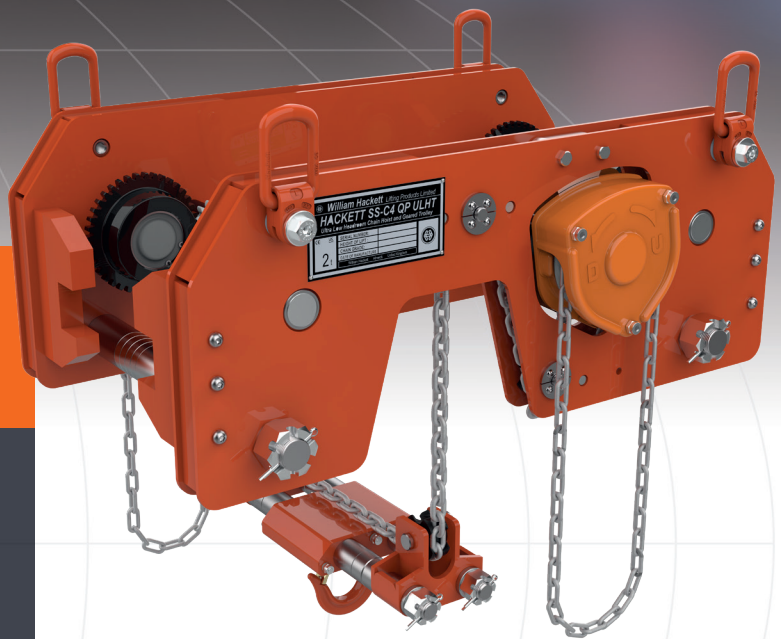
William Hackett




# ULTRA LOW HEADROOM GEARED TROLLEY USER MANUAL

**The William Hackett Trolleys meet and exceed the requirements of British and European Standard BS EN 13157:2004 + AI:2009.**

# Ultra Low Headroom Trolley Hoist

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**Selecting the correct Ultra Low Headroom Trolley Hoist**

1. William Hackett combined ultra low headroom trolley hoists are manufactured in accordance with British and European Standard BS EN 13157:2004+A1:2009.
2. William Hackett combined trolley hoists are available in a range of sizes and are suitable for both temporary and permanent load attachment applications.
3. William Hackett combined trolley hoists are assembled, chained and tested in the UK to the height of lift specified by the end user.
4. The configuration of the combined trolley hoist is demonstrated on page 9 and are in accordance with the product specification, dimensions and working load limit (WLL) recorded in table 1.
5. William Hackett combined trolley hoists can be used within an operating temperature range of -40°C to +120°C.
6. In accordance with statutory requirements (e.g. The Lifting Operations and Lifting Equipment Regulations 1998), all lifts using combined trolley hoists should be planned by a competent person; require risk assessment and the production of a task method statement; and be subject to execution by suitably trained operatives under the supervision of a responsible person. The specification of the combined trolley hoists required to achieve a safe lifting operation must be determined by a competent person.
7. Careful consideration should be given to the mass of the load being lifted and any dynamic factors that may be likely to affect the load on the combined trolley hoist. Select the Combined Trolley Hoist capacity equal to or greater than the load.
8. It is not intended that the recommendations in this manual take precedence over existing plant safety rules and regulations or OSHA regulations. In the event that a conflict exists between a rule set forth in this publication and a similar rule already set by an individual company, the more stringent of the two should take precedence.
9. A thorough study of the information in this manual should provide a better understanding of safe operating procedures and afford a greater margin of safety for people and equipment.

# *Storage and Control Procedures*

The equipment should ideally be stored in a purpose designed facility where it can be kept secure from unauthorised use. A responsible person should control the issue and receipt of all lifting appliances and accessories, and a system to manage statutory inspections should be in place.

Storage would normally be in a suitable storage container on racking in a manner that prevents accidental mechanical damage and where the load chains are clear from the ground.

1. Never return damaged or contaminated combined trolley hoists to storage. The equipment should be dry, clean, and protected from corrosion.
2. Store combined trolley hoists in a suitable container or on a rack and not lying on the ground. The storage area should be dry, clean, and free from contaminates which could harm the equipment.
3. If a combined trolley hoist is permanently installed on a beam, it should be protected from the elements as far as possible.

During transport to the worksite and whilst in store at the worksite, the equipment should be protected from exposure to any conditions which may affect its ability to operate safely. In particular, it should be protected from exposure to:

- water/sea water
- temperatures higher than can be comfortably tolerated by the hand
- temperatures below freezing point
- solvents
- corrosive chemicals or fumes
- grit, sand and wind-blown dust.

Any defects should be reported to the responsible person and damaged combined trolley hoists should be quarantined.

Before issue from the designated storage location the certification supplied with the combined trolley hoists should be confirmed as within date.

The label on the trolley should be fully legible and it should correspond with the relevant certification.

# *Pre-use Procedure*

Duty holders and actual users of lifting equipment, including hoists, combined trolley hoists and associated components can obtain more detailed information and guidance on safe use and compliance with statutory requirements from the following publications:

HSE Publication L22 (2014) Safe Use of Work Equipment.
HSE Publication L113 (2014) Safe Use of Lifting Equipment.
HSE Publication INDG422 (2008) Thorough Examination of Lifting Equipment.
HSE Publication L23 (2004) Manual Handling.
HSE Publication L25 (2005) Personal Protective Equipment at Work.

Inspection, maintenance and discard criteria

1. Lifting equipment, including combined trolley hoists should be thoroughly examined before first use and at periodic intervals in accordance with statutory requirements (i.e. the Lifting Operations and Lifting Equipment Regulations 1998).
2. Only competent qualified people should carry out maintenance and repairs of lifting equipment including William Hackett combined trolley hoists.
3. The user should inspect the equipment before each period of use for distortion, nicks, gouges, weld splatter, heat discolouration, and effective rotation of the threaded adjustable connection bars and wheels, all of which are quarantine criteria.
4. The identification and WLL information must be clearly visible on the combined trolley hoists accompanied by the UKCA and CE mark.
5. William Hackett combined trolley hoists should be kept lubricated.

Conducting thorough and consistent checks on a combined trolley hoist immediately prior to use will help identify problems due to accidental damage, internal corrosion, or inappropriate storage. Recommended checks include:

1. If necessary the combined trolley hoist should be cleaned before inspection.
2. Ensure beam end stops are installed to prevent the trolley from leaving the beam.
3. Check all fixings and fasteners are present, of good condition and secure.
4. Transverse the combined trolley hoist with no load, in the case of geared combined trolley hoists ensure the hand chain run smoothly and freely through the hand wheel, the trolley should run smoothly and freely and seat level on the beam when a light load is applied.
5. Check for damage, excessive wear and signs of overloading.
6. Geared combined trolley hoist hand chain should be checked for cuts, nicks, gouges, excessive wear and excess corrosion.
7. Examine the side plates for wear distortion, damage and cracks.
8. Examine wheels, axles, bearings and wheel flanges for damage, excessive wear and security.
9. Examine the combined trolley hoist attachment point e.g. hanging plate or shackle depending on Variant.

If any of these points are not satisfied the trolley MUST NOT be used.

For information on inspection and maintenance of SS-C4 QP chain hoists (combined trolley hoists) please refer to WH SS-C4 QP user manual.

NB: All personnel involved in using lifting equipment in any of its many forms must be provided with suitable training. This is a specific requirement highlighted in the Health & Safety at Work etc. Act 1974 and ancillary legislation and is of particular concern given the risk to individuals and equipment due to incorrect use.

# *Safe Use Information*

1. Do not install lifting equipment or attempt lifting operations unless you have been properly trained and you understand the use of the equipment.
2. A competent person must ensure that the load and the material from which it is constructed has the adequate strength and capability to withstand the forces imposed during the lifting operation.
3. Inspect the combined trolley hoist prior to use. If any damage is apparent the combined trolley hoists should be quarantined for inspection by a competent person.
4. Ensure that the beam and structure has sufficient load bearing strength, and the capacity to support the load.
5. William Hackett combined trolley hoists must not be side loaded.
6. Never shock load combined trolley hoists. Take up the tension in the lifting appliance in a controlled manner and apply the same principle when landing the load.
7. Do not expose combined trolley hoists to chemicals or corrosive solutions (whether immersed in such solutions or used in atmospheres in which fumes are present), particularly acidic or strongly alkaline environments without consulting the supplier or manufacturer.
8. Do not leave suspended loads unattended. In an emergency, cordon off the working area and establish safe exclusion zones.
9. Never return a damaged combined trolley hoist to stores, it should be reported to a competent person.
10. Combined trolley hoists shall not be used for transporting people.
11. Combined trolley hoists shall not be used to transport loads over or near people.
12. Ensure the area of travel is clear and free from obstructions.
13. Always read the instruction manual prior to use.
14. Ensure pre-use inspections have been performed prior to use.
15. In regard to geared combined trolley hoists ensure the hand chain does not produce a trip hazard or have the potential to become entangled or trapped in use.

**Operation**

Hoist operation - Facing the hoist hand chain side.

1. Pull the hand chain clockwise to raise the load, the hoist ratchet pawl system will be audible.
2. Pull the hand chain counter clockwise to lower the load.

Travelling the geared Trolley unit- Facing the trolley hand chain.

1. Pull the hand chain clockwise to traverse the trolley to the left.
2. Pull the hand chain counter clockwise to traverse the trolley to the right.

# *Installation Instructions*

Ideally the combined trolley hoists assembly width shall be set and secured prior to installation on the beam, the installation can then be performed from the end of the beam section.

**1. End of beam installation including beam range adjustment**

1.1 Check that the beam width is within the combined trolley hoist's stated range.

*Never use a combined trolley hoists on a beam outside of its range of adjustment.

1.2 Assemble and adjust the combined trolley hoists to the required width to fit the beam the combined trolley hoist is to be installed onto.

1.3. Remove the beam end stop.

1.4. The combined trolley hoist can now be installed from the end of the beam, ensure the beam end stop is reinstalled securely.

**2. Installation when end of beam access is not possible (including beam range adjustment)**

2.1 Check that the beam width is within the combined trolley hoist's stated range.

*Never use a combined trolley hoist on a beam outside of its range of adjustment.

2.2. Remove the trolley bar nuts and side plate from one side of the combined trolley hoists, this is best performed at the hand wheel side of the combined trolley hoist, if load chain is installed care must be taken not to capsize or twist the load chain during this operation.

2.3. After calculating the required wheel flange to beam flange spacing assemble the required number of spacer washers on to the bars equally inside the combined trolley hoist side plates ensuring that the specified clearances between the combined trolley hoist wheel flange and the beam flange are correct. (2mm-2.5mm), ensure the travelling hook assembly is centered in the combined trolley hoist assembly and central to the beam flange.

2.4. Position the partial assembly onto the beam flange.

2.5. Install the opposing side plate, surplus washers and locking nuts. Ensure the correct amount of spacer washers are used in the correct position so that locking nuts are fully seated and the combined trolley hoist assembly is secure.

2.6. All fixings shall now be checked and secured.

2.7. Remove the split pins and washers from one side of the bottom hook assembly, taking care not to capsize or twist the chain remove 2pcs of sheave housing.

2.8. Position the spacers washers onto the hook bars either side of the sheave housings so that the vertical load chain is in line with the upper combined trolley hoists sheave.

2.9. Replace the split pins and secure fully.

**After installation, operate the combined trolley hoist unloaded along the length of the beam ensuring the combined trolley hoist is free to transverse. Do not use a combined trolley hoist that sticks, slips or has any form of malfunction.**

# William Hackett

# WH SS-C4 QP Ultra Low Headroom Trolley Hoist

**Standards:** ASME B30.20 Chapter 6 Clamps and EN13157:2004 + AI:2009

**Proof Tested:** 1.5 x WLL.

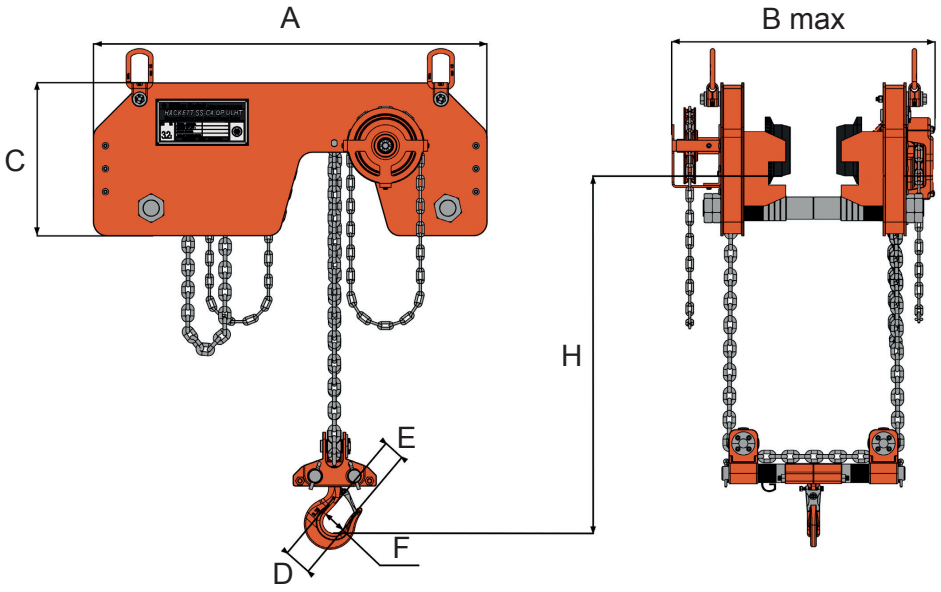
**Safety factor:** 4:1.

**Temperature range:** -30°C to +120°C.

**End stops:** Fitted as standard.

**Surface finish:** Marine paint corrosion protected to International Standard ISO12944 - Category C5.

**Handling:** Grade 8 lifting points fitted on each corner of the Ultra Low Headroom Hoist (ULHT) to aid with manual handling.




## Specifications

| Part Code | WLL tonnes | A mm | B max mm | C mm | D mm | E mm | F mm | Beam Range mm |
|---|---|---|---|---|---|---|---|---|
| 068.100 | 1.0 | 680 | 507 | 270 | 49.0 | 25.5 | 40 | 62 - 185 |
| 068.200 | 2.0 | 720 | 554 | 290 | 54.5 | 30.0 | 44 | 75 - 220 |
| 068.320 | 3.2 | 830 | 590 | 330 | 61.0 | 37.5 | 48 | 110 - 220 |
| 068.500 | 5.0 | 980 | 745 | 385 | 85.0 | 43.0 | 60 | 125 - 320 |
| 068.750 | 7.5 | 1180 | 765 | 440 | 89.0 | 53.0 | 83 | 145 - 320 |
| 068/1000 | 10.0 | 1180 | 765 | 440 | 89.0 | 53.0 | 83 | 145 - 320 |
| 068/1200* | 12.0 | 1180 | 765 | 440 | - | 53.0 | 108 | 145 - 320 |
| 068/1500* | 15.0 | 1540 | 765 | 440 | - | 80.0 | 108 | 145 - 320 |
| 068/2000* | 20.0 | 1940 | 765 | 440 | - | 80.0 | 108 | 145 - 320 |

| | 1t | 2t | 3.2t | 5t | 7.5t | 10t | 12t | 15t | 20t |
|---|---|---|---|---|---|---|---|---|---|
| **Minimum Headroom (H) mm** | 180 | 180 | 240 | 290 | 345 | 345 | 445 | 445 | 530 |
| **Nett Weight HOL 3m kg** | 65 | 98 | 129 | 213 | 365 | 365 | 376 | 495 | 588 |
| **Weight per 1m Additional HOL kg** | 3.4 | 3.4 | 4.6 | 6.1 | 10.5 | 10.5 | 10.5 | 14.8 | 19.2 |

*** ULHT hoists over 12t are not held in stock and are manufactured upon request.**

**Delivery of ULHT hoists over 12t: Approximate lead time would be 3-4 months. The lead time would be re-confirmed upon receipt of a confirmation.**

**Dimension and unit weight for the ULHT hoists over 12t may be subject to change and will be confirmed against an order confirmation.**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LEEA Full Member

# *Warranty Statement*

All William Hackett products are thoroughly inspected and/or tested prior to shipment. Should any problems develop; return the specific product back to William Hackett Lifting Products Limited or authorised distributor. If inspection reveals that the problem is caused by defective workmanship or material, repairs will be made without charge and the product will be returned, transportation prepaid.

This warranty does not apply where:

1. deterioration is caused by normal wear, abuse, eccentric or side loading, overloading, chemical or abrasive actions, improper maintenance, or excessive heat.

2. problems resulted from repairs, modifications or alterations made by persons other than William Hackett or their authorised distributor.

3. the William Hackett product has been abused or damaged as a result of an accident.

4. repair parts or accessories other than those supplied by William Hackett are used. Equipment and accessories not of the seller's manufacture are warranted only to the extent that they are warranted by the manufacturer.

**Except as stated herein, William Hackett makes no other warranties, expressed or implied, including warranties of merchantability and fitness for a particular purpose.**

**William Hackett can confirm that the warranty period is 12 months.**

William Hackett

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