

Series 1 freight containers — Handling and securing

ICS 55.180.10

National foreword

This British Standard reproduces verbatim ISO 3874:1997, including amendments 1:2001, 2:2002 and 3:2005, and implements it as the UK national standard. It supersedes BS 3951-1-1.5:1989 which is withdrawn.

The start and finish of text introduced or altered by ISO amendment is indicated in the text by tags A1 A1. Tags indicating changes to ISO text carry the number of the ISO amendment. For example, text altered by ISO amendment 1 is indicated by A1 A1.

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Summary of pages

This document comprises a front cover, an inside front cover, page i, a blank page, the ISO title page, pages ii to iv, pages 1 to 66, and inside back cover and a back cover.

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Series 1 freight containers — Handling and securing

Conteneurs de la série 1 — Manutention et fixation



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Descriptors: Containers, freight containers, handling, hoisting, fastenings, specifications, safety requirements, safety measures, lashing devices.

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 3874 was prepared by Technical Committee ISO/TC 104, *Freight containers*, Subcommittee SC 1, *General purpose containers*.

This fifth edition cancels and replaces the fourth edition (ISO 3874:1988), of which it constitutes a technical revision. It is planned that the physical and functional requirements for the securing devices will be attached as amendments to this International Standard, whereas the rationale for these requirements will be given in a type 3 Technical Report.

Annex A, Annex B, Annex C, Annex D and Annex E form a normative part of this International Standard.

1 Scope

This International Standard specifies methods of handling and securing series 1 freight containers built and tested to comply with the latest editions of ISO 1496-1 to ISO 1496-5.

NOTE Freight containers built according to specifications contained in earlier editions of ISO 1496 may not possess the same capabilities.

This International Standard defines basic principles and procedures to ensure safe operation of containers in all surface modes of transport.

Methods of handling and securing are described for both loaded and empty containers. The conditions for lifting different types of loaded and empty containers are laid down in Clause 6.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of the publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on the International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 668:1995, Series 1 freight containers — Classification, dimensions and ratings.

ISO 830¹⁾, Freight containers — Terminology.

ISO 1161:1984, Series 1 freight containers — Corner fittings — Specification.

ISO 1496-1:1990, Series 1 freight containers — Specification and testing — Part 1: General cargo containers for general purposes.

ISO 1496-2:1988, Series 1 freight containers — Specification and testing — Part 2: Thermal containers.

ISO 1496-3:1995, Series 1 freight containers — Specification and testing — Part 3: Tank containers for liquids, gases and pressurized dry bulk.

ISO 1496-4:1991, Series 1 freight containers — Specification and testing — Part 4: Non-pressurized containers for dry bulk.

ISO 1496-5:1991, Series 1 freight containers — Specification and testing — Part 5: Platform and platform-based containers.

ISO 6346:1995, Freight containers — Coding, identification and marking.

3 Definitions

For the purposes of this International Standard, the definitions given in ISO 830 and the following apply.

3.1

empty container

container in the tare condition

3.2

loaded container

container in other than tare condition

3.3

eccentricity of the centre of gravity

longitudinal and/or lateral horizontal differences between the centre of gravity of any container (empty or loaded, with or without fittings and appliances) and the geometric centre of the diagonals of the centres of the four bottom corner fittings

3.4

mobile centre of gravity

centre of gravity of a container loaded with liquid, bulk, hanging or similar cargo which is liable to move under dynamic conditions

¹⁾ To be published. (Revision of ISO 830:1981)

3.5

securing device

device used to secure containers

NOTE They are in direct contact with the corner fittings of the container or between the transportation means and corner fittings of the container.

4 Basic requirements

4.1 General

Users of this International Standard should use caution regarding conditions which may place loads on the containers or on the handling or securing devices. These include deterioration of the container or devices, loosening and over-tightening of devices, slackness of cargo within containers, eccentric loading and excessive environmental conditions such as high wind, ice, wave action, etc.

NOTE Slackness is a general term which includes shifting of cartons, shifting and settlement of bulk cargoes, liquids having a free surface, etc.

4.1.1 The requirements of all relevant national and international regulations shall be complied with.

4.1.2 The container and any equipment which may be used in its operation shall be adequately maintained.

4.1.3 Doors, lids, closures, removable or foldable parts and any loose equipment shall be properly secured.

4.1.4 All personnel engaged in handling and securing operations shall have received proper instructions, especially with regard to safety matters.

4.1.5 It is necessary to know whether the container is empty or loaded; unless otherwise ascertained, a container shall be treated as loaded.

4.1.6 Strong winds and other environmental conditions can have an effect on handling equipment and additional care shall be taken when operating in such conditions.

4.2 Packing, loading and emptying

4.2.1 When a cargo is packed, loaded, and secured where necessary, this shall be carried out in accordance with good and recommended practices so that the cargo does not impose on the container forces in the excess of those for which it has been designed and so that the fundamental requirements specified in 4.2.2, 4.2.3 and 4.2.4 are complied with.

4.2.2 The equipment used for loading and emptying the container shall only impose loads which are not in excess of those for which the container was designed.

4.2.3 The total mass of all items packed and loaded into the container, including dunnage, securing equipment and similar equipment, shall not exceed the maximum permitted payload, i.e. the maximum permissible operating gross mass minus the tare.

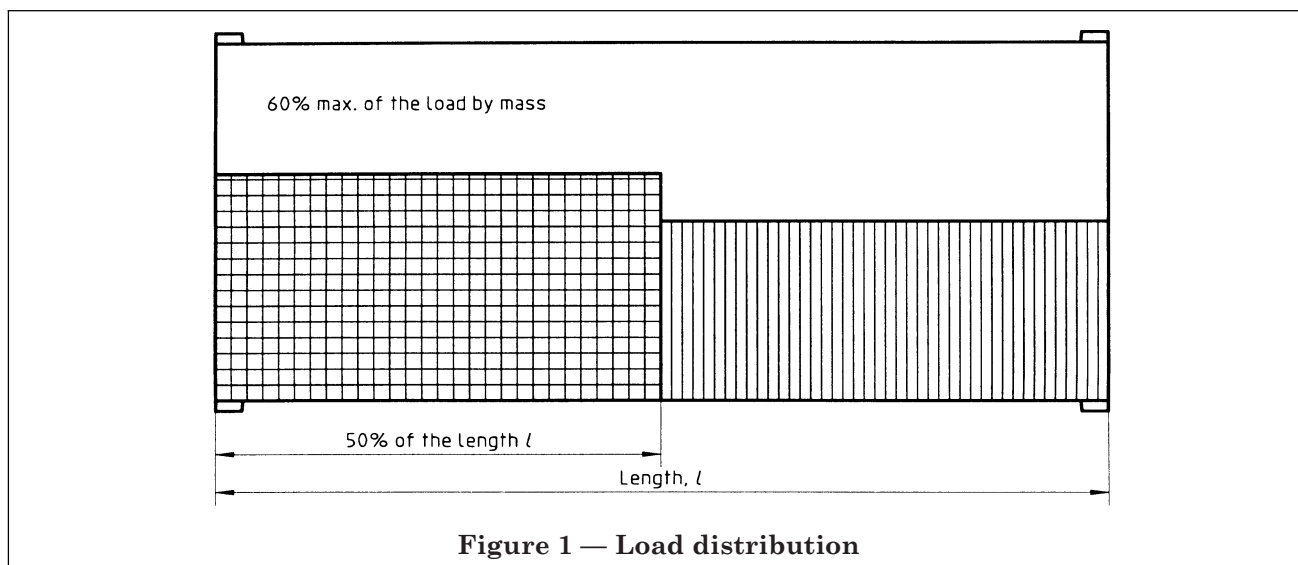
4.2.4 The cargo shall be distributed throughout the container to ensure that the centre of gravity is kept as central and as low as possible:

- to avoid excessive tilting;
- to avoid overstressing either the container or the handling equipment;
- to avoid unacceptable vehicle axle loading;
- to avoid lack of vehicle stability;
- to avoid unacceptable load concentrations.

Eccentricity of the centre of gravity for the loaded container varies with the distribution of load within the container; designers of containers and handling equipment should take this fact into account. As an example, when 60 % of the load by mass is distributed in 50 % of the container length measured from one end (see Figure 1), the eccentricity corresponds to 5 %.

4.3 Stowage and securing of cargo

The cargo shall be stowed and secured to prevent damage which might otherwise result from dynamic conditions encountered during handling and transportation.



5 Handling

5.1 Handling by specified lifting methods

(See Clause 6.)

5.1.1 Care shall be taken to ensure that the equipment used is suitable for the load and is safely attached to the container and that the container is free to be handled.

5.1.2 In the case of a single-point lift, special attention should be paid to the risk of the container tilting owing to eccentricity of the centre of gravity.

5.1.3 Care shall be taken when lifting a container whose centre of gravity is mobile or eccentric, e.g. a tank container, a bulk container, a container with a liquid bulk bag, a container with hanging cargo or a thermal container with a refrigerating unit (integral or clip-on).

5.2 Handling by unspecified lifting methods

Containers may be handled by methods other than those specified in Clause 6 but only after careful evaluation of the equipment by means of which the container is to be handled and of the methods of operation envisaged, with respect to international container standards.

6 Specified lifting methods

6.1 General

6.1.1 The lifting methods specified in 6.2 to 6.10 are summarized in Table 1.

6.1.2 The headings “Allowed” and “Not allowed” used in Table 3 to Table 5 and Table 7 to Table 12 refer to the specified lifting methods applied to differing types and sizes of containers and take into account the stresses on containers of differing types of design, their loads, where applicable, and the safety of the operation.

NOTE There could be exceptions in cases when combinations of container types, size, load, design and operating condition could not be taken into account in Table 3 to Table 5 and Table 7 to Table 12. Such situations should be carefully evaluated by those competent to do so in order to decide whether a safe and satisfactory operation can be ensured. An explanation of the size designations referred to in Table 3 to Table 12 is given in Table 2.

Table 1 — Summary of specified lifting methods

Subclause	Description	Illustration
6.2	Top lift spreader	
6.3	Top lift sling	
6.4	Bottom lift sling	
6.5	Side lift: method 1	
6.6	Side lift: method 2	
6.7	Side lift: method 3	
6.8	End lift: method 1	
6.9	End lift: method 2	
6.10	Fork-lift	

Table 2 — Size designations referred to in Table 3 to Table 12

Nominal length		External height			
m	ft	<2 438 mm (8 ft 0 in)	2 438 mm (8 ft 0 in)	2 591 mm (8 ft 6 in)	2 896 mm (9 ft 6 in)
12	40	1AX	1A	1AA	1AAA
9	30	1BX	1B	1BB	1BBB
6	20	1CX	1C	1CC	—
3	10	1DX	1D	—	—

NOTE All units have a nominal width of 2 438 mm (8 ft 0 in).

6.2 Top lift spreaders

See Figure 2.

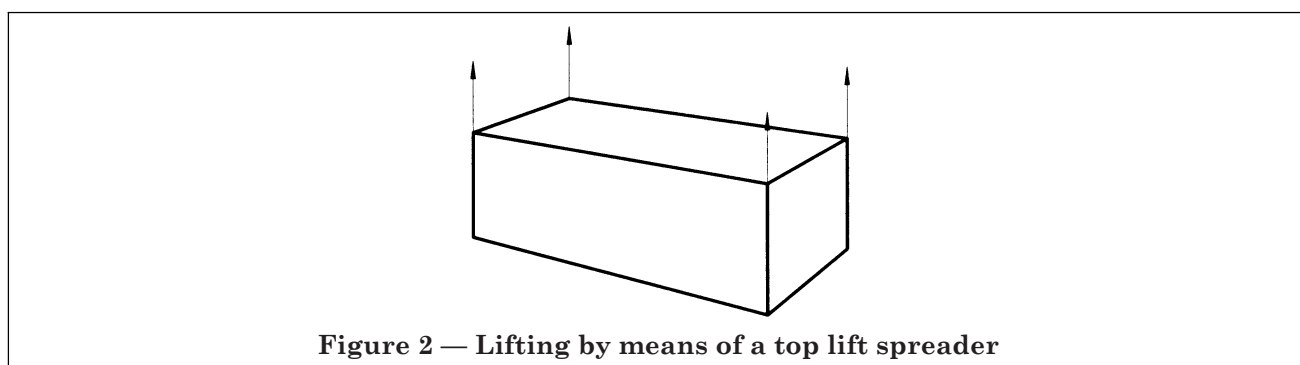


Figure 2 — Lifting by means of a top lift spreader

6.2.1 The container is lifted by means of a spreader designed to lift containers by the top apertures of the four top corner fittings, the lifting forces being applied vertically.

6.2.2 Lifting devices shall be properly engaged. Gathering devices shall impinge on corner fittings only.

6.2.3 The applicability of top lift spreaders is given in Table 3.

6.2.4 Folding platform-based containers (codes PL and PC; see ISO 6346), when empty and in the folded condition, may be handled in interlocked piles. The total mass of the pile shall not exceed the maximum gross mass (rating) according to ISO 668.

6.2.5 The vertical coupling of containers that are not specifically designed as in 6.2.4 for lifting purposes, using twistlocks or other loose gear, is acceptable if forces of not greater than 75 kN²⁾ act vertically through each corner fitting, and the twistlocks or other loose gear used are certified³⁾ for lifting. The twistlocks or other loose gear shall be periodically examined. [A2](#)

²⁾ The value of 75 kN prescribes the minimum structural capability of the locker/corner fitting combination. The 75 kN value includes an arbitrary constant wind load of 26 kN (corresponding wind speed of 100 km/h), regardless of the size of the containers. As an example, the balance of the 75 kN value equates to two 1 AAA containers with a combined tare of 22 kN and a maximum payload of 27 kN. A practical upper limit of three vertically-coupled containers is also envisaged.

³⁾ The certification process envisaged is to use a safety factor of at least four based on the ultimate strength of the material.

Table 3 — Applicability of top lift spreaders

Key : ☐ Allowed ☒ Not allowed (or not applicable)

Empty container												Container type	ISO 6346	Loaded container												
AAA	AA	A	AX	BBB	BB	B	BX	CC	C	CX	D			DX	AAA	AA	A	AX	BBB	BB	B	BX	CC	C	CX	D
													General purpose	GP,VH												
													Open top	UT												
													Bulk: non-pressurized/box	BU												
													Thermal	RE,RT RS												
													Tank for liquids and gases	TN,TD TG												
													Bulk: non-pressurized/hopper pressurized	BK												
													Platform	PL			1)			1)			1)		1)	1)
												Platform -based	complete and fixed ends	PF												
													fixed free standing posts	PF												
													complete and folding ends, erected condition	PC												
													folding free standing posts, erected condition	PC												
													complete and folding ends, folded condition	PC												
													folding free standing posts, folded condition	PC												
												Platform-based with complete superstructure and open-sided	PS													

1) Top lift possible with extensions only.

1) Top lift possible with extensions only.

6.3 Top lift sling

See Figure 3.

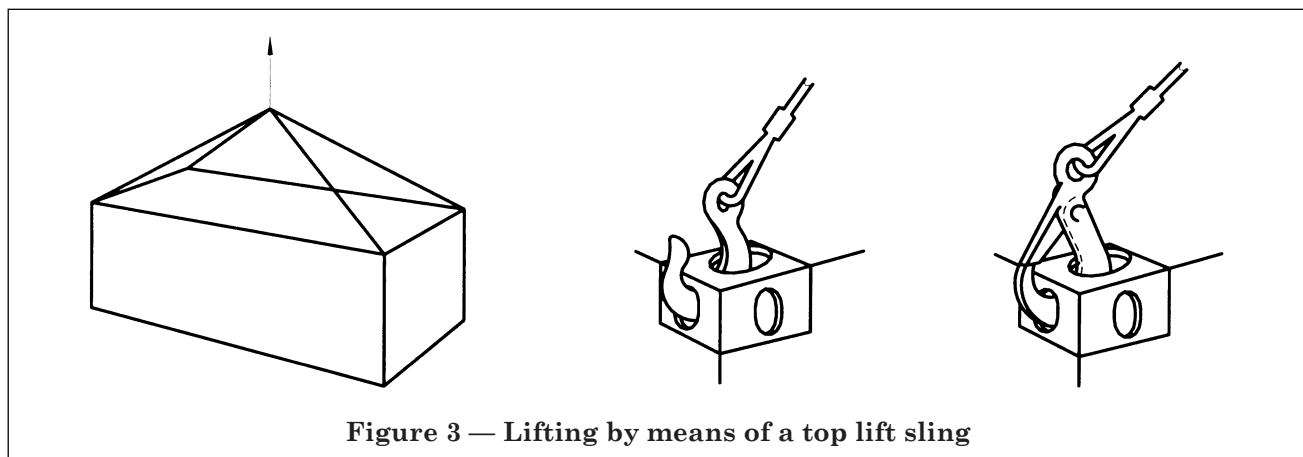


Figure 3 — Lifting by means of a top lift sling

6.3.1 The container is lifted by all four top corner fittings with forces applied other than vertically.

6.3.2 Lifting devices shall be properly engaged. Hooks shall always be placed in an inward to outward direction.

6.3.3 The applicability of top lift slings is given in Table 4.

6.3.4 Folding platform-based containers (codes PL and PC; see ISO 6346), when empty and in the folded condition, may be handled in interlocked piles. The total mass of the pile shall not exceed the maximum gross mass (rating) according to ISO 668.

Table 4 — Applicability of top slings

Key : ☐ Allowed ☒ Not allowed (or not applicable)

Empty container												Container type	ISO 6346	Loaded container													
AAA	AA	A	AX	BBB	BB	B	BX	CC	C	CX	D			DX	AAA	AA	A	AX	BBB	BB	B	BX	CC	C	CX	D	DX
													General purpose	GP,VH												2)	
													Open top	UT												2)	2)
													Bulk: non-pressurized/box	BU												2)	2)
1)	1)	1)		1)	1)	1)		1)	1)		1)		Thermal	RE,RT RS												2)	
													Tank for liquids and gases	TN,TD TG												2)	2)
													Bulk: non-pressurized/hopper pressurized	BK												2)	2)
													Platform	PL													
													Platform-based	complete and fixed ends	PF												
														fixed free standing posts	PF												
														complete and folding ends, erected condition	PC												
														folding free standing posts, erected condition	PC												
														complete and folding ends, folded condition	PC												
														folding free standing posts, folded condition	PC												
													Platform-based with complete superstructure and open-sided	PS													

1) Centre of gravity may be eccentric.

2) For 1D and 1DX containers, the lifting forces shall be applied at an angle not less than 60° to the horizontal, see figure 4.

NOTE — Centre of gravity may be mobile, e.g. liquid, bulk or hanging loads.

Dimensions in metres

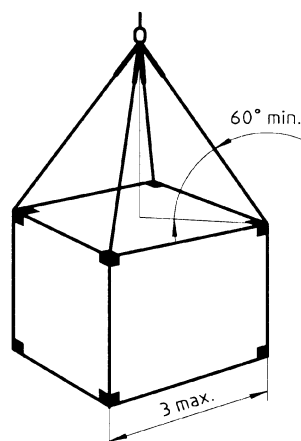


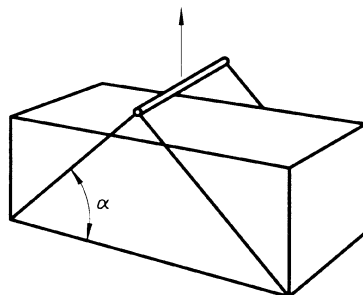
Figure 4 — Application of lifting forces (1D and 1DX containers)

6.4 Bottom lift sling

See Figure 5.

6.4.1 The container is lifted from side apertures of four bottom corner fittings by means of slings. The bottom sling attachment shall bear on the corner fittings only and should be such to exert lifting forces not more than 38 mm away from the outer face of the corner fittings (see Figure 6).

6.4.2 Lifting devices shall be properly engaged.



NOTE See footnotes to Table 5.

Figure 5 — Lifting by means of a bottom lift sling

Dimensions in millimetres

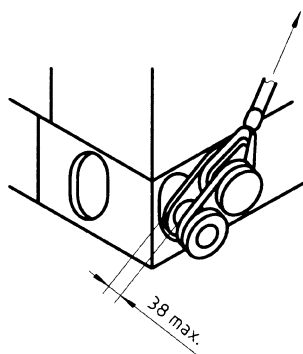


Figure 6 — Bottom sling attachment

6.4.3 The applicability of bottom lift slings is given in Table 5.

6.4.4 Folding platform-based containers (codes PL and PC; see ISO 6346), when empty and in the folded condition, may be handled in interlocked piles. The total mass of the pile shall not exceed the maximum gross mass (rating) according to ISO 668.

6.4.5 For loaded containers, the lifting angle, α , shown in Figure 5, shall not be less than the minimum values shown in Table 6.

Table 5 — Applicability of bottom lift slings

Key : ☐ Allowed ☒ Not allowed (or not applicable)

Empty container													Container type	ISO 6346	Loaded container												
AAA	AA	A	AX	BBB	BB	B	BX	CC	C	CX	D	DX			AAA	AA	A	AX	BBB	BB	B	BX	CC	C	CX	D	DX
													General purpose	GP,VH													
													Open top	UT													
													Bulk: non-pressurized/box	BU	2)	2)	2)	2)	2)	2)	2)	2)	2)	2)	2)	2)	
1)	1)	1)		1)	1)	1)		1)	1)		1)		Thermal	RE,RT RS	1) 2)	1) 2)	2) 1)	1) 2)	1) 2)			1) 2)		1) 2)			
													Tank for liquids and gases	TN,TD TG	2)	2)	2)	2)	2)	2)	2)	2)	2)	2)	2)	2)	
													Bulk: non-pressurized/hopper pressurized	BK	2)	2)	2)	2)	2)	2)	2)	2)	2)	2)	2)	2)	
													Platform	PL													
													Platform-based	complete and fixed ends	PF												
														fixed free standing posts	PF												
														complete and folding ends, erected condition	PC												
														folding free standing posts, erected condition	PC												
														complete and folding ends, folded condition	PC												
														folding free standing posts, folded condition	PC												
													Platform-based with complete superstructure and open-sided	PS													

1) Centre of gravity may be eccentric.

2) Centre of gravity may be mobile, e.g. liquid, bulk or hanging load.

1) Centre of gravity may be eccentric.
 2) Centre of gravity may be mobile, e.g. liquid, bulk or hanging load.

Table 6 — Lifting angles for loaded containers

Container size designation	Lifting angle, α , min.
1AAA; 1AA; 1A; 1AX	30°
1BBB; 1BB; 1B; 1BX	37°
1CC; 1C; 1CX	45°
1D; 1DX	60°

6.5 Side lift: method 1

See Figure 7.

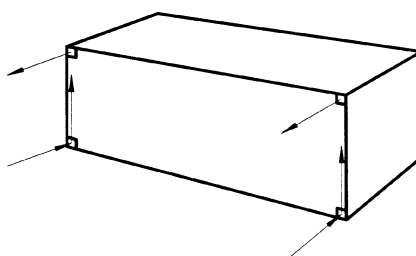


Figure 7 — Lifting by means of a side lift (method 1)

6.5.1 The container is lifted by means of a side lift frame designed to lift a container by the two bottom corner fittings of one side and to restrain it by the two top corner fittings of the same side.

6.5.2 Lifting and restraining devices shall be properly engaged.

6.5.3 The applicability of side lift (method 1) is given in Table 7.

Table 7 — Applicability of side lift (method 1)

Key :

Allowed

Not allowed (or not applicable)

Empty container													Container type	ISO 6346	Loaded container												
AAA	AA	A	AX	BBB	BB	B	BX	CC	C	CX	D	DX			AAA	AA	A	AX	BBB	BB	B	BX	CC	C	CX	D	DX
													General purpose	GP,VH													
													Open top	UT													
													Bulk: non-pressurized/box	BU									2)	2)	2)	2)	2)
1)	1)	1)		1)	1)	1)		1)	1)		1)		Thermal	RE,RT RS									2)	2)		2)	
													Tank for liquids and gases	TN,TD TG									2)	2)	2)	2)	2)
													Bulk: non-pressurized/hopper pressurized	BK									2)	2)	2)	2)	2)
													Platform	PL													
													Platform-based	complete and fixed ends	PF												
														fixed free standing posts	PF												
														complete and folding ends, erected condition	PC												
														folding free standing posts, erected condition	PC												
														complete and folding ends, folded condition	PC												
														folding free standing posts, folded condition	PC												
													Platform-based with complete superstructure and open-sided	PS													

1) Centre of gravity may be eccentric.

2) Centre of gravity may be mobile, e.g. liquid, bulk or hanging loads.

6.6 Side lift: method 2

See Figure 8.

6.6.1 The container is lifted by means of a side lift frame designed to lift a container by the two top corner fittings of one side and to take the reaction forces on the bottom corner fittings of the same side or on suitable corner post areas above those corner fittings (see Figure 9).

6.6.2 Lifting devices shall be properly engaged.

6.6.3 The applicability of side lift (method 2) is given in Table 8.

Table 8 — Applicability of side lift (method 2)

Key : ☐ Allowed ☒ Not allowed (or not applicable)

Empty container													Container type	ISO 6346	Loaded container												
AAA	AA	A	AX	BBB	BB	B	BX	CC	C	CX	D	DX			AAA	AA	A	AX	BBB	BB	B	BX	CC	C	CX	D	DX
													General purpose	GP,VH													
													Open top	UT													
													Bulk: non-pressurized/box	BU								2)	2)	2)	2)	2)	
1)	1)	1)		1)	1)	1)		1)	1)		1)		Thermal	RE,RT RS								2)	2)		2)		
													Tank for liquids and gases	TN,TD TG								2)	2)	2)	2)	2)	
													Bulk: non-pressurized/hopper pressurized	BK								2)	2)	2)	2)	2)	
													Platform	PL													
													Platform-based	complete and fixed ends	PF												
														fixed free standing posts	PF												
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														folding free standing posts, erected condition	PC												
														complete and folding ends, folded condition	PC												
														folding free standing posts, folded condition	PC												
													Platform-based with complete superstructure and open-sided	PS													

1) Centre of gravity may be eccentric.

2) Centre of gravity may be mobile, e.g. liquid, bulk or hanging loads.

NOTE When using this method, care should be taken to ensure that under dynamic conditions the container is not subjected to undue deflection or damage.

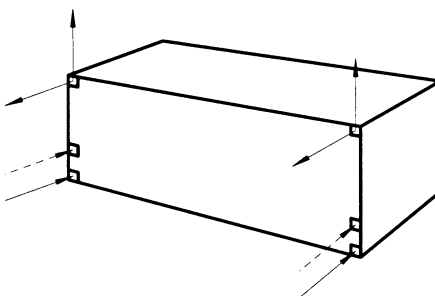
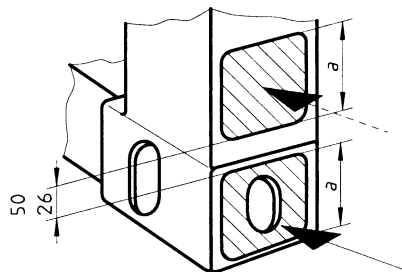


Figure 8 — Lifting by means of side lift (method 2)

Dimensions in millimetres



NOTE Dimension a is shown to indicate that the two bearing areas shall have similar or equal heights.

Figure 9 — Arrangement of bottom corner fittings and corner post areas

6.7 Side lift: method 3

See Figure 10.

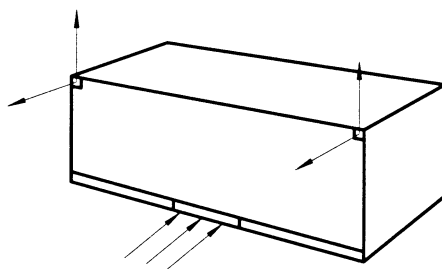


Figure 10 — Lifting by means of side lift (method 3)

6.7.1 The container is lifted by means of a side lift frame designed to lift a container by the two top corner fittings of one side and to take the reaction forces at the bottom side rail of the same side by means of a pad of sufficient size and located so as to prevent deformation and damage to the container.

WARNING 1. Under no circumstances shall the bearing pad be applied to the underside of the container side panel.

WARNING 2. Under no circumstances shall the lifting forces be applied to the underside of the bottom side rail.

6.7.2 Lifting devices shall be properly engaged.

6.7.3 The applicability of side lift (method 3) is given in Table 9.

Table 9 — Applicability of side lift (method 3)

Key : ☐ Allowed ☒ Not allowed (or not applicable)

Empty container													Container type	ISO 6346	Loaded container												
AAA	AA	A	AX	BBB	BB	B	BX	CC	C	CX	D	DX			AAA	AA	A	AX	BBB	BB	B	BX	CC	C	CX	D	DX
													General purpose	GP,VH													
													Open top	UT													
													Bulk: non-pressurized/box	BU													
1)	1)	1)		1)	1)	1)		1)	1)		1)		Thermal	RE,RT RS													
													Tank for liquids and gases	TN,TD TG													
													Bulk: non-pressurized/hopper pressurized	BK													
													Platform	PL													
													Platform-based	complete and fixed ends	PF												
														fixed free standing posts	PF												
														complete and folding ends, erected condition	PC												
														folding free standing posts, erected condition	PC												
														complete and folding ends, folded condition	PC												
														folding free standing posts, folded condition	PC												
													Platform-based with complete superstructure and open-sided	PS													
1) Centre of gravity may be eccentric.																											

1) Centre of gravity may be eccentric.

NOTE The use of piggybackers has never been recognized by ISO and may cause damage due to excessive stresses to containers operated in such a way.

6.8 End lift: method 1

See Figure 11.

6.8.1 The container is lifted by means of an end lift frame designed to lift a container by the two bottom corner fittings of one end and to restrain it by the two top corner fittings of the same end.

6.8.2 Lifting and restraining devices shall be properly engaged.

6.8.3 The applicability of end lift (method 1) is given in Table 10.

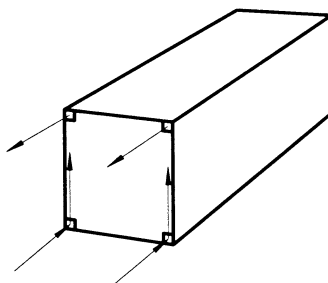


Figure 11 — Lifting by means of an end lift (method 1)

Table 10 — Applicability of end lift (method 1)

Key : ☐ Allowed ☒ Not allowed (or not applicable)

Empty container													Container type		ISO 6346	Loaded container												
AAA	AA	A	AX	BBB	BB	B	BX	CC	C	CX	D	DX				AAA	AA	A	AX	BBB	BB	B	BX	CC	C	CX	D	DX
														General purpose		GP,VH												
														Open top		UT												
														Bulk: non-pressurized/box		BU												
														Thermal		RE,RT RS												
														Tank for liquids and gases		TN,TD TG												
														Bulk: non-pressurized/hopper pressurized		BK												
														Platform		PL												
													Platform -based	complete and fixed ends		PF												
														fixed free standing posts		PF												
														complete and folding ends, erected condition		PC												
														folding free standing posts, erected condition		PC												
														complete and folding ends, folded condition		PC												
														folding free standing posts, folded condition		PC												
													Platform-based with complete superstructure and open-sided		PS													

NOTE When using this method, care should be taken to ensure that under dynamic conditions the container is not subjected to undue deflection or damage.

6.9 End lift: method 2

See Figure 12.

6.9.1 The container is lifted by means of an end lift frame designed to lift a container by the two top corner fittings of one end and to take the reaction forces on the bottom corner fittings of the same end or on suitable corner post areas above those corner fittings (see Figure 13).

6.9.2 Lifting devices shall be properly engaged.

6.9.3 The applicability of end lift (method 2) is given in Table 11.

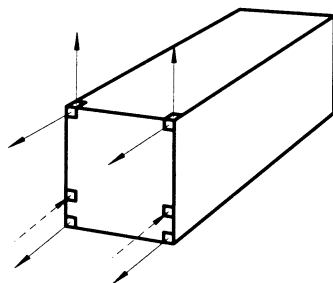
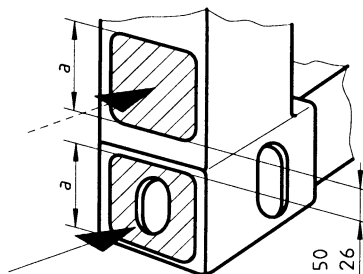


Figure 12 — Lifting by means of an end lift (method 2)

Dimensions in millimetres



NOTE Dimension a is shown to indicate that the two bearing areas shall have similar or equal heights.

Figure 13 — Arrangement of bottom corner fittings and corner post areas

Table 11 — Applicability of end lift (method 2)

Key : ☐ Allowed ☒ Not allowed (or not applicable)

Empty container													Container type	ISO 6346	Loaded container												
AAA	AA	A	AX	BBB	BB	B	BX	CC	C	CX	D	DX			AAA	AA	A	AX	BBB	BB	B	BX	CC	C	CX	D	DX
													General purpose	GP,VH													
													Open top	UT													
													Bulk: non-pressurized/box	BU													
													Thermal	RE,RT RS													
													Tank for liquids and gases	TN,TD TG													
													Bulk: non-pressurized/hopper pressurized	BK													
													Platform	PL													
													Platform-based	complete and fixed ends	PF												
														fixed free standing posts	PF												
														complete and folding ends, erected condition	PC												
														folding free standing posts, erected condition	PC												
														complete and folding ends, folded condition	PC												
														folding free standing posts, folded condition	PC												
													Platform-based with complete superstructure and open-sided	PS													

NOTE When using this method, care should be taken to ensure that under dynamic conditions the container is not subjected to undue deflection or damage.

6.10 Fork lifts

See Figure 14.

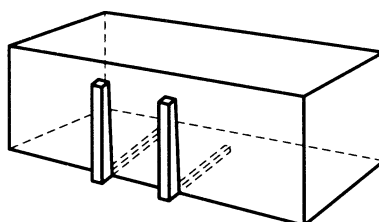


Figure 14 — Lifting by means of forks