

Packing and Handling Instruction for the TC01(2910C) Type IP-2 ISO Container

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Package and Handling Instruction for the TC01 (2910C) Type IP-2 ISO Container

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Definitions/Glossary

ACEP	Approved Continuous Examination Programme
ADR	European Agreement concerning the carriage of Dangerous Goods by Road
ALARP	As Low As Reasonably Practicable
Approving Authority	LLWR Container Approval Authority is responsible for the issue of Certificates of Approval for IAEA self assessment container types on behalf of LLWR
Consignor	Consignor according to the provisions of ADR
Container Operator	Owner of the Container
Contract Authority	LLW Repository Ltd
CSC	(International) Convention for Safe Containers
Design Authority	Head of Engineering LLW Repository Ltd., Holmrook, Cumbria
Inspection Authority	An Inspection organisation approved by the Health & Safety Executive to approve designs as meeting ISO and CSC requirements.
IAEA	International Atomic Energy Agency.
IP-2	Industrial Container Type 2
ISO	International Standards Organisation.
LLW	Low Level Waste
LLWR	Low Level Waste Repository
LSA	Low Specific Activity
Manufacturer	The organisation responsible for producing hardware in accordance with the requirements of the Contract Authority.
SCO	Surface Contaminated Object
SQEP	Suitably Qualified and Experienced Person
UDL	Uniformly Distributed Load
WAC	Waste Acceptance Criteria

1 Introduction

1.1 General

- 1.1.1 This document provides the relevant parties (Consignors, Consignees & Inspection) guidance regarding the O&M requirements for the LLW Repository Ltd, Industrial Package Type 2 (IP-2), Package Design TC01.
- 1.1.2 The container is designed for the transport and disposal of solid radioactive material in the form of LLW conforming to LSA or SCO material as defined in the IAEA Safety Standard Series TS-R-1, Regulations for the Safe Transport of Radioactive Material, 2009 Edition [1]. Each container is supplied as an Industrial Package Type 2 (IP-2) container. The explicit use and restrictions of the packaging are defined in the Certificate of Approval issued by the Package Approval Authority, LLW Repository Ltd.

Note: Where it is found that any part of the Packing and Handling Instructions cannot be complied with the container shall be embargoed and advice shall be sought from the Contract Authority.

- 1.1.3 The TC01 package was previously known and referred to by the package design number 2910C. Its primary use is as a single use package for direct disposal of solid LLW to the national repository; however, subject to the conditions specified in Section 1.3 and permissions in Section 1.2, the container can be operated under a restricted re-use regime.
- 1.1.4 In single use mode the TC01 package has a rated payload capacity of 31920 kg but when operated as a re-usable package the payload capacity is reduced in accordance with Section 1.3.

1.2 Permissions

- 1.2.1 In specific circumstances, including the option for re-use, the following table indicates where Contract Authority permission/authority/endorsement must be obtained.

Contact: transportandlogistics@llwrsite.com

Ref	Activity	Acceptance Criteria
1	Re-use of the Container	1.3
2	Container restraint (other than twist lock)	6.3.1
3	Use of any internal contents restraint not conforming to guidance note [8]	7.3.4
4	Approval of Repair Procedure	5.1, 5.9.1
5	Payload Restraint (other than to base assembly)	1.2.3
6	Approval of Inspection Authorities	1.3

Table 1: Actions requiring Contract Authority Approval

1.3 Conditions for Restricted Container Reuse

- 1.3.1 The TC01 package can be operated as a re-usable package under options A or B
- 1.3.2 Restricted re –use option A**

The TC01 can be used as a re-usable container, with no restrictions for restraining contents to the grid lattice, subject to the following conditions:

- Permission in writing stating the serial numbers of the containers must be requested and agreed by LLWR.
- The maximum gross weight of the package shall be limited to 24000 kg except when the package is being transported to the repository for final disposal when the maximum gross weight of 35000 kg can be applied
- Containers are restricted to use for a maximum. of 2 cycles with reduced payload and a final cycle with a gross weight less than or equal to the permissible gross weight of the container.

Note: One cycle of a container is defined as filling the container for transport in the public domain for disposal or subsequent unloading

Note:-Each cycle can include topping up of the container to the appropriate weight limit subject to the controls in section 7

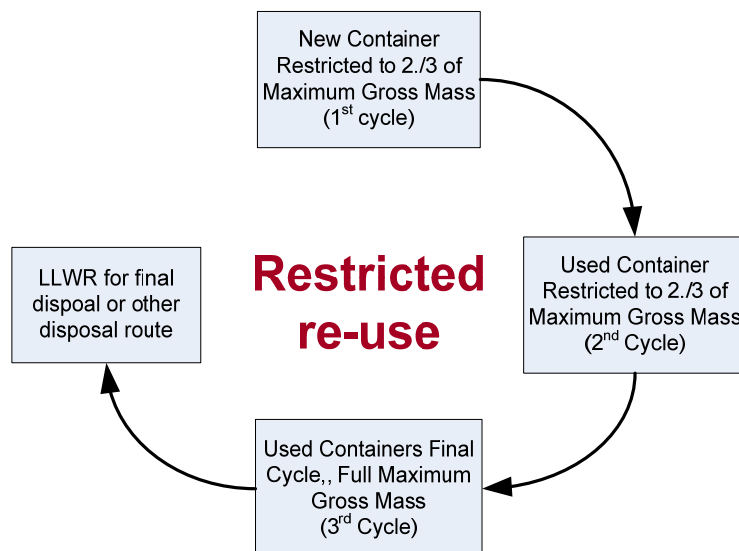


Diagram 1:- Restricted Container Reuse.

1.3.3 Restricted re-use option B:

1.3.3.1 The TC01 can be used as a re-usable package for a restricted lifecycle equivalent of 3000 miles under transport in loaded condition subject to the following conditions:

- Permission in writing stating the serial numbers of the containers must be requested and agreed by LLWR.
- The container must be examined and leak tested by an LLW Repository Ltd qualified inspector (or other qualified Inspection Authority under a procedure approved by LLWR – see Section 1.2) as suitable for operating under an Approved Continuous Examination Programme (ACEP). If suitable then an ACEP decal, indicating the ACEP Scheme approval number, must be prominently displayed adjacent to the CSC plate. Guidance on the

inspection/leak tests required for the TC01 container can be downloaded from the LLW Repository web site Guidance Note PAA/GN01 LLW Repository IP2 ISO Container CSC Technical Inspection and Seal Leakage Test Guidance Document.

- The container shall be subject to examinations in accordance with the requirements of IICL-5 (including seal leak tests) of 12 months (or 3000 miles under transport in loaded condition if reached before examination due date in first year of operation). Additionally a maintenance decal indicating the maintenance validity period must be fitted adjacent to the ACEP decal.
- The maximum gross weight of the package shall be limited to 24000 kg except when the package is being transported to the repository for final disposal when the maximum gross weight of 35000 kg can be applied.
- The payload shall be adequately restrained to the base assembly unless otherwise agreed and approved by LLW Repository Ltd. See section 7.4.3.
- Inspection prior to every shipment will be required for containers that have reached the 3000 miles limit.

Note: This arrangement will be reviewed by LLWR a year from the issue of this document

1.4 Temperature Range

The permitted operational ambient temperature range for the TC01 package is minus 10°C to +38°C.

2 Scope

- 2.1 This document identifies the design intent for the operation and maintenance of the containers and is to be used as an aid to producing detailed Operating and Maintenance Instructions. The purpose of these instructions is to ensure that the container is safely and correctly handled and loaded prior to transportation, and is maintained and examined in accordance with the requirements of the International Convention for Safe Containers, 1972 (CSC) 1996 Edition [2].
- 2.2 These instructions are to be used in conjunction with the Container Operator and/or Consignors local instructions governing radiological and other safety issues related to movement of radioactive materials, any national nuclear safety requirements and the agreement for the supply of the container.
- 2.3 The Packing and Handling Instructions address the following issues:-
- a) Container handling operations, including turn-round inspection are to be carried out as required. It is recommended that an Operational Quality Plan (OQP) be put in place for minor tasks only and be carried out at loading and unloading by the operational staff. Guidance on preparing container operational quality plans can be down loaded from the LLW Repository web site
 - b) Planned inspection and frequency.
 - c) Acceptance criteria requirements (norms and tests).
-

3 Compliance

- 3.1 The Consignor is responsible for ensuring that Regulatory requirements governing the use of the container are complied with.

4 Responsibilities

- 4.1 It is the responsibility of the Consignors to ensure that:-

- Container operating and inspection activities are carried out in compliance with a quality management system that meets the requirements of BS EN ISO 9001 [3].
- All local and regulatory requirements governing radioactive materials and transport containers are complied with.
- Reference is made to the Certificate of Approval for the container identifying information on approved contents and other shipment and operating requirements.
- The material to be consigned satisfies the regulatory requirements for transport within an IP-2 ISO freight container and complies with the Acceptance criteria for the receiving facility.
- Personnel associated with filling, closing, loading, handling and carrying out examination of the container are instructed to carry out the required operations as quickly as safely practicable in order to ensure personal radiation dose is ALARP.

5 Consignor Pre-Loading Checks

5.1 General

The container should be in a fit for purpose condition before being used and as a minimum the checks detailed below are designed to ensure that the packaging is fit for purpose. All inspections must be carried out by a Suitably Qualified and Experienced Person (SQEP). If any damage is found, permission for repair must be sought from the Contract Authority.

5.2 Certificate of Approval

The container certificate of approval for transport issued by the Approving Authority must be checked to ensure it is valid and will remain valid throughout the period during which the container is to be transported in the public domain.

5.3 Container Body and Lid

5.3.1 Visual Inspection

Visually examine all the external surfaces (including the base) of the container for signs of damage.

- i) Cracking of welded joints is unacceptable (including stud welds)
- ii) Puncturing of the container body or lid is unacceptable
- iii) Cuts or scratches in the container skin greater than 1.5 mm deep are unacceptable
- iv) Small dents are acceptable (less than 35 mm in container and lid panels, 25 mm in corner posts), provided that no puncturing of the skin has taken place.

5.4 Vent and Grout Ports

- 5.4.1 The venting port (See Figure 1), which is located in the container end panel, is open when the container is supplied from new and it must be sealed prior to shipment. See Section 8.3.1. If it is a reused container (see section 1.3 for definition) then the vent port must be opened on arrival at the receiver's site and it must be sealed prior to shipment. See Section 8.3.1.
- 5.4.2 The grout port (See Figure 1), which is located on the container lid is closed and sealed when the container is supplied. This port is only used once the container arrives at the repository for grouting on final disposal. The grout port must remain sealed prior to shipment. See Section 8.2.3.

5.5 CSC Plate

- 5.5.1 The CSC plate must be checked to verify that: the Container is still within its licensed period i.e. within 5 years of the date of manufacture, and; the Container can be filled, consigned and transported to the receiving facility within the period stated on the CSC plate. Alternatively, where a package is being operated as a re-usable package and an ACEP decal and associated maintenance decal are displayed adjacent to the CSC plate, check the next examination due date and verify the Container can be filled, consigned and transported to the receiving facility before the next examination falls due.
- 5.5.2 Re-inspection and re-CSC certification of the container is required if the validity stated on the CSC plate has expired or is likely to expire prior to receipt at the receiving facility; or, where the package is operating under an ACEP, the next examination due date has passed or will pass prior to receipt at the receiving facility.

Re-inspections/examinations shall include a confirmatory leakage testing to verify containment integrity of the package: see guidance document PAA/GN01 LLW Repository IP2 ISO Container CSC Technical Inspection and Seal Leakage Test Guidance Document. [5]

5.6 Decals

All decals must be legible and securely affixed to the container body.

5.7 Paint Finish

The external paint finish must be checked for damage/corrosion. Minor scuffing of the paint finish is acceptable but there shall be no exposed bare metal. Any exposed bare metal should be reported to the Contract Authority.

5.8 Lid Removals

- 5.8.1 Examine the lid retaining studs for damage; ensure all welds are free from defect, and that the retaining nuts can be freely rotated by hand. For any damaged or sheared studs refer to guidance document ref [7].
- 5.8.2 Unscrew the nut/stud combination, once the nut becomes free (by hand) the lid clamp can be rotated through 90° and rested on the top plate, there is no need to fully remove the nut and clamp during the removal of the lid.
- 5.8.3 After removing the lid it should be set down on a clear area where it will not obstruct loading operations and it should be supported at regular intervals (1.2 m) across the width of the lid as shown in Figure 5

5.9 Lid Seals, Seal Faces and Seal Support Channels

CAUTION: The seals should be handled with care and not twisted.

- 5.9.1 Particular attention should be given to checking the features which secure the lid, and also to the lid seal faces and seal channels (See Figure 6 and 7). If any damage is found on the lid seal faces or seal support channels then repairs must be carried out as recommended by the Contract Authority and additional inspections recorded (ref section 5.1).
- 5.9.2 If the lid seals are found to be damaged, they must be replaced. Replacement seals can be obtained from the Contract Authority. The fitting of replacement lid seals must be undertaken with care. Consignors must ensure that the seal support channel is clean and free from any defect liable to give rise to a leak test failure. The seals should be fitted to the channel with the 'long legged' side of the seal within the seal channel. A seal leakage test shall be required.
- 5.9.3 For information on seal leakage testing see guidance document PAA/GN01 LLW Repository IP2 ISO Container CSC Technical Inspection and Seal Leakage Test Guidance Document[5].
- 5.9.4 When securely fitted and correctly orientated, a light surface coating of silicone based grease should be applied to the surface of the seals.

6 Container Handling Operations

WARNING: The Consignor must ensure that the loaded container is safe to handle. Additional guidance to that contained within this document can be obtained from BS ISO 3874: 1997 – Guide to the handling and securing of Series 1 Freight Containers [6].

6.1 General

- 6.1.1 It is a regulatory requirement to have in place an adequate safety case to demonstrate the safety of any operation concerning the handling of containers used to move radioactive material on licensed sites. Before consigning the containers any users must be reminded that in support of the safety case an OQP along with detailed operating instructions and operating rules shall be developed. Compliance should be demonstrated by a suitable QA system.
- 6.1.2 The detailed operating instructions referenced above shall consider all operational hazards and limits such as:
- Container inventory
 - Container lift height
 - Container payload size, weight, SWL, etc.
 - Container radiation and contamination levels.

6.2 Handling Methods

- 6.2.1 The container is based on a Series 1 ISO freight container conforming to BS3951 (ISO 1496/1) [4] (incorporating standard corner fittings and fork lift pockets.) The recommended handling methods are detailed below.
- 6.2.2 Before any lifting the container must be free to be lifted, e.g. ensure that the twistlock mechanisms or any other securing systems are removed or disengaged. (See Figure1, Figure 2 and Figure 8)

6.3 Container Restraint

Where ever possible the container is to be restrained using the twistlock mechanisms. For any other method of container restraint, assessment must be carried out by SQEP personnel and submitted to the Contract Authority for assessment (see Section 1.2).

6.4 Lifting and Loading Equipment

All container lifting and loading equipment must be suitably rated to handle the container safely. See Appendix A for relevant weight information applying to the TC01 container design..

6.5 Lifting using a Fork Lift Truck

The container base is fitted with forklift pockets that are rated for the gross weight of the container. The container must only be lifted with the forks aligned and fully inserted.

6.6 Lifting Using Bottom Corner Fittings

CAUTION: The angle between the container base and the sling leg must be 45 degrees or greater. This method of lifting can be used to lift loaded and empty containers. Ensure that the Safe Working Load of all lifting equipment/accessories is not exceeded.

This method of lifting (See Figure 2) usually employs a four leg wire or chain sling which utilizes a top spreader beam which is at least as wide as the container to be lifted, each leg of the sling is attached to the side of the appropriate corner casting using either shackles or monoblocks.

6.7 Lifting Using Top Corner Fittings

WARNING: The use of a four-leg sling (when applied to the top corner fittings) is NOT suitable for lifting a loaded container; however, it can be used to lift an empty container.

For lifting a loaded container using the top corner fittings, a spreader frame designed to ensure that only a vertical lift is applied to the top twistlock fittings must be used and the attachment to the corner fitting must be as shown in Figure 3. This method of lifting is suitable for either a loaded or empty container.

6.8 Maximum Stacking Height

CAUTION: The ground upon which the containers are stacked must be flat and level and capable of taking the accumulated gross weight of the containers.

CAUTION: Spacers must be used between containers when stacked since the lid stands proud of the top corner casting faces (See Figure 9). Where containers are to be stacked it is recommended that ISO intermodal connecting twistlocks are used to aid stack stability.

The maximum stacking height for the TC01 design is shown in Appendix A.

6.9 Lifting Container Lid

CAUTION: Ensure the lid clamps have been removed before attempting to lift the lid off the container body.

CAUTION: The lid lifting lugs must not be used to lift the container assembly.

6.9.1 The lid is lifted by connecting a 350 kg rated shackle to each of the four lid lifting lugs (See Figure 5) and utilising a four leg lifting chain.

- 6.9.2 Once the lid is lifted clear of the container body it should be set down onto timber bearers to protect the seal face and aid access for monitoring purposes.

7 Loading the Container

7.1 Positioning of Container

During loading operations the container shall be either:

- i) Positioned on a flat & level hard standing/floor such that the floor and/or all the four corner fittings can take the load. Care must be taken to ensure that the container is not set-down on any sharp objects, e.g. bricks that could damage the floor. Note: proprietary castor wheel can be secured to each base corner twistlock to aid manoeuvrability of the container provided that: the castor wheels are rated to support the maximum gross weight of the loaded container, and; movement of the container, supported on the wheels is attempted only on a level hard standing/floor, or;
- ii) If the container is to be loaded with waste whilst residing on its transport trailer, then the tractor unit must be removed and an independent jacking system must be used to support the front of the trailer as shown in Figure 4.

7.2 Environmental Consideration

During all loading operations, water must be prevented from entering the container cavity. Ingress of water and dirt into the seal areas should also be prevented.

7.3 Protecting Seals

The lid seals shall be protected with a suitable cover during all loading operations (See Figure 6).

7.4 Loading

7.4.1 General (to be complied with in all Case)

- 7.4.1.1 The load in the container shall be evenly distributed over the length and width of the container, and in no case shall more than 60% of the load be distributed over 50% of the containers length. It is advised that lid removal be kept to a minimum.
- 7.4.1.2 All items shall be placed in the container in such a manner that significant movement of the contents cannot occur. If movement of the contents could occur restraint systems should be considered as stated below.
- 7.4.1.3 Any waste material which has the ability to penetrate the container walls during normal conditions of transport must not be loaded adjacent to the internal surfaces of the container.

7.4.2 Large Items

- 7.4.2.1 Large and/or heavy items must be packed such that no significant movement can occur if this is not possible refer to Use of tie Down and Restraints below.
- 7.4.2.2 Where large and/or heavy items are to be carried, not packed, then they should be located centrally within the container and chocked/restrained to prevent any movement under normal conditions of transport.

7.4.3 Use of Tie Down and Restraint Systems

- 7.4.3.1 For the purposes of designing and assessing internal restraints the base lattice grid can be used to restrain items. For the location of the anchor points refer to

guidance [8]. Each anchor point can take a maximum 800kg load in the vertical direction to an angle of 75 degrees to the horizontal. A calculation will be required if the angle is less than 75 degrees. In addition, the metal strip can take a maximum of 800kg load in the lateral direction acting through a chock restraint. When using the base lattice grid to restrain items the guidance note [8] must be complied with in full. Guidance on the restraint of items in the TC01 container can be downloaded from the LLW Repository web site – PAA/GN04 Guidance for Placing and Securing Items.

- 7.4.3.2 For assessing the side and end wall loadings as part of any restraint system the permissible loads are provided in Table 4 below.

Container Design No	Rated Payload (kg)	End Wall Loading UDL (kg)	Side Wall Loading UDL (kg)
TC01 (2910C)	31920	12000	21000

Table 2: Container Payload and Wall Loadings

NOTE: For packages operated under an ACEP, the payload shall be restrained to the base assembly unless otherwise agreed and approved by LLW Repository Ltd

7.4.4 Additional Requirements when Loading for Disposal

- 7.4.4.1 For disposal the loading of the container shall be carried out in an efficient manner that makes maximum use of the available space. Accessible voidage (air space) shall be kept to a minimum and any inaccessible voidage must not exceed 10% of the container volume unless express permission is given by the contract authority.
- 7.4.4.2 Direct pour encapsulation of waste is permitted subject to compliance with ref [9] (PAA/GN02 Low Level Waste Repository IP-2 ISO Container Direct Pour Encapsulation Guidance Document).

7.4.5 Additional requirement when transporting waste to Treatment Facilities under LLWR Waste Services Contract

A Waste Loading Plan (LLWR Form WSC-FOR-WLP) must be submitted to and approved by, the Contract Authority prior to the commencement of loading operations for all consignments.

7.4.6 Recommendation when transporting waste not under LLWR Waste Services Contract

When a consignor uses a container for transporting items or waste that is not under the LLWR Waste Services Contract, LLWR recommend that a risk assessment is undertaken for all packing, loading and unloading of the contents of the container.

8 Pre-dispatch Checks

8.1 Prior to Closing the Lid

- 8.1.1 Remove the seal protection system (See Section 7.3). Check that the seals are in a serviceable condition, free from damage and ensure that the seal interspace is clear.
- 8.1.2 The seals shall be lightly lubricated with a silicone based grease.

8.1.3 Before replacing the lid it should be positioned on a trestle or similar support such that the seal face can be inspected. The seal face must be clean and free from damage.

8.2 Closing the Lid

8.2.1 The lid will only locate in one position on the container. The correct orientation is to locate the grout port on the lid at the opposite end to the container vent port. The lid alignment brackets located on the top of the container at each end are designed to prevent misalignment.

8.2.2 Once the lid has been refitted, refit the lid clamps and tighten the nuts to a torque of $170\text{Nm} \pm 10\text{Nm}$. This will bring the underside of the lid into contact with the container lid seals. At this stage the gap between the edge of the lid and the container body can vary between 1 and 12 mm. The dimension of the gap varies due to component tolerancing and fabrication distortion, however all containers have achieved a satisfactory leakage test during the manufacturing stage, with the clamp nuts tightened to the prescribed torque. Once the lid is secured, the security seals should be fitted: the lid incorporates two positions for fitting any of the standard ISO container security seals.

8.2.3 Check the grout port is sealed with the flange bolts tightened to a torque $38\text{Nm} \pm 2\text{Nm}$.

8.3 After Closing the Lid

CAUTION: The Container should not be sealed more than 30 days in advance of the anticipated receipt date at the consignee facility.

8.3.1 Examine the vent port retaining bolts; ensure they are free from damage. Bolt the venting port flange against the gasket to a tightening torque of $38\text{Nm} \pm 2\text{Nm}$.

8.3.2 The container shall again be subjected to a visual examination of all exterior surfaces, including the underside and fork pockets. If any damage is identified the Container must be quarantined and the Contract Authority notified.

8.4 Monitoring and Labelling

Prior to dispatch, the Consignor shall monitor the radiation levels on the outside of the package and affix all necessary labels and placards in compliance with the IAEA Regulations [1].

8.5 Documentation

The Consignor shall complete the necessary consignment documentation as required by the IAEA Regulations [1], the Consignors/Consignees Site Procedures and the receiving facility acceptance criteria.

9 Storage of Containers

9.1 Storage of Empty Containers

9.1.1 The container vent port cover plate must remain open and vented to prevent pressurisation of the container during storage.

9.1.2 The container should be stored on a hard flat surface that is well drained. It is important that the container paint finish is not damaged during this operation.

- 9.1.3 If the Container is to be stored for a period of 6 months or longer, all lid clamp nuts shall be removed and a thin coat of lubricant applied to the threaded studs. The clamps and nuts shall be replaced and tightened to between 15 - 20Nm.

9.2 Container Retrieval from Storage

Upon retrieval from storage the container vent port cover plate is to be fitted and the container examined in accordance with Section 5.

10 References

- [1] IAEA Safety Standard Series No TS-R-1: Regulations for the Safe Transport of Radioactive Material, 2009 Edition.
- [2] International Convention for Safe Containers, 1972 (CSC).1996 Edition
- [3] BS EN ISO 9001 Quality Management Systems – Requirements
- [4] BS 3951: Part 2: Section 2.1 (ISO 1496/1), Freight Containers. Part 2, Specification and Testing of series 1 freight containers. Section 2.1, General Cargo Containers for General Purposes Amendment 1: 1AAA and 1BBB Containers Fifth Edition; Amendment 1: 03/01/93; Amendment 2: 07/01/98
- [5] PAA/GN01 LLW Repository IP2 ISO Container CSC Technical Inspection and Seal Leakage Test Guidance Document.
- [6] BS ISO 3874: Series 1 Freight Containers - Handling and Securing Fifth Edition; 1997. Corrected and Reprinted 15/07/1999; Amendment 1 15/11/2000; Amendment 2 01/07/2002.
- [7] PAA/GN03: Low Level Waste Repository Stud Repair Guidance document.
- [8] PAA/GN04: Low Level Waste Repository Guidance for Securing Items within the TC01, TC03, TC06 & TC09 LLWR IP-2 ISO Containers.
- [9] PAA/GN02 Low Level Waste Repository IP-2 ISO Container Direct Pour Encapsulation Guidance Document

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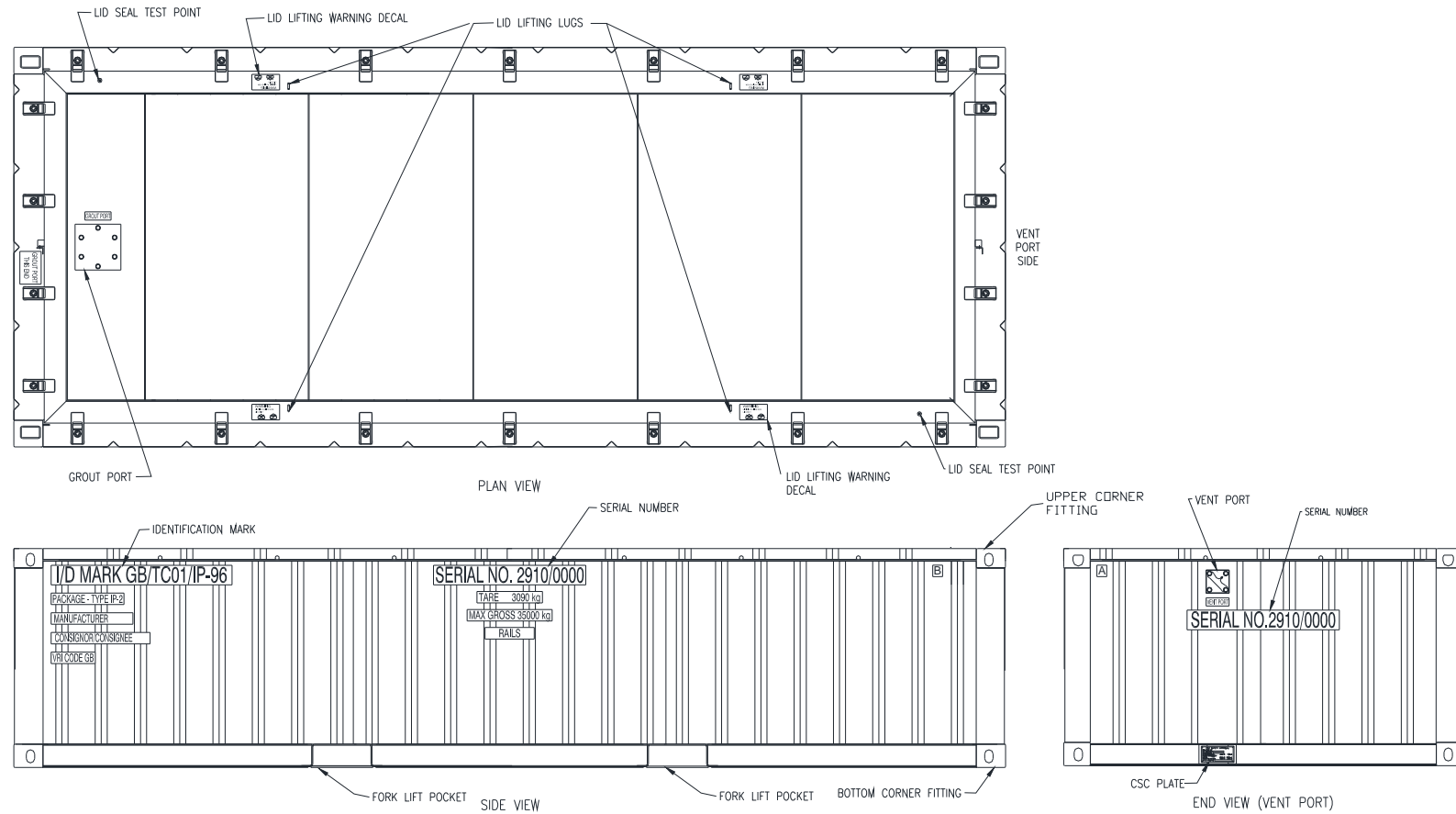


Figure 1: General view of TC01

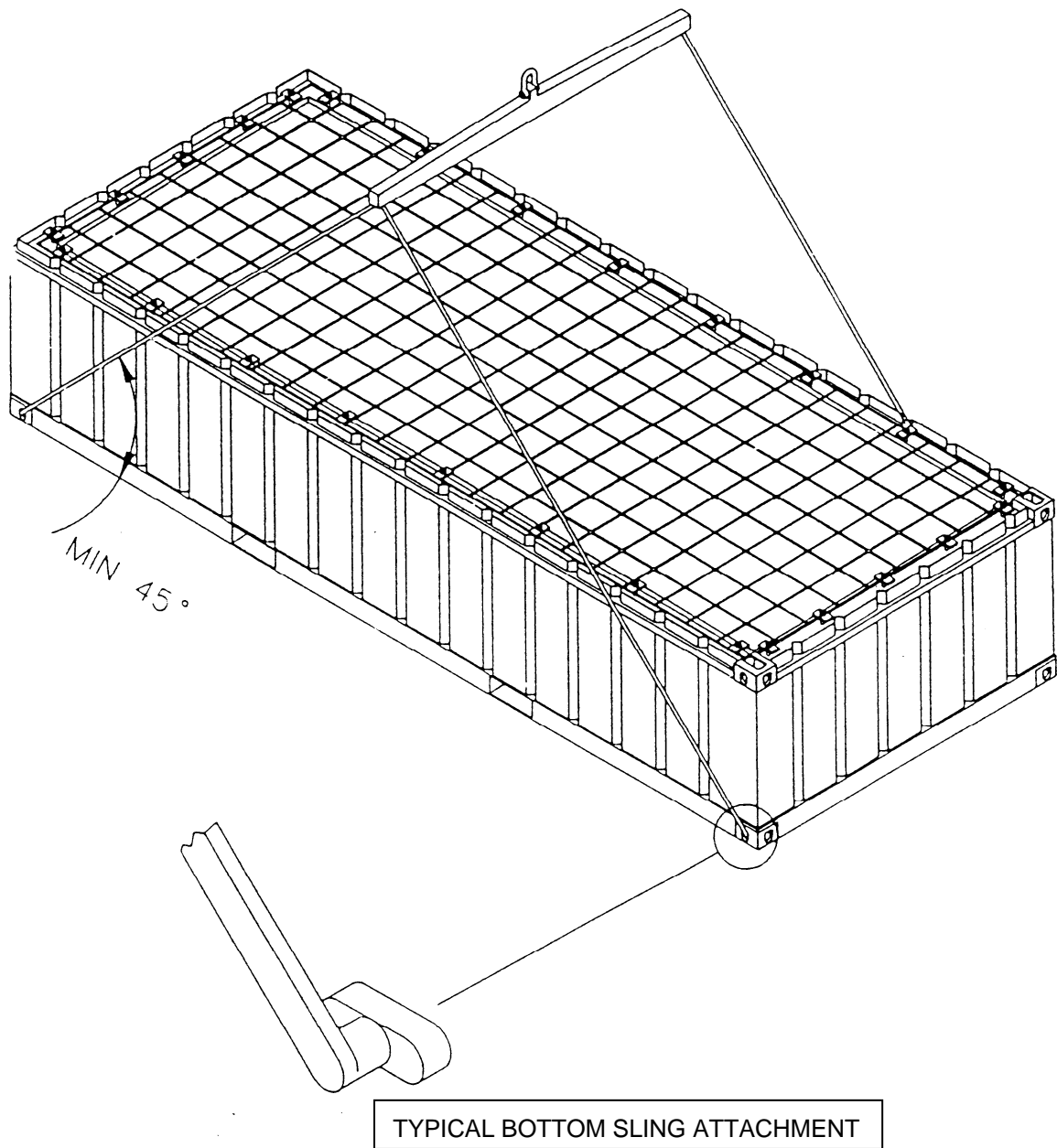


Figure 2: Lifting Using Bottom Fittings

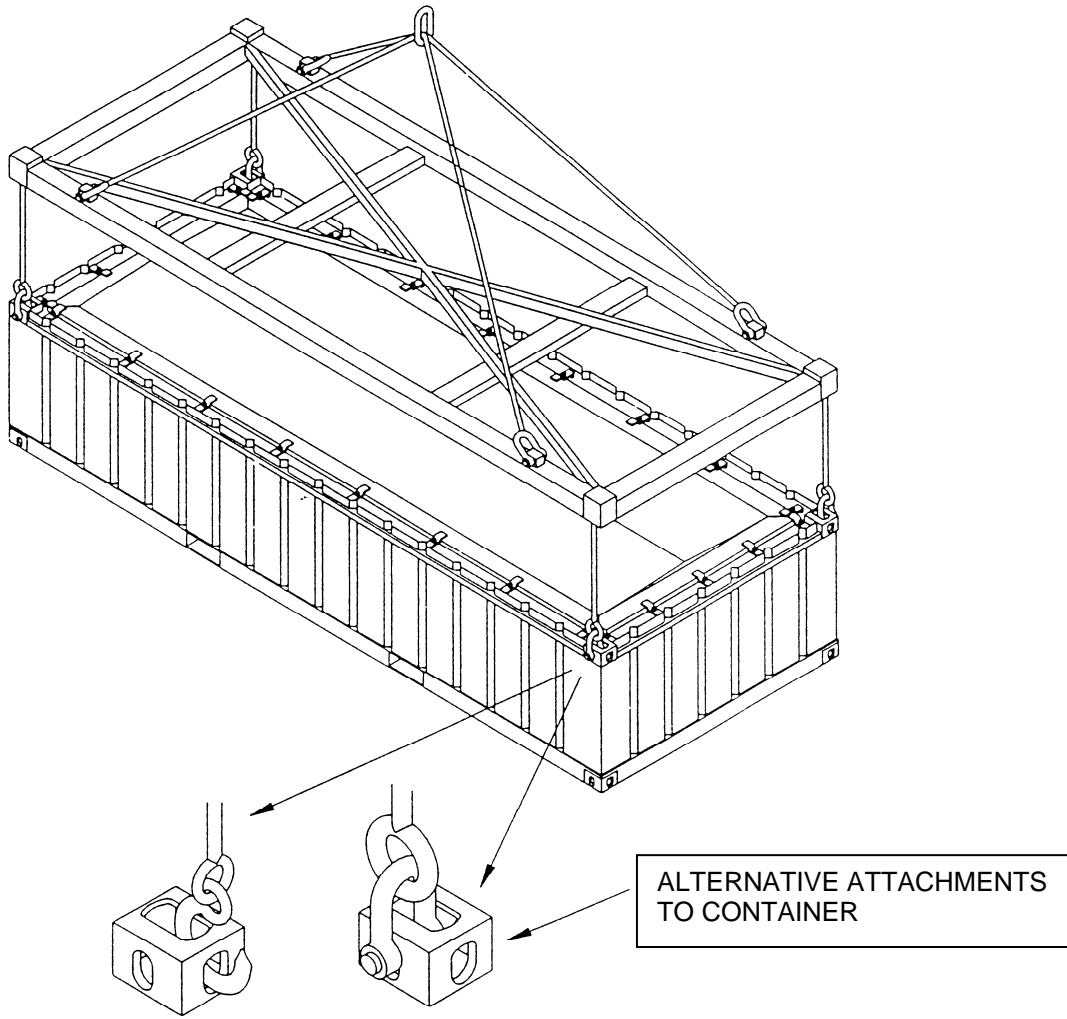
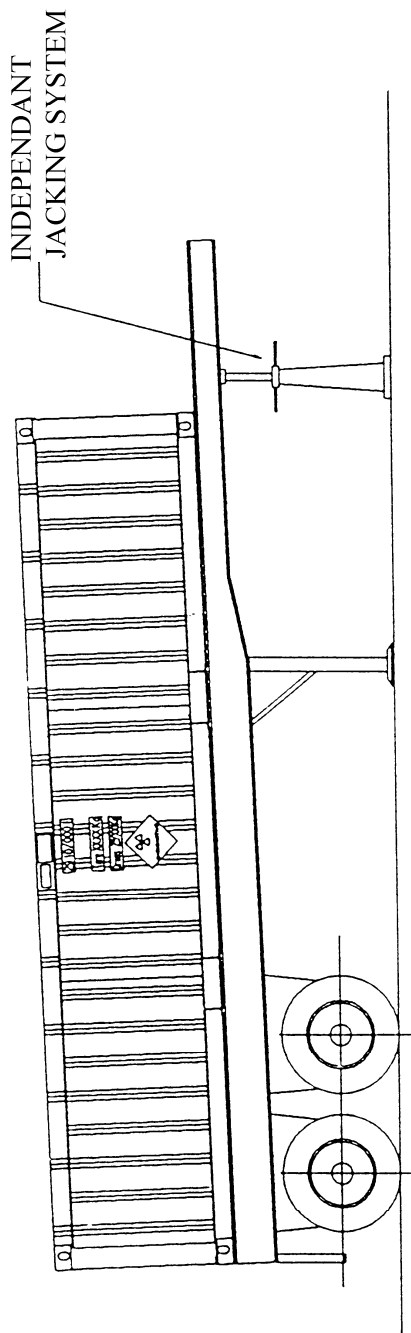


Figure 3: Lifting Using Top Fittings



SUPPORT ARRANGEMENT WHEN THE CONTAINER IS LOADED WHILST ON A TRAILER

Figure 4: Trailer Support

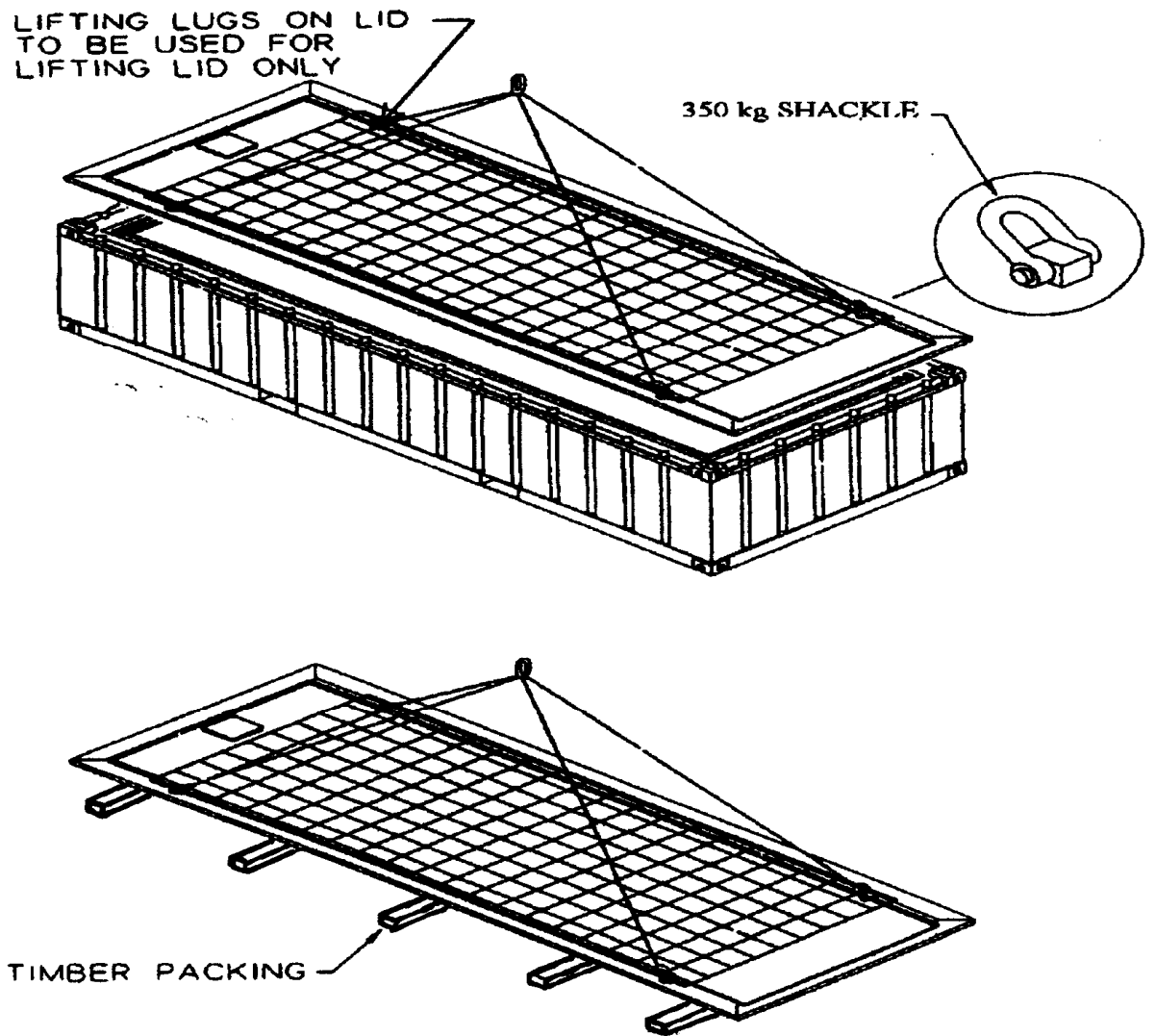


Figure 5: Lid Lifting & Set Down Criteria

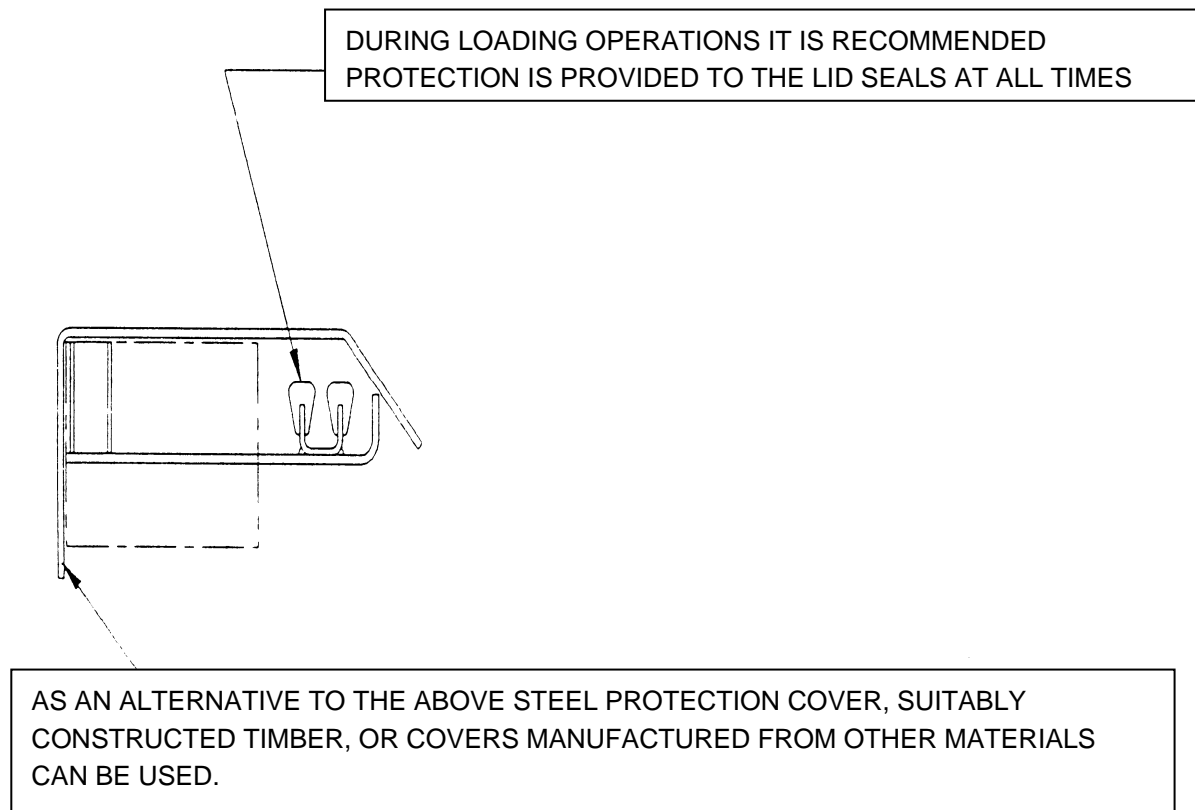
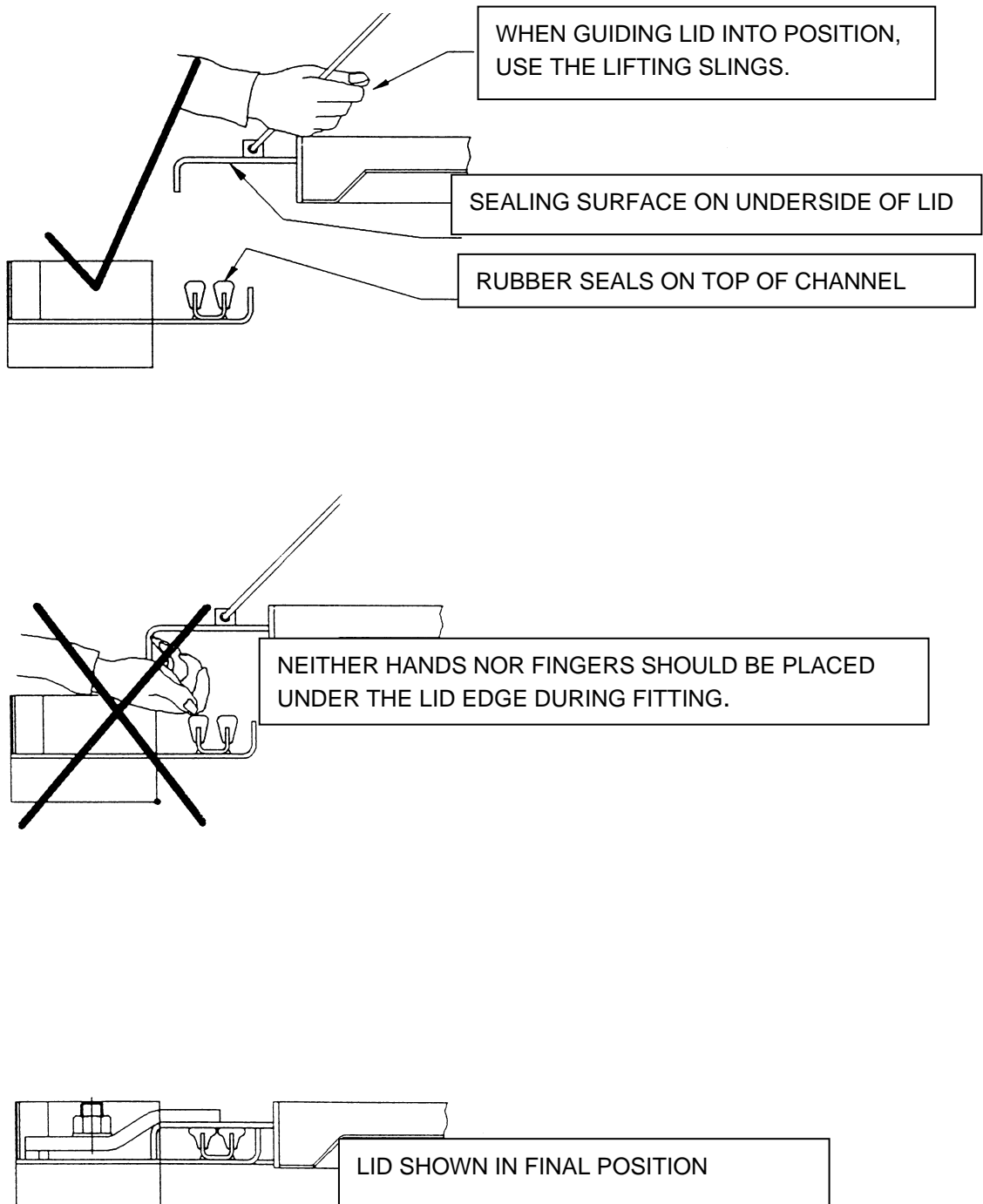


Figure 6: Lid Seals and Seal Protection



I935A

Figure 7: Lid Positioning

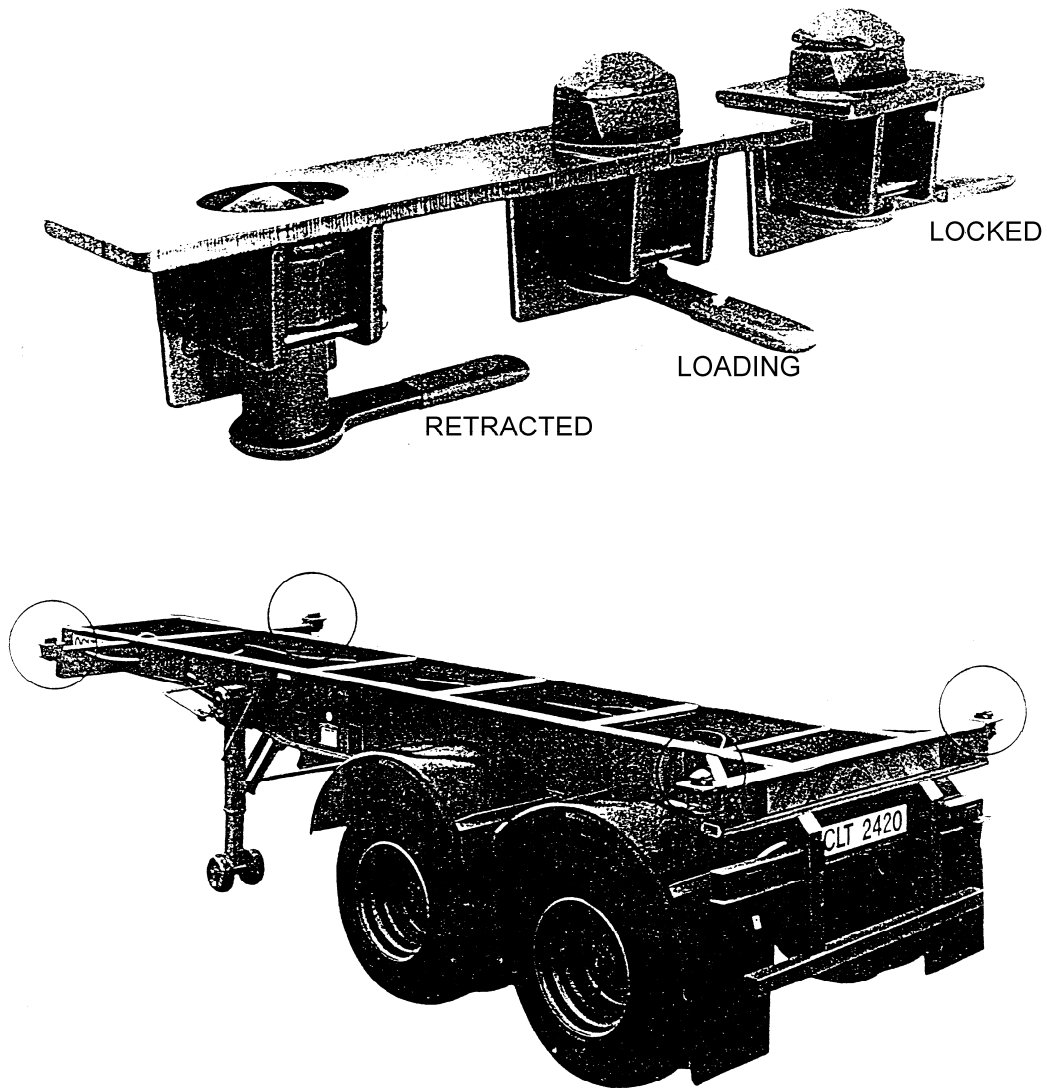


Figure 8: Twistlock System on Trailer

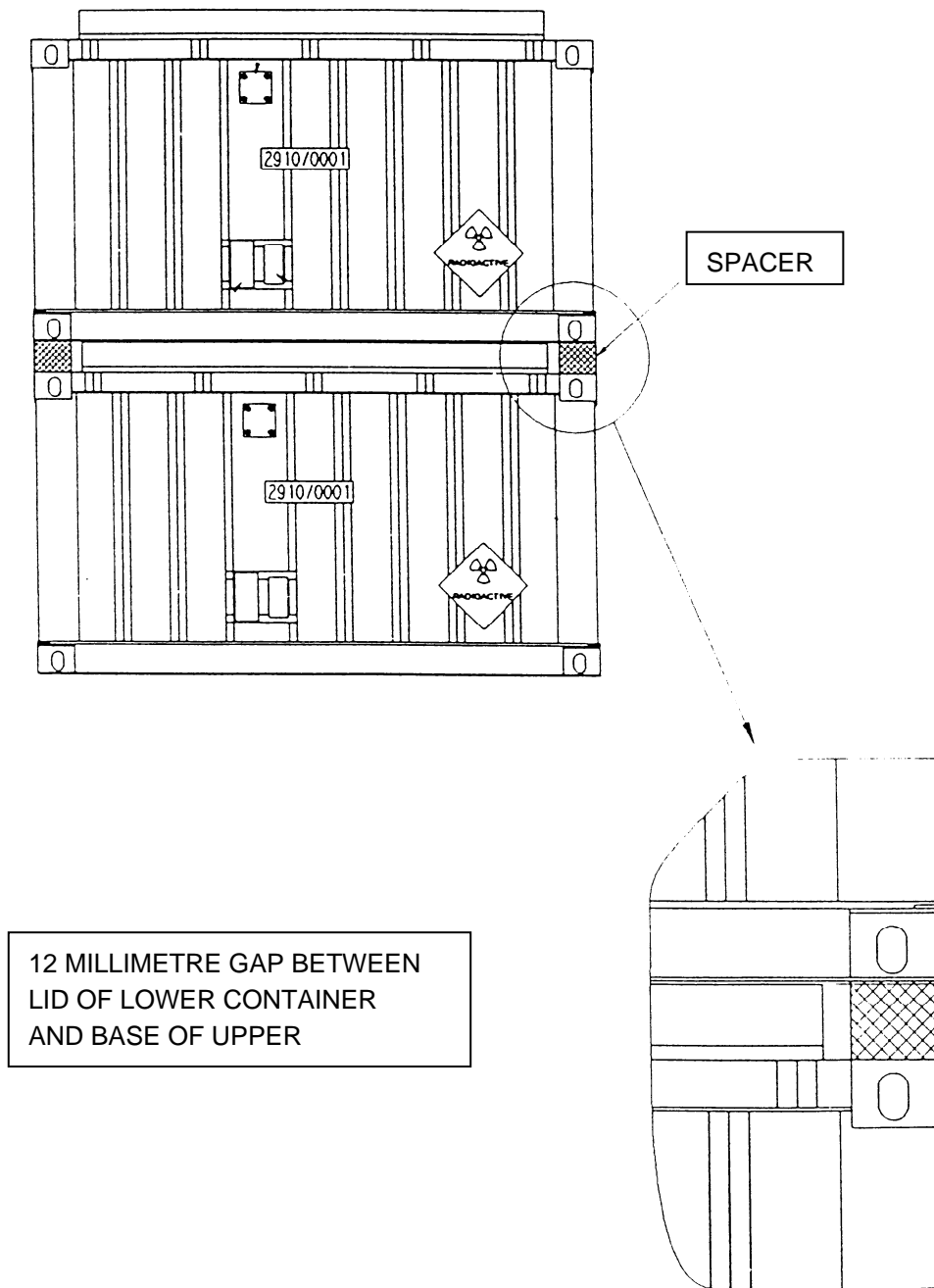


Figure 9: Spacer for use when stacking containers

Appendix A Container Specification

	CONTAINER TYPE
	TC01
G.A. Drg. No.	0NF 1840676
Indicative Weights (kgs)	
Body	2580
Lid	500
Permissible Gross Weight	35000
Indicative External Dimensions:	
Height (mm)	1320
Width (mm)	2438
Length (mm)	6058
Volume (m ³)	19.5
Indicative Internal Dimensions:	
Height (mm)	1106
Width (mm)	2364
Length (mm)	5954
Volume (m ³)	15.6
Maximum Stacking Height:-	4
Lid Seal Configuration	Double
Lid Seal Leak Test Method	Interspace
Grout Port Leak Test Method	Vacuum Test
Vent Port Leak Test Method	Vacuum Test