

# User Guide

# Direct-to-Truck BulkX



# Product Information

# Overview

Conquip has worked with contractors to understand the multi-faceted muck away and logistics challenges that they face on projects involving large excavations, removal of demolition arisings or removing waste material. The situation was resolved by creating a system which meant that contractors could excavate and transfer the waste directly into waste management vehicles or stockpiles.

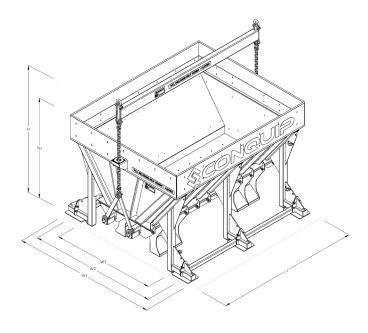
The result was BulkX.

Not only is BulkX more efficient than any traditional method, it reduces the level of noise and dust pollution as less machines are required on site and excavation waste doesn't have to be stock piled. As a result, excavation and waste management can become more flexible on your site and reduce the overall impact on the local community.

# **Product Information**

# **Specification**

Item	Product Code		
Direct-to-Truck BulkX 3000	CA525AA-03000		
Direct-to-Truck BulkX 4000	CA525AC-04000		
Direct-to-Truck BulkX 6000	CA525AE-06000		
Direct-to-Truck BulkX 8000	CA525AE-08000		



<sup>1</sup>Working Load Limit

Height (Lifting)	Height (Transport)	Width	Length	Weight	WLL <sup>1</sup>	Capacity
2930mm	1700mm	2880mm	2806mm	1350kg	6000kg	3000 litres
3020mm	1890mm	2700mm	2820mm	1620kg	8000kg	4000 litres
3650mm	1890mm	2890mm	3440mm	2090kg	14,100kg	6000 litres
3980mm	2180mm	2890mm	3400mm	2330kg	16,000kg	8000 litres

### Original Working Instructions

# **Usage Instructions**

### **Important Usage Notes**

- DO NOT overload by volume or by weight. The load should be evenly placed
  in the bin by weight and volume. If unevenly loaded when docking with the
  truck it could result in damage to the truck.
- Where possible two taglines with 2 operators on the ground should guide the bin to the optimum position.
- Approximately only 25% of the load is ever sat on the truck body as the load starts to discharge, the rest is held on the crane hook. If concerned about wear and tear on the truck body, rubber or hardwood can be fitted to the feet of the bin for protection.

### **Basic Overview**

BulkX is a system generally comprising of a landing frame in a designated discharge area and one or more large drop bottom bins. This variation of BulkX does not require a landing frame, but instead relies of the back of the muck away wagon for discharge, and therefore discharges directly into the back of the truck. When the 'feet' engage with the truck, the lifting chains lower the doors open and the bin can discharge.

#### **Practice**

To ensure that both the slinger / signaller and the Crane operator are familiar with the correct and safe operation, it is advisable to have at least one practice run with the unit empty. This will ensure that both fully understand how the system functions.

### Loading

- 1. Position the unit on firm level ground, which is able to bear the unit's weight and load.
- 2. The banksman must ensure the crane driver places the spreader bar to one side of the bin so it can be loaded without obstruction.
- 3. You can now evenly fill the bin ensuring the load is no wider, longer or higher than the side walls of the bin.

### Original Working Instructions

# **Usage Instructions**

### **Moving & Emptying Procedure**

- 1. Once loaded, check that no spillage from the loading process has remained on the bins sides, the bins frame is purposely designed to be angled to reduce build up of overspill however it is worth having a stiff broom or similar as some substances can still remain.
- 2. Ensure that two tag lines are attached to the dedicated tie points on one side of the bin, this will be the side of the bin that you can access from beside the truck.
- Clear all personnel from the immediate area, raise the bin just enough to allow sufficient clearance from the ground to check that the load is balanced. DO NOT enter the area or allow anyone beneath the unit.
- 4. You can now crane lift the bin to the discharge area. Move the bin slowly to prevent it from swinging.
- 5. Lower the bin so the tag lines can be reached, then guide the bin towards the truck.
- 6. Ensure the lifting chains are vertical then slowly lower the bin so that it can dock with the truck, with the 'feet' of the bin evenly resting on each side of the truck. Ensure the crane operator does not lower the chains to the point where the doors will open.
- 7. Ensure the bin lands completely on the back of the truck.
- 8. Remove everyone from the discharge area and warn those around that the bin is to be discharged.
- 9. If you are satisfied the bin has docked fully then the crane driver can lower the chains and the bin will discharge.
- 10. The bin is now ready to be lifted back to the loading area to refill and begin the process again.



The doors remain completely closed while the bin is in transit.



Once feet rest on the truck, chains can be lowered so doors open for discharge.

# Original Working Instructions

# **Safety Instructions**

### **Basic Safety**

A site-specific Risk Assessment, and lift plan where applicable, must be completed by the responsible person before using this equipment to control risks, produce a safe system of work and ensure safety for you, your colleagues and others. Your risk assessment will determine the correct Personal Protective Equipment (PPE) for the task you are doing. You must use it. Conquip recommends that you should wear:

- Suitable clothing
- Gloves
- Hard hat
- Protective footwear (steel toecaps)
- Safety glasses











#### **Important Safety Notes**

- Read these instructions before using this equipment. If there is anything you do not understand or if you have any concerns do not use this equipment. Contact your supervisor or Conquip Engineering Group for advice.
- You must check that you have considered all the safety requirements for the task you are doing and that this equipment is suitable.
- You must protect bystanders and the general public by preventing access to the working area.
- Do not use this equipment if you are tired, unwell or under the influence of alcohol or drugs. If you are taking any medicine or undergoing treatment you should inform your supervisor.

### **Usage & Transportation**

- Never unevenly load this equipment.
- The weight of the equipment, together with its attachments, must be added to the weight of the load when calculating the total load that will be imposed on the lifting apparatus / operating machine.
- This equipment must be used in conjunction with the load ratings of the lifting apparatus / operating machine. (Refer to the manufacturers' load ratings and original working instructions).
- Make sure you know how to use this equipment and understand all aspects of its operation in case of emergency.
- This equipment weighs more than 25kg. Do not lift or manhandle without machine assistance.
- Do not operate this equipment near overhead power lines.
- Take care in confined spaces, near ceilings or similar hazards. This equipment was designed for vertical lifting. Do not drag, or swing.
- Before operating this equipment, check that you have enough space for you to work safely and make sure that the working area is clear of hazards, obstructions and personnel.
- Before lowering equipment make sure that the landing zone is clear and capable of accepting the size and weight of the load.
- Crush Risk. Keep hands and feet clear of the equipment at all times to avoid injury.
- Do not exceed the maximum Working Load Limit (WLL) shown on the serial plate. Ensure that the WLL on the individual lift points is not exceeded.
- Before lifting, check that the load is secured, balanced and stable. Allow space for the equipment to move if the load shifts.

#### **Personnel**

- All personnel must wear relevant personal protective equipment.
- Do not wear loose clothing or jewellery and tie back long hair to avoid becoming tangled or trapped in this equipment. You must make everyone in the work area aware of what you are doing.
- All personnel involved in the lifting operation must be competent to do so and must have been briefed in conjunction with this User Guide available from Conquip Engineering Group, the manufacturer.

### **Equipment Maintenance & Cleaning**

- It is mandatory that the equipment is thoroughly examined regularly, by a qualified engineer, to ensure compliance with relevant regulation/s. (Conquip recommend to carry out thorough examination every six months).
- This product may incorporate various loose and detachable items of lifting gear. Refer to the separate requirements for the safe use of those items.
- When not being used, store the unit in a clean, upright condition and in a safe place where it will be protected from thieves and unauthorised users.
- This equipment must be inspected by the responsible person before each use and then regularly, as determined by your risk assessment or working practice. If you have any concerns about condition or suitability do not use.

### **Disclaimer**

### Warranty

The products supplied by Conquip Engineering Group are all guaranteed by a 12 month warranty.

Apart from where exceptions apply, Conquip Engineering Group promises to repair or replace any fault which the Company considers to be due to defective material or workmanship within 12 months of the date of sale, at no additional cost.

- Faults arising from unauthorised alterations (see modifications section below for full details).
- Damage caused by abuse, neglect, misuse or falling.
- Damage caused because of failure to follow transportation, storage, loading, cleaning or operating instructions.
- Replacement or repair of components due to fair wear and tear.
- Any consequential damage or wear arising from the use or fitting of additional or non-standard parts.

#### **Modifications**

If any third-party modifications or alterations, involving drilling, welding, cutting or distortion of materials in any form, are to be carried out on the product, Conquip Engineering Group must provide full written approval prior to the work being carried out.

Alterations, modifications, additions or repairs must be carried out by Conquip Engineering Group's recognised distributors, if they are not carrying out the work themselves.

Conquip Engineering Group operate a continuous improvement policy and therefore reserve the right to alter technical specifications and user guide details at any point without notice.

Conquip Engineering Group will not cover or reimburse any transportation and/or shipment costs to and from their premises or their recognised agents, or any material and/or labour costs for repair, replacement or assessment against a warranty claim.

Conquip Engineering Group and/or their directors, employees, insurers or recognised agents will not be held liable for consequential damages, losses or expenses relating to the inability to use the product correctly for its purpose.

### **Important Notes**

- This User Guide is for this Conquip product only.
- Any movements of the product must be thoroughly planned before the work commences to identify
  potential hazards and assess risk.
- All personnel involved in lifting and transportation of this product must have read this User Guide and must be properly briefed.
- You must be competent, alert and medically fit when using this equipment. If you have a medical
  condition, a mental or physical disability, you must seek advice from a medical professional before using
  this equipment.

Talking to us is easy

# We're here to help

Call us on 0800 116 076 Email us at sales@conquipgroup.co.nz www.conquipgroup.co.nz

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