be $437 \text{ mm} \pm 5 \text{ mm}$.

Table 1 — Examples of recommended lifting connections

| Family | Shape | Relevant Dimensions |
|---------------------|--|--|
| Single loop |  | See Annex A. |
| Two loops parallel |  | $d = \text{loop distance} = 100 \text{ mm} \pm 40 \text{ mm}$ See Annex A. |
| Three loops in line |  | $i_1 = i_2 = \text{loops interaxel} = 280 \text{ mm} \begin{matrix} +80 \text{ mm} \\ -50 \text{ mm} \end{matrix}$ See Annex A. |
| Mushroom |  | See Annex B. |
| Twin lifting bars |  | $i = \text{distance between the axles} = 437 \text{ mm} \pm 5 \text{ mm}$ $d = \text{axle diameter} = 32 \text{ mm} \pm 1 \text{ mm}$ $M = \text{centre of the container and hinge point of the container halves}$ |

Annex A (normative)

Upper shape for loop

**Key**

R_i internal radius = 45 mm \pm 5 mm for a minimum of 90° on the vertical upper axle

Figure A.1 — Upper shape for loop

The loop should be easily connectable to hooks from code number 8 to 16 of EN 1677-3:2001+A1:2008, Table 3.

(standards.iteh.ai)

SIST EN 13071-3:2019

<https://standards.iteh.ai/catalog/standards/sist/1e341c5d-da92-4388-8634-2383ec78c111/sist-en-13071-3-2019>