

Leaflet for usage and maintenance of special steel containers

Please read this container user leaflet carefully, because proceeding in accordance with this leaflet is prerequisite for using the container correctly and it is a conditional part when claiming manufacturer’s guarantee. Compliance with the contract guarantees and performance is furthermore conditioned by the use of the container as well as the installed equipment in accordance with the designed purpose and in defined manner. When using the container, the generally binding country-specific legislation must always be observed.

This leaflet applies to more container versions and therefore not all the parts described therein must be necessarily installed in your container. The scope of equipment refers to the confirmed order (purchase contract). Should you have any queries, do not hesitate to contact us (for contact details see the header of this leaflet). Handling, installation, operation and maintenance of the container should be performed by properly qualified personnel only. Observance of safe working practices is the responsibility of the customer (i.e. purchaser) or his/her authorised person. It is assumed at the same time that the container operator is over 18 years old, physically and mentally competent and has been made familiar with this leaflet as well as the related documentation prior to usage of the container.

1. CONTAINER HANDLING

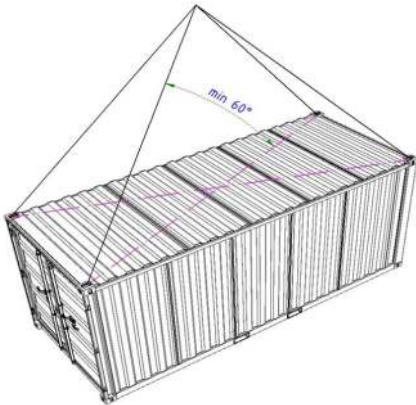
Instructions for safe handling

- The personnel handling or lifting the container must have the relevant qualification for this kind of work.
- All windows, doors and gates must be shut and secured before the container is moved.
- Moving the container with persons inside is **prohibited**.
- Any built-in technologies and any material stowed in the container must be secured against movement during container handling.
- The container may be lifted only if the payload does not exceed the value specified in the order confirmation (purchase contract).
- Any handling whatsoever (by crane or forklift) of a damaged container is **prohibited**.

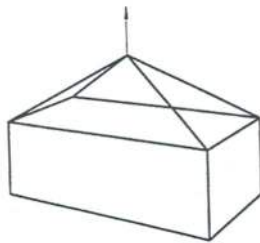
Unless otherwise specified in the order confirmation (purchase contract), the container may be lifted by the following techniques only while observing the operating conditions (container loads).

Crane handling with cables attached to top ISO corners

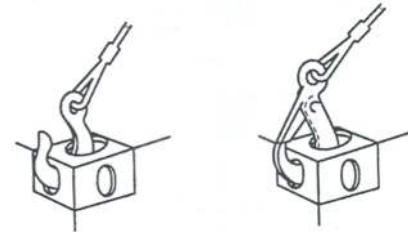
All four top corner castings are used to lift the container. Lifting forces must act in an angle not less than 60° relative to the horizontal plane (see picture 1). Hooks must be always inserted in the direction from inside outwards (see picture 2).



picture 1 – lifting angle for top ISO corners



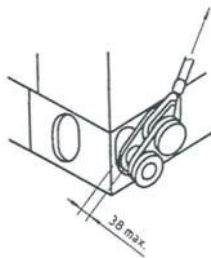
picture 2 – lifting by top ISO corners



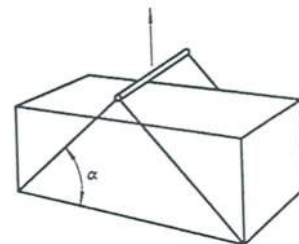
Crane handling with cables attached to bottom ISO corners

The container may be lifted by slings attached to the side holes of the four bottom corner castings. The slings must pull on the bottom corner elements only, and the lifting forces must not act at a greater distance than 38mm from the outside surface of the corner element (see picture 3). The lifting angle α of empty and loaded containers shown in picture 4 must not be smaller than the minimum values specified in the table below.

Container length	min. angle α
12.192 mm – 9.125 mm	30°
9.125 mm – 6.058 mm	37°
6.058 mm – 2.991 mm	45°
2.991 mm and less	60°



picture 3 – lifting by bottom ISO corners



picture 4 – lifting angle for bottom ISO corners

Lifting the container with a forklift

If the container is equipped with forklift pockets, it can be lifted by a forklift. Ideally, the inserted fork should extend across the full width of the container, but never less than 1825mm inside the forklift pockets. If the distance between the forklift pockets is less than 2050mm, only an empty container may be lifted this way.

IMPORTANT: Under no circumstances may the container be lifted, regardless of whether it is equipped with forklift pockets or not, with its underside sitting on the forks.

2. OPERATING CONDITIONS

Preparation of the underground

The container must be positioned on a flat base surface of adequate load bearing capacity and stability, sitting firmly on all support elements defined in the accompanying documentation, however at least on all four corner elements. The base surface must be made of material which can withstand loads imposed by the given container element. The surrounding ground must always slope away from the container. Surface flatness deviations must be within a $\pm 5\text{mm}$ tolerance. Base surface non-flatness can be compensated by placing various pieces of galvanised sheets between the base surface and container corner casting. Containers are delivered as free standing. If it is necessary to anchor the container to the base, this must be done exclusively via the corner elements by means of Twistlocks (i.e. container fasteners), or by connectors supplied or approved by the container manufacturer. The container must be mounted in such a way that the floor is sufficiently ventilated from underneath. The container must never stand in water. It is prohibited to scrape soil or snow towards the container.

Container loads

Unless otherwise specified in the order confirmation (purchase contract) or approved production drawing, the following loads must be observed:

- Floor: maximum permissible floor load is 500 kg/m^2 .
- Wind: the container has been designed for fundamental basic wind velocity $v_{b,0} = 20,0 \text{ m/s}$.
- Roof: maximum permissible load on the container roof is 150 kg/m^2 . If a larger quantity of snow accumulates on the container roof, it must be removed. It is prohibited to store anything on the roof that the roof hasn't been adapted for.
- Earthquake resistance: seismicity has not been taken into account.

Rain water drainage

Water from the roof runs along the container walls to the ground, where it is absorbed or discharged into sewerage.

Functioning of gates, doors and windows

After the container has been delivered and set up, the correct function of doors, gates, flaps and windows must be checked. If necessary, door and/or window hinges must be adjusted. Improper function of gates, doors or windows can be caused by insufficient base surface flatness or by foundation settlement. Hinges must be checked and lubricating grease refilled during regular container inspections and maintenance. Doors and gates are not designed to be waterproof (unless specified otherwise) and therefore must be, especially in wet and rainy weather, carefully shut. Should door thresholds be temporarily removed during technology mounting, they must be immediately and properly fitted back to prevent potential infiltration of any liquids or moisture.

Operating temperatures (climatic conditions)

The container is resilient against normal weather conditions (rain, snow) and is designed for outdoor temperatures between -20°C (-4°F) and $+40^\circ\text{C}$ ($+104^\circ\text{F}$) and normal relative humidity inside the container between 40 and 60%, unless otherwise stated in order confirmation (purchase contract). If the container is equipped with e.g. thermal/fire insulation, flooring over metal floor or wooden furniture – i.e. objects sensitive to moisture and vapour condensation, we recommend to ventilate the container regularly and maintain an inside temperature of at least $+12^\circ\text{C}$ ($+54^\circ\text{F}$). Otherwise, the life of these objects will be significantly reduced, their physical-technical properties cannot be maintained and no warranty repair requests will be accepted. Since all container walls are made of steel sheets and the container can be located in a variety of climatic conditions, the following principles should be observed in extreme climatic conditions:

- At very high temperatures, the surface temperature might exceed $+60^\circ\text{C}$ ($+140^\circ\text{F}$), in which case measures must be adopted to prevent the material stored inside the Container from being damaged and operator getting burnt.
- At very low temperatures (around -20°C (-4°F)), there is a potential risk that a wet skin gets stuck to the steel surface (protective gloves must be worn).

Regular inspections and maintenance

Throughout the container's life, regular inspections must be made and maintenance performed in line with this leaflet. The container must be inspected carefully at least once every 6 months, especially its moving parts, functional equipment and its outer shell. Any dirt must be removed and any damage underneath checked and repaired. Any leaves or other dirt accumulated on the roof, which prevent free discharge of water from the roof, must be removed. If a significant amount of snow accumulates on the roof, it must be regularly removed throughout the winter months. Any spilled liquids must be immediately washed off and the container must be dried.

Disposing of the container at the end of the life span

The container is made of recyclable materials (steel, aluminium, iron, glass, plastic, rubber, etc.). At the end of the life span, the container shall be disposed of in accordance with current binding local regulations.

3. COATING / LACQUERING

General information

After any installation works done inside or outside the container, all steel shavings, steel dust, grease and other dirt must be removed immediately. The roof (unless specified otherwise) is not designed to be walked on. When walking on the roof, the paintwork must be protected by a suitable method against damage (e.g. by spreading pieces of cardboard). When handling the container, painting must be protected from damage caused by hooks or chains, any such damage shall be repaired immediately. After transporting the container in winter months, it is recommended to clean it (wash it with water), since there is a danger of damage due to long exposure to salt. Painted surfaces must be regularly cleaned and any damage (abrasions, scratches, air-borne iron particles, chemical contamination, etc.) carefully attended to without delay, in order to prevent further damage and to ensure that the coating system as a whole functions correctly, using the paint supplied for this purpose together with the container. If the supplied paint is more than 24 months old or is growing stiff, a new paintwork repair kit must be ordered. Coated container surfaces must be checked at regular intervals as part of regular inspection and maintenance, i.e. at least once in 6 months (see chapter 2 of this leaflet). When making these inspections, do not forget to check the roof as well. Unless the instructions in this leaflet are observed, the product warranty will become null-and-void.

Colour variation, aging of the coating

Exposure of the container to weather conditions (especially UV radiation) might lead to colour variation of the top coat. Even though the materials used are resilient against UV radiation, this phenomenon is inevitable, depending on the exposure length and coating material applied.

Assessment criteria

Provided that the principles stated in this document are followed, the coating system applied to the container will at the end of the warranty period meet the below specified quality attributes (warranty period 2 years).

- | | | |
|--------------------|------------------------------------|-----------------------------------|
| • Blistering | degree of blistering max. 2-2 (S3) | acc. to EN ISO 4628-2 |
| • Rusting | degree of rusting max. Ri3 | acc. to EN ISO 4628-3 |
| • Cracking | degree of cracking max. 2 (S3)b | acc. to EN ISO 4628-4 |
| • Flaking | degree of flaking max. 2 (S3) | acc. to EN ISO 4628-5 |
| • Colour variation | deviation max. dE 5 | acc. to ISO 7724-2 and ISO 7724-3 |

Repair instructions for various types of damage

All paintwork repairs must be done by a person familiar with the application of given coating materials and with appropriate licence and experience in this field. Should the surface protection be heavily damaged (e.g. large areas), the manufacturer must be addressed and an outline of adequate repair technology obtained, in order to prevent damage spreading to as yet undamaged areas and to preserve the longest possible life of the coating.

1. Small damages such as scratches

Remove any residual coating material from the damaged spot; any rust must be mechanically removed to the bare metal. Remove all loose parts from the surface. Clean the surface using a suitable degreasing product. Apply the coating material delivered together with the Container. Should any doubt arise, please contact ABS intec.

2. Damages in larger scale

Contact ABS intec in these rare cases; you will receive adequate technical assistance.

4. OPTIONAL EQUIPMENT

Depending on the order confirmation (purchase contract), the steel container can be equipped with other equipment and components enhancing its utility features, such as electrical installation (lights, power sockets, ...), fire protection systems, ventilation and air-conditioning, noise-suppression systems, etc. In order for these systems to function correctly and safely, it is absolutely essential to observe the instructions given in the user manuals for each of these devices. Furthermore, it is necessary to carry out regular inspections and revisions at intervals specified by current local legislation and in accordance with the user and maintenance instructions of individual components. Any detected defects and damage must be remedied immediately in order to maintain the product's functions and parameters. In addition, a paid-for regular preventative maintenance and revisions of the equipment must be performed by the manufacturer or by an authorised organisation.

Electrical installation

Electrical installation is made to meet the standard specified by the client. Wiring is installed in the container walls and ceiling or is surface mounted, using the prescribed cables. In accordance with approved electrical documentation and at the defined places, an appropriate switchbox is installed with all necessary components for the electrical circuits and with a residual current circuit breaker.

- User instructions for the electrical installation are supplied with each device. Observe these instructions.
- Any works on the container's electrical installations, its connection to power mains and its earthing must be performed by a person with the appropriate electrical engineering certificate!

Ventilation and air-conditioning

1. Ventilation ducting and accessories

Ventilation distributes air free of dust, mechanical or other particles. Part of this distribution ducting can be also components to control the air flow, dampen the noise extending through the ducting, etc. The actual numbers, parameters and functions of these components are specified in the order confirmation (or purchase contract). If these devices are used, the following regular inspections and maintenance must be carried out for them:

- Distribution ducting: check for damage, corrosion, leaks in joints
- Control, isolation and positive/negative pressure flaps: check the function, soiling and corrosion, check the mounting and correct function of actuators (control mechanisms)
- Elastic linings (fan sleeves): check the mounting and stressing of joints and check for damage (punctures)
- Rain shutters: check for soiling and corrosion, check for leaks
- Filter: designed to separate ordinary mechanical dirt from the air depending on the filtration class. To ensure its correct functioning, the filter element must be regularly checked for clogging and if required replaced.

The instructions in this leaflet must be combined with the requirements in the supplied user instructions for each installed device. The inspections and the maintenance have to be performed by an operator experienced in measurement and control technology to avoid persons and property from being endangered.

2. Air conditioning

An air-conditioning unit is a sophisticated device whose performance and lifespan are strongly affected by its cleanliness, because clogged equipment means reduced heat transfer but also higher pressure in the air-conditioning circuit and greater loads on the compressor, which might result in its destruction. Unless operating regulations and maintenance schedules are observed, the equipment life will be shortened, energy consumption will grow and the features of the ventilation and air-conditioning systems may change, which in turn might result in the failure to meet hygiene or technical requirements on the environment and the used technology.

5. CUSTOMER COMPLAINTS

At ABS intec we offer competent and excellent service and do everything in our power to meet all our customers' demands. During the production process we proceed in accordance with applicable standards and regulations and place strong emphasis on final quality inspection. The outcome of our production process is a high-quality product which meets the customer's requirements. Therefore, we trust that there will be no need for you to file a complaint concerning our product.

How to file a complaint

If requesting a complaint repair, the client must inform the manufacturer in writing and in detail about the problem, the required extent of repairs and other necessary information required to identify the product and the defect. It is recommended to send the warranty claim by e-mail and attach quality photo documentation of the problem.

- Obvious manufacturing and transportation defects must be reported immediately after being discovered; this applies primarily to defects/faults apparent at first sight when receiving and checking the product. Damage obviously suffered during transportation must be reported to the carrier and recorded in the delivery note or CMR during delivery.
- Other faults or defects (i.e. hidden faults or defects which will only manifest themselves when the product is being used) must be reported immediately after being discovered, i.e. not later than 6 months after their occurrence (interval between regular container inspections).

When filing a complaint regarding construction, a reference to the non-compliance with an approved drawing in the latest version or technical description of the container must be given (see the latest version of the order confirmation or purchase contract).

Prior to any warranty fulfilment by the manufacturer, an agreement must be reached about a suitable repair method, repair date and who will perform the repairs.

Warranty limitations:

- All warranty repair requests must be submitted during the warranty period, requests submitted later will not be accepted.
- The warranty period for the container covers 2 years (unless otherwise specified in the order confirmation/purchase contract), the warranty period for the installed technology corresponds to the warranty period specified by the producer/supplier of the technology (unless otherwise stated in the order confirmation/purchase contract).
- In case of complaint concerning the installed technology, the container manufacturer will provide the rights arising from defective performance in the same volume as provided by the technology supplier (or technology producer) to the container manufacturer. Generally, the manufacturer carries the responsibility for material (spare part) needed to remedy the fault. Any other associated risk and cost for work or transport are carried by the client (for the specific warranty conditions, see the accompanying documentation and conditions for the given technology to learn about responsibility for regular checks).
- Warranty conditions and responsibility conditions for defective performance concerning the technological equipment installed in the container (as listed in the supplied documents) form an integral part of this manufacturer's warranty conditions and take precedence over this leaflet in case of discrepancies.
- Liability of the container manufacturer for damages caused in connection with the supplied container may under no circumstances exceed the value of the delivered product.

Container manufacturer disclaims liability for:

- Damages caused by unpredictable circumstances, in particular by welding or other thermal stressing, soiling, mechanical damage, use of unsuitable materials, fire, explosion, radiation, collision with other object, incorrectly selected base material, force majeure, vandalism, industrial actions, etc.
- Damages in places where the damage occurred as a consequence of the physical location, usage or object shape, e.g. ladders, handrails, friction surfaces, points of contact between profiles or places otherwise stressed in the sense of this paragraph.
- Degradation caused by galvanic reaction at the presence of metals, damage caused by aggressive chemical substances (e.g. fertilisers etc.) and other chemicals.
- Any belatedly reported container defects or damages that became aggravated during the time when no regular inspections and maintenance were performed in accordance with this leaflet.
- Degradation, damage or defects of any part of the container caused by works, modifications, etc., after the container has been handed over for use.
- Paintworks carried out by the user with different material or other material or technology deviation from the specified coating system.
- Damage caused by the container being placed in an environment different from what was specified in the order and confirmed in the order confirmation (scale C1 – C5 according to EN ISO 12944-2).
- Degradation of the coating system vis-à-vis the declared quality attributes (see chapter "Coating / Lacquering").
- Damage obviously suffered during transportation, which was reported late and which was not recorded in the delivery note or CMR.
- A service action carried out on the installed equipment by an unauthorised person (see the product's accompanying documentation).
- Wear and tear of parts which are generally regarded as consumable material (such as filter elements, work fluids, etc.).
- Any other damages and disproportionate costs such as: loss of time, employee costs, loss of profit and other claims made against manufacturer by third parties, etc., as defined in this paragraph.

Keeping maintenance records

The user must keep records of all inspections, revisions and servicing works carried out in the form of operation diaries and revision reports, which is one of the prerequisites for the manufacturer to recognise the legitimacy of warranty repair requests. Entries into the operation diary (which will be kept the whole time by the user) must be made immediately by the service technician, clearly stating his/her name and the name of the company on whose behalf the service action was performed, together with other information required by user and maintenance instructions of the manufacturers of specific products, and by local legislation.

Declaration

This leaflet has not been devised as an exhaustive list of relevant information. The information contained in this leaflet is subject to modifications based on experience and to our policy of continuous product development.

If it is demonstrated that the container has been used in contradiction with the intention and manner defined in this leaflet and the supplied related documentation, the manufacturer shall not be held liable for any damages and defects, nor for incorrect function of the product and for the failure to meet the product's design parameters.