Rand Air Machine Loading Guidelines 2021



Containers

Safety Instructions



Truck

To determine whether a truck is suited for transport of the unit:

- compare the dimensions of the unit with the truck's loading space.
- check the truck's loading capacity. Compare the truck's loading capacity with the weight on the type plate of the unit.
- check that there are sufficient fixation points on the truck's loading floor
- check that the loaded height is OK in relation to the proposed transport route (passage height of bridges)

Lifting equipment/tools

• Before lifting a unit, all loose or pivoting parts, e.g. doors, have to be securely fastened first.

• To lift a unit, apply crane hooks or lifting beam meeting local safety regulations and attach these on the unit's lifting eyes.

• Depending on the product category (see technical specifications) the unit has to be lifted on bottom with a lifting beam or on top with a chain hoist (refer to reverse page).

- It is also allowed to lift the unit with a forklift using the forklift slots when the proposed forklift has adequate lifting capacity.
- When lifting on bottom, always make sure to position the lifting beam with the gravity sticker on the unit. The chain of the lifting beam contains markings indicating where to adjust.

• Lifting hooks, eyes, shackles, etc., should never be bent and only subjected to stress in line with their load axis design. The capacity of a lifting device diminishes when the lifting force is applied at an angle to its load axis. Never allow sharp bends in lifting cables, chains or ropes.

Local transport regulations always prevail.

Refer to individual technical data sheets for fleet unit weight and dimensions

Lifting

• For maximum safety and efficiency of the lifting apparatus, all lifting members have to be applied as close to perpendicular as possible. If required, a lifting beam has to be applied between hoist and load.

• A hoist has to be installed in such a way that the object will be lifted perpendicularly. If that is not possible, necessary precautions must be taken to prevent load-swinging, e.g. by using two hoists, each at approximately the same angle not exceeding 30° from the vertical.

- Helicopter lifting is not allowed.
- Lifting acceleration and braking has to be kept within safe limits.
- Never leave a load hanging on a hoist.

Securing

- For securing the unit, use the container twist locks on the truck.
- Inspect all doors and panels so that they are secured and locked in place to avoid coming off in transit. All panel bolts and door latches are to be in place tight and closed.
- If unsure about the transport requirement of this machine, please contact the local Rand-Air Rental Branch on 011 345 0700 for more information.



CONTAINERS









Align with centre of gravity sticker



Four strand chain hoist



Lifting container with crane



Moving container with forklift (depending on max. weitght capacity)







Fixartion with Twistlocks









Fixation of container with chains

X-Series, Single Axle

Safety Instructions



Truck

To determine whether a truck is suited for transport of the unit:

- compare the truck's loading capacity with the weight on the data plate of the unit.
- check that there are sufficient fixation points on the truck's loading floor
- check that the loaded height is OK in relation to the proposed transport route (passage height of bridges)

Before lifting

- Never exceed the maximum towing speed of the unit (refer to local regulations).
- Place the unit on level ground and apply the parking brake before disconnecting the unit from the towing vehicle. Immobilize the unit by placing chocks in front of and/or behind the wheels.

• Before lifting a unit, all loose or pivoting parts, e.g. doors, have to be securely fastened first.

Lifting equipment/tools

- To lift a unit; apply crane hooks or lifting shackles meeting local safety regulations and attach these to the unit's lifting eyes. Never allow sharp bends in lifting cables, chains or ropes.
- It is also allowed to lift the unit at the lifting eye with a forklift using an auxiliary hoisting hook attached to the lifting forks when the proposed forklift has adequate lifting capacity.



• Lifting hooks, eyes, shackles, etc., should never be bent and only subjected to stress in line with their load axis design. The capacity of a lifting device diminishes when the lifting force is applied at an angle to its load axis.

Lifting

- For maximum safety and efficiency of the lifting apparatus, all lifting members have to be applied as close to perpendicular as possible.
- A hoist has to be installed in such a way that the object will be lifted perpendicularly. If that is not possible, necessary precautions must be taken to prevent load-swinging, e.g. by using two hoists, each at approximately the same angle not exceeding 30° from the vertical.
- Helicopter lifting is not allowed.
- Lifting acceleration and braking has to be kept within safe limits.
- Never leave a load hanging on a hoist.

Securing

- For securing the unit on the trailer, you may use wooden beam block cradles or wooden chocks to block the wheels and additionally secure the unit with straps. (Refer to reverse page).
- Inspect all doors and panels so that they are secured and locked in place to avoid coming off in transit. All panel bolts and door latches are to be in place tight and closed.
- If unsure about the transport requirement of this machine, please contact the local Rand-Air Rental Branch on 011 345 0700 for more information



Local transport regulations always prevail.

X-Series, Single Axle



Open Flatbed Trailer



Truck fitted with Winch



Truck fitted with Crane



Location lifting eye



Stop Blocks provided with each unit



Use approved lashing tools (chains & straps)

Lifting eye



Loading by winch

Local transport regulations always prevail. Refer to individual technical data sheets for fleet unit weight and dimensions

WAYS OF FIXATION



Fixation of Axle (---) and towbar(---)



Z & G Series (Skid mounted)

A

Safety Instructions



Truck

To determine whether a truck is suited for transport of the unit:

- compare the dimensions of the unit with the truck's loading space.
- check the truck's loading capacity. To determine the loading weight, the weight on the unit's data plate has to be increased with the weight of the protective frame. For loading volumes less than 10 m³: add 500 kg
- For loading volumes between 10 m³ and 20 m³: add 800 kg
- For loading volumes between 20 m³ and 30 m³: add 1,000 kg
- check that there are sufficient fixation points on the truck's loading floor
- check that the loaded height is OK in relation to the proposed transport route (passage height of bridges)

Lifting equipment/tools

- Before lifting a unit, all loose or pivoting parts, e.g. doors, have to be securely fastened first.
- It is ONLY allowed to lift the unit with a forklift using the forklift slots when the proposed forklift has adequate lifting capacity.
- The capacity of a lifting device diminishes when the lifting force is applied at an angle to its load axis.

Lifting

- For maximum safety and efficiency of the lifting apparatus, all lifting members have to be applied as close to perpendicular as possible.
- Helicopter lifting is not allowed.
- Lifting acceleration and braking has to be kept within safe limits.

Securing

- For securing the unit on the trailer, use chains or straps. (Refer to reverse page).
- Inspect all doors and panels so that they are secured and locked in place to avoid coming off in transit. All panel bolts and door latches are to be in place tight and closed.
- If required, Ratchet strapping can be used to provide additional security around the body of the machine.
- If unsure about the transport requirement of this machine, please contact the local Rand-Air Rental Branch on 011 345 0700 for more information.

Local transport regulations always prevail.



Z & G-Series



FIXATION TOOLS

Use Safety certified chains and straps

Open Flatbed Trailer



Truck fitted with Winch



Fixation of unit with chains & doors with strap



Truck fitted with Crane

P-Series, Dual Axle

RAND-ALP

Safety Instructions 😡 🕥 🕓 📥 📥

Truck

To determine whether a truck is suited for transport of the unit:

- compare the truck's loading capacity with the weight on the data plate of the unit.
- check that there are sufficient fixation points on the truck's loading floor
- check that the loaded height is OK in relation to the proposed transport route (passage height of bridges)

Before lifting

- Never exceed the maximum towing speed of the unit (refer to local regulations).
- Place the unit on level ground and apply the parking brake before disconnecting the unit from the towing vehicle. Immobilize the unit by placing chocks in front of and/or behind the wheels. Position the tow bar vertically and lock it.
- Before lifting a unit, all loose or pivoting parts, e.g. doors and tow bar, have to be securely fastened first.

Lifting equipment/tools

- Check that the intended lifting tools are designed for the weight to be lifted.
- To lift a unit; apply crane hooks or lifting shackles meeting local safety regulations and attach these to the unit's lifting eyes. Never allow sharp bends in lifting cables, chains or ropes.
- It is also allowed to lift the unit with a forklift using the forklift slots when the proposed forklift has adequate lifting capacity.

Local transport regulations always prevail.

• Lifting hooks, eyes, shackles, etc., should never be bent and only subjected to stress in line with their load axis design. The capacity of a lifting device diminishes when the lifting force is applied at an angle to its load axis.

Lifting

- For maximum safety and efficiency of the lifting apparatus, all lifting members have to be applied as close to perpendicular as possible. If required, a lifting beam has to be applied between hoist and load.
- A hoist has to be installed in such a way that the object will be lifted perpendicularly. If that is not possible, necessary precautions must be taken to prevent load-swinging, e.g. by using two hoists, each at approximately the same angle not exceeding 30° from the vertical.
- Helicopter lifting is not allowed.
- Lifting acceleration and braking has to be kept within safe limits.
- Never leave a load hanging on a hoist.

Securing

- For securing the unit on the trailer, use wooden beam block cradles or wooden chocks to block the wheels and additionally secure the unit with straps or chains on the wheels. Never strap on top of the canopy!
- Per wheel, 2 straps are mandatory (refer to reverse page).
- Inspect all doors and panels so that they are secured and locked in place to avoid coming off in transit. All panel bolts and door latches are to be in place tight and closed.
- If unsure about the transport requirement of this machine, please contact the local Rand-Air Rental Branch on 011 345 0700 for more information.



P-Series, Dual Axle





Forklift

Open Flatbed Trailer



Truck fitted with Winch



Max. apex angle of hoisting sling is 60" Use approved lashing tools



(chains & straps)

FIXATION TOOLS

WAYS OF FIXATION







Fixation with chains to trailer frame (to the outside)







Truck fitted with Crane



Loading by winch

Q-Series, Single Axle

Safety Instructions 😡 🕥 🕓 🛆 🛆



Truck

To determine whether a truck is suited for transport of the unit:

- compare the truck's loading capacity with the weight on the data plate of the unit.
- check that there are sufficient fixation points on the truck's loading floor
- check that the loaded height is OK in relation to the proposed transport route (passage height of bridges)

Before lifting

- Never exceed the maximum towing speed of the unit (refer to local regulations).
- Place the unit on level ground and apply the parking brake before disconnecting the unit from the towing vehicle. Immobilize the unit by placing chocks in front of and/or behind the wheels.
- Before lifting a unit, all loose or pivoting parts, e.g. doors, have to be securely fastened first.

Lifting equipment/tools

• To lift a unit; apply crane hooks or lifting shackles meeting local safety regulations and attach these to the unit's lifting eyes. Never allow sharp bends in lifting cables, chains or ropes.

• It is also allowed to lift the unit at the lifting eye with a forklift using an auxiliary hoisting hook attached to the lifting forks when the proposed forklift has adequate lifting capacity.

A Never lift the unit using the lifting forks under the frame of the unit.

Lifting hooks, eyes, shackles, etc., should never be bent and only subjected to stress in line with their load axis design. The capacity of a lifting device diminishes when the lifting force is applied at an angle to its load axis.

Lifting

• For maximum safety and efficiency of the lifting apparatus, all lifting members have to be applied as close to perpendicular as possible.

• A hoist has to be installed in such a way that the object will be lifted perpendicularly. If that is not possible, necessary precautions must be taken to prevent load-swinging, e.g. by using two hoists, each at approximately the same angle not exceeding 30° from the vertical.

- Helicopter lifting is not allowed.
- Lifting acceleration and braking has to be kept within safe limits.
- Never leave a load hanging on a hoist.

Securing

- For securing the unit on the trailer, you may use wooden beam block cradles or wooden chocks to block the wheels and additionally secure the unit with straps. (Refer to reverse page).
- Inspect all doors and panels so that they are secured and locked in place to avoid coming off in transit. All panel bolts and door latches are to be in place tight and closed.
- If unsure about the transport requirement of this machine, please contact the local Rand-Air Rental Branch on 011 345 0700 for more information



Local transport regulations always prevail.

Q-Series, Single Axle







Truck fitted with Winch



Truck fitted with Crane



Lifting generator with forklift (if fitted wit) Use approved lashing tools Forklift slots) (chains & straps)



Loading by winch



Lifting Generator

FIXATION TOOLS



Fixation fo axle (--) and Towbar (--)



Fixation with chains to trailer frame (to the outside)



Fixation of generator with chains

X & Q Series, Dual Axle

Safety Instructions 😡 🕥 🕓 🛆 🛆

Truck

To determine whether a truck is suited for transport of the unit:

- compare the truck's loading capacity with the weight on the data plate of the unit.
- check that there are sufficient fixation points on the truck's loading floor
- check that the loaded height is OK in relation to the proposed transport route (passage height of bridges)

Before lifting

- Never exceed the maximum towing speed of the unit (refer to local regulations).
- Place the unit on level ground and apply the parking brake before disconnecting the unit from the towing vehicle. Immobilize the unit by placing chocks in front of and/or behind the wheels. Position the tow bar vertically and lock it.
- Before lifting a unit, all loose or pivoting parts, e.g. doors and tow bar, have to be securely fastened first.

Lifting equipment/tools

- To lift a unit; apply crane hooks or lifting shackles meeting local safety regulations and attach these to the unit's lifting eyes. Never allow sharp bends in lifting cables, chains or ropes.
- It is also allowed to lift the unit with a forklift using the forklift slots when the proposed forklift has adequate lifting capacity.
- Lifting hooks, eyes, shackles, etc., should never be bent and only subjected to stress in line with their load axis design. The capacity of a lifting device diminishes when the lifting force is applied at an angle to its load axis.

Lifting

• For maximum safety and efficiency of the lifting apparatus, all lifting members have to be applied as close to perpendicular as possible. If required, a lifting beam has to be applied between hoist and load.

• A hoist has to be installed in such a way that the object will be lifted perpendicularly. If that is not possible, necessary precautions must be taken to prevent load-swinging, e.g. by using two hoists, each at approximately the same angle not exceeding 30° from the vertical.

- Helicopter lifting is not allowed.
- Lifting acceleration and braking has to be kept within safe limits.
- Never leave a load hanging on a hoist.

Securing

- For securing the unit on the trailer, use wooden beam block cradles or wooden chocks to block the wheels and additionally secure the unit with straps or chains. (Refer to reverse page).
- Inspect all doors and panels so that they are secured and locked in place to avoid coming off in transit. All panel bolts and door latches are to be in place tight and closed.
- If unsure about the transport requirement of this machine, please contact the local Rand-Air Rental Branch on 011 345 0700 for more information



Local transport regulations always prevail.

Q & X-Series, Dual Axle





Forklift



FIXATION TOOLS

Stop Blocks provided with each unit





Truck fitted with Winch



Crane Lifting



Use approved lashing tools (chains & straps)



Fixation with chains to trailer frame (to the outside)



Truck fitted with Crane

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Loading by winch



Lifting Generator



Fixation with chains to trailer frame

Safety Instructions Before Work Commences 😡 🕔 🔕 🛕

- **1.** Ensure All Trucks are supplied with the following:
- Spill Kits
- ✓ Fire Extinguishers with valid sticker/expiry date
- ✓ First Aid Kits
- Each truck must have a Safety File with all relevant documentations
- Copy of Truck Documents
- Copies of All Certifications (Winch Load Test, Chains Load Test, Belts Load Test, Crane Certification and Crane Operators Certificates
- ✓ Drivers License with Valid PDP
- 2. Ensure all Drivers are wearing correct Personal Protective Equipment (PPE) on duty:
- Hard Hat with Chin Strap
- Gloves
- ✓ Safety Glasses
- ✓ Safety Shoes
- ✓ Coveralls
- ✓ Reflector Vest
- Breathing Apparatus (as required on specific sites)

- **3.** Ensure Chains and Winches are in good condition and load tested annually
- **4.** Ensure Truck is not leaking diesel/lubrication oil/liquid, if leaking please report to supervisor immediately for corrective action
- 5. Ensure truck is road worthy and in good condition, especially:
- Tires
- Windscreen
- Lights
- Breaks
- ✓ Windscreen Wipers
- 6. Truck must have a valid license disc and operating certificate



Safety Instructions when loading and offloading on site

- 1. Do a Mini Assessment to ensure it is safe to load/offload rental fleet units
- 2. Ensure safety cones are set up to notify surrounding traffic of caution: "work in progress"
- 3. Ensure loading/offloading does not take place on an incline
- 4. Ensure that there is no personnel behind the truck while loading/offloading is taking place
- 5. Only rental fleet units fitted with fork lift slots and/or are skid mounted can be loaded/offloaded using a forklift
- 6. Rental fleet units without fork lift slots must be loaded with a crane onto a flat bed truck
- 7. A roll back truck can make use of the winch for trailer mounted rental fleet units only



Safety Chains

Safety Chain Sizes to be used:

- At least 10mm thick in size & 5 m long
- One end must have a grip hook suitable for all machines sizes
- Machines must be secured to truck chains, and not belts only
- Security/Safety to ensure all machine doors are properly closed
- Machines with doors must be strapped around to avoid doors opening while in transit

Chains Required per Rental Fleet Unit:

Diesel Compressors (Trailer Mounted)

- ✓ D190 to D770 use 2(two) chains to secure machine to truck bed
- ✓ D800 and larger use 4(four) chains to secure machine to truck bed
- Oil Free Compressors use 4(four) chains to secure machine to truck bed

Electrical Compressors (Skid Mounted)

 Use 2(two) chains to tie down electric compressors and use belt to secure doors around compressor to avoid doors from opening

Generators (Trailer Mounted)

- ✓ 20Kva to 60Kva use 2(two) chains to secure machine to truck bed
- ✓ 80Kva to 500Kva use 4(four) chains to secure machine to truck bed

Dryers (Skid Mounted)

Use 2(two) chains to tie down dryers

Transformers & Equipment

- ✓ Use 2(two) straps to secure transformers to truck bed
- Use straps to tie down ancillary equipment (as required)

Pumps

Use 2(two) straps to secure transformers to truck bed



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Making agility count

