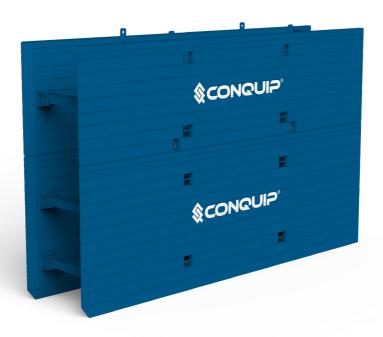


User Guide

# **Drag Box**



#### Product Information

#### Overview

The Conquip Drag Box is a simple to assemble, edge-supported trench lining system intended to be installed by an excavator using the excavate and drag technique.

They are designed to provide local support for trenches as transportable 'shields' generally in stable or self-supporting ground conditions. The Conquip Drag Box is normally selected for installing utility pipes in non-urban environments where increased laying rate is required and ground movements are not critical.

It is generally suitable for trench depths of up to 4.4m and trench widths of up to 3.2m.

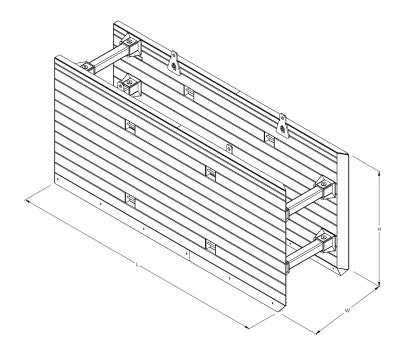
All Conquip Drag Boxes are manufactured from Grade S355 British and European steel. The equipment is manufactured at our fabrication facility in the UK to the highest manufacturing standards held in the construction industry.

Conquip supply a full range of suitable lifting and extraction chains, edge protection and trench access accessories.

#### **Product Information**

# **Specification**

Item	Product Code
Drag Box Base 5000	TL100-00002
Drag Box Extension 5000	TL100-00003
Drag Box Base 7000	TL100-00010
Drag Box Extension 7000	TL100-00011

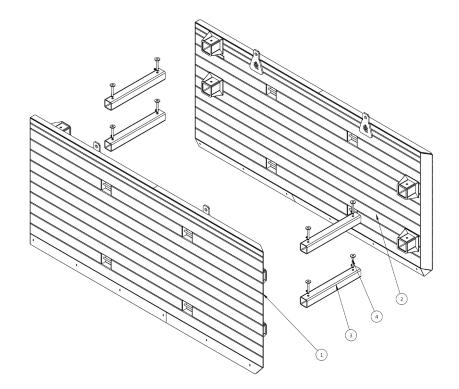


<sup>1</sup>Weight will be equal to or less than the weight stated depending on your strut configuration.

Product Code	Height	Working Width	External Length	Internal Length	Maximum Weight <sup>1</sup>	Limit State Design Load
TL100-00002	2410mm	600-3000mm	5000mm	4140mm	3,716kg	44kn/m²
TL100-00003	1810mm	600-3000mm	5000mm	4140mm	2,570kg	44kn/m²
TL100-00010	2410mm	600-3000mm	7100mm	6150mm	5,236kg	20kn/m²
TL100-00011	1810mm	600-3000mm	7100mm	6150mm	3,940kg	20kn/m²

# Product Information Parts Diagram

#### **Drag Box Base Box**

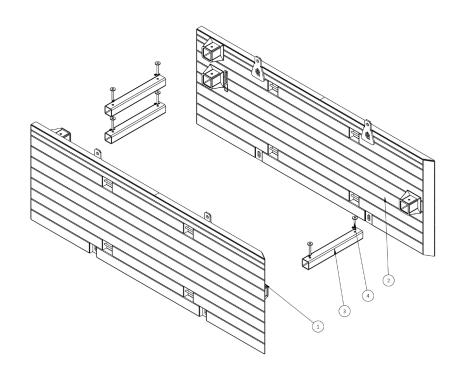


NOTE: These parts are for this model, they may differ for previous versions. Please contact Conquip with any queries.

Item Number	Description	Quantity
1	Drag Box Base Panel Left	1
2	Drag Box Base Panel Right	1
3	Drag Box Width Extension	4
4	25mm x 230mm Pins	8

Product Information Parts Diagram

#### **Drag Box Extension Box**



NOTE: These parts are for this model, they may differ for previous versions. Please contact Conquip with any queries.

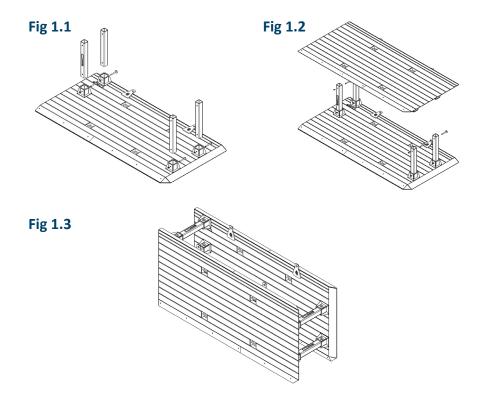
Item Number	Description	Quantity
1	Drag Box Extension Panel Left	1
2	Drag Box Extension Panel Right	2
3	Drag Box Width Extensions	3
4	25mm x 230mm Pins	6

#### Original Working Instructions

### **Usage Instructions**

#### **Assembly Instructions**

- 1. Using certified lifting slings connected to the four handling points place a base side panel with the flat face down.
- 2. Place struts of equal lengths into all connection points protruding from the panel and secure them using the pin and R-clip supplied. (Fig 1.1)
- 3. Connect the sling to the four handling points of the opposite base side panel (flat face up) and lift into position above the struts.
- 4. Secure the struts to the panel with the remaining four pins and R-clips. (Fig 1.2)
- 5. Disconnect the lifting sling and connect to two of the lifting points on the top assembly. Lift to rotate into its working position. (Fig 1.3)

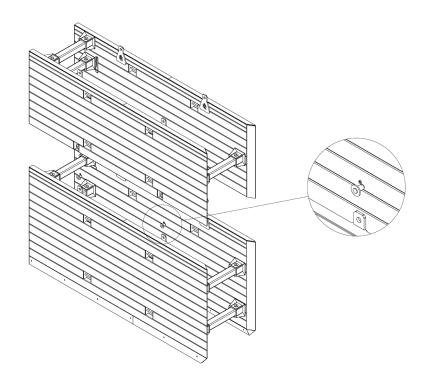


# Original Working Instructions

#### **Usage Instructions**

#### **Connecting Extensions Boxes**

- 1. The base box and extension box are connected by inserting a pin through a plate on the base panel and slot in the extension panel.
- 2. There are 2 plates welded to the top of every base panel that protrudes from the top. There are 4 connecting points per box.
- 3. The plate hole aligns with a slot in the bottom of the extension panel. Once aligned, insert the 45mm pin from the inside of the drag box so the pin hides within the depth of the box.
- 4. Secure each pin in position with an R clip.



#### Original Working Instructions

### **Usage Instructions**

#### **Important Installation Notes**

- Never enter an unsupported excavation.
- A top extension should be attached when the top of the base is approximately 200mm above ground level.

#### **Usage Instructions**

- Excavate initial section of the trench to the dimensions of the Drag Box base box.
- 2. Using an excavator or crane lift and lower the Drag Box into the trench, with a suitably rated 4 leg chain. If an extension box is to be used, lift and lower into the trench and connect to the Base Box. (Fig 2.1)
- 3. Suitable Conquip Edge Protection can now be installed.
- 4. Lower the pipe within the Drag Box with the aid of a banksman ensuring all personnel are clear of the operation. (Fig 2.2)
- 5. As work progresses the excavator operator then digs ahead of the box, in the direction of the trench excavation. (Fig 2.3)
- 6. For assemblies using struts up to a length of 1180mm, gently drag the box forward into the newly excavated area using the excavator bucket on the top front strut of the base box. For assemblies using struts greater than a length of 1180mm move the box using a suitably rated four leg chain connected to the lifting points. (Fig 2.4)
- 7. The Drag Box is progressively moved until the work is completed. Back fill onto the pipe as the trench is advanced. (Fig 2.5)
- 8. On completion, remove any Edge protection before extracting the box assemblies.
- 9. Extract the box assemblies using a suitably rated four leg chain.



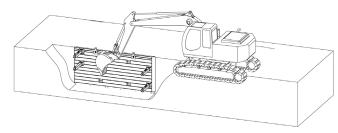


Fig 2.2

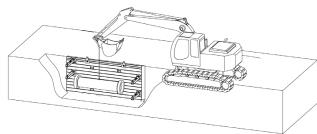


Fig 2.3

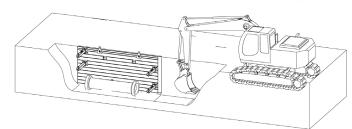


Fig 2.4

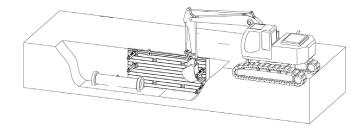
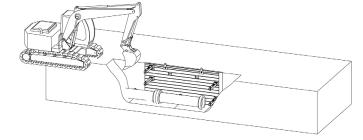


Fig 2.5



#### 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.

# **EC Declaration of Conformity**

#### In accordance with EN ISO 17050-1:2004

Declaration: As defined by the Machinery Directive 2006/42/EC and subsequent amendments

We, CONQUIP ENGINEERING GROUP, herewith declare that the following indicated equipment meets the fundamental health and safety requirements concerning the EU guide line(s), due to their design and manufacture.

This declaration will be rendered null and void if the machine is changed without our approval.

Signed:

Dated: 2021

#### **Garry Critchley, Managing Director**

Product Code(s):	TL100-00010 / TL100-00011
EC Directive/ Regulation:	2006/42/EC, Lifting Operations and Lifting Equipment Regulations 1998 Provision and Use of Work Equipment Regulations 1998
Harmonised Standards:	BS EN ISO 12100:2010 BS EN 13155
General Description/ Designation:	Drag Box - TL100-00002 / TL100-00003, TL100-00010 / TL100-00011
WLL:	TL100-00002 / TL100-00003 = N/A TL100-00010 & TL100-00011 = N/A

#### **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 +44 (0) 333 3000 3470 Email us at sales@cqegroup.com www.cqegroup.com

#### **Conquip Engineering Group**

Waterbrook Estate, Alton, Hampshire, GU34 2UD

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