William Hackett

# TROLLEY

## USER MANUAL

A LONG LASTING **CONNECTION**

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This User Guide is designed to provide you with clear, concise, and comprehensive information of (product/service/solution). For further assistance, please don't hesitate to contact us.


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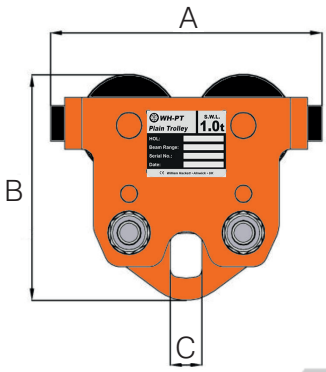
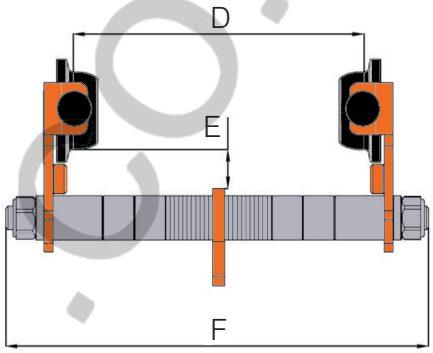
## Specifications and Dimensions




| ATEX PART CODE | CORROSION PROTECTION PART CODE | WH-PT PART CODE | WLL tonnes | MIN. RADIUS OF CURVE m | A mm | B mm | C mm | E mm |
|---|---|---|---|---|---|---|---|---|
| 047.ATEX.050 | 047.050.CP | 047.050 | 0.5 | 0.80 | 199 | 159 | 22 | 28 |
| 047.ATEX.100 | 047.100.CP | 047.100 | 1.0 | 0.90 | 221 | 183 | 30 | 30 |
| 047.ATEX.200 | 047.200.CP | 047.200 | 2.0 | 1.00 | 272 | 218 | 36 | 36 |
| 047.ATEX.320 | 047.320.CP | 047.320 | 3.2 | 1.20 | 318 | 272 | 45 | 49.5 |
| 047.ATEX.500 | 047.500.CP | 047.500 | 5.0 | 1.30 | 391 | 302 | 55 | 57 |
| 047.ATEX.1000 | 047.1000.CP | 047.1000 | 10.0 | 2.00 | 403 | 372 | 65 | 74 |

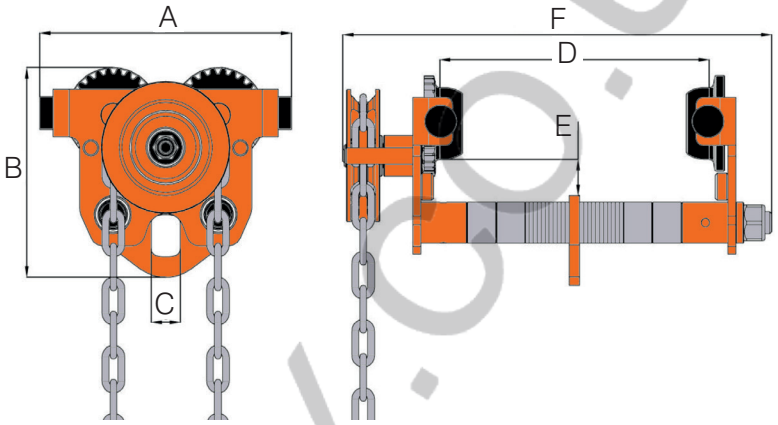
### Standard Range 1

| WLL tonnes | I BEAM WIDTH mm | D MAX. WIDTH mm | F MAX. mm | MASS Kg |
|---|---|---|---|---|
| 0.5 | 50-203 | 203 | 294 | 6.9 |
| 1.0 | 64-203 | 203 | 309 | 9.0 |
| 2.0 | 88-203 | 203 | 327 | 14.5 |
| 3.2 | 100-203 | 203 | 351 | 25.7 |
| 5.0 | 114-203 | 203 | 366 | 37.3 |
| 10.0 | 124-203 | 203 | 392 | 59.0 |

### Extended Range 2

| WLL tonnes | I BEAM WIDTH mm | D MAX. WIDTH mm | F MAX. mm | MASS Kg |
|---|---|---|---|---|
| 1.0 | 64-305 | 305 | 412 | 10.5 |
| 2.0 | 88-305 | 305 | 431 | 16.5 |
| 3.2 | 100-305 | 305 | 457 | 27.7 |
| 5.0 | 114-305 | 305 | 470 | 42.0 |
| 10.0 | 124-305 | 305 | 495 | 73.0 |

## Specifications and Dimensions




| ATEX PART CODE | CORROSION PROTECTION PART CODE | WH-GT PART CODE | WLL tonnes | HOL m | MIN. RADIUS OF CURVE m | A mm | B mm | C mm | E mm |
|---|---|---|---|---|---|---|---|---|---|
| 057.ATEX.050 | 057.050.CP | 057.050 | 0.5 | 3.0 | 0.8 | 199 | 159 | 22 | 28 |
| 057.ATEX.100 | 057.100.CP | 057.100 | 1.0 | 3.0 | 0.9 | 221 | 183 | 30 | 30 |
| 057.ATEX.200 | 057.200.CP | 057.200 | 2.0 | 3.0 | 1.0 | 272 | 218 | 36 | 36 |
| 057.ATEX.320 | 057.320.CP | 057.320 | 3.2 | 3.0 | 1.2 | 318 | 272 | 45 | 49.5 |
| 057.ATEX.500 | 057.500.CP | 057.500 | 5.0 | 3.0 | 1.3 | 391 | 302 | 55 | 57 |
| 057.ATEX.1000 | 057.1000.CP | 057.1000 | 10.0 | 3.0 | 2.0 | 403 | 372 | 65 | 74 |

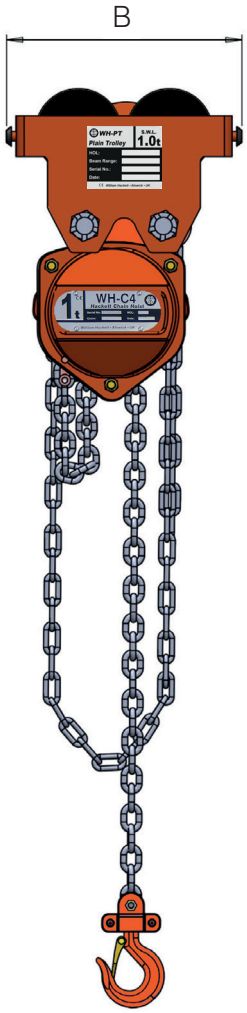
### Standard Range 1

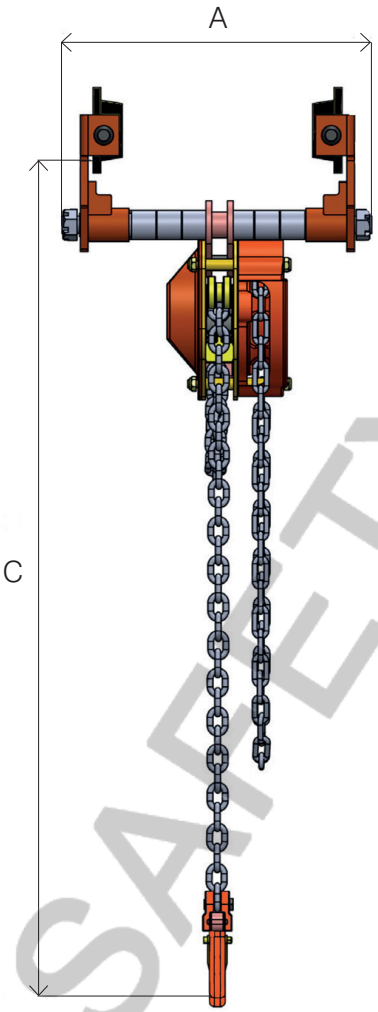
| WLL tonnes | I BEAM WIDTH mm | D MAX. WIDTH mm | F MAX. mm | MASS Kg |
|---|---|---|---|---|
| 0.5 | 50-203 | 203 | 322 | 7.60 |
| 1.0 | 64-203 | 203 | 326 | 9.75 |
| 2.0 | 88-203 | 203 | 346 | 15.65 |
| 3.2 | 100-203 | 203 | 365 | 26.40 |
| 5.0 | 114-203 | 203 | 381 | 39.60 |
| 10.0 | 124-203 | 203 | 403 | 70.50 |

### Extended Range 2

| WLL tonnes | I BEAM WIDTH mm | D MAX. WIDTH mm | F MAX. mm | MASS Kg |
|---|---|---|---|---|
| 1.0 | 64-305 | 305 | 431 | 11.2 |
| 2.0 | 88-305 | 305 | 448 | 17.6 |
| 3.2 | 100-305 | 305 | 472 | 28.9 |
| 5.0 | 114-305 | 305 | 483 | 43.4 |
| 10.0 | 124-305 | 305 | 506 | 75.0 |

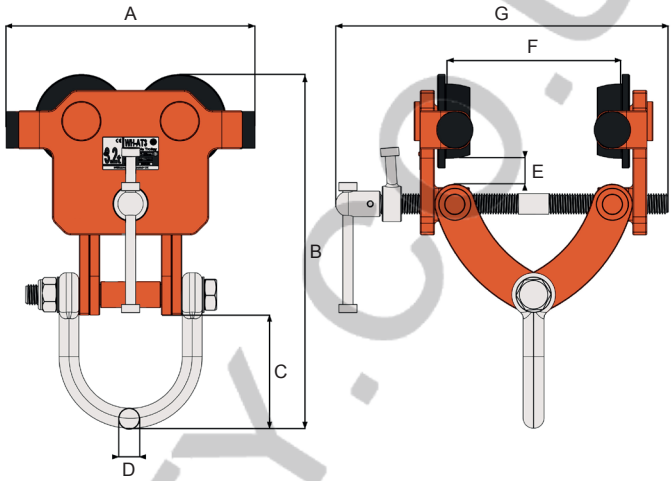
## Specifications and Dimensions




| ATEX-C4 PART CODE | CP-C4 PART CODE | WH-C4 PART CODE | WLL tonnes | NO. OF FALLS | BEAM RANGE 1 mm | BEAM RANGE 2 mm | A MAX mm | B mm | C MIN mm | MASS Kg RANGE 1 3m HOL | MASS Kg RANGE 2 3m HOL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 066.ATEX.050 | 066.050.CP | 066.050 | 0.5 | 1 | 50 - 203 | - | 294 | 190 | 295 | 14.6 | - |
| 066.ATEX.100 | 066.100.CP | 066.100 | 1.0 | 1 | 64 - 203 | 64 - 305 | 311 | 206 | 305 | 22.4 | 24.1 |
| 066.ATEX.200 | 066.200.CP | 066.200 | 2.0 | 1 | 88 - 203 | 88 - 305 | 324 | 246 | 437 | 31.9 | 33.7 |
| 066.ATEX.320 | 066.320.CP | 066.320 | 3.2 | 2 | 100 - 203 | 100 - 305 | 348 | 300 | 493 | 50.1 | 52.9 |
| 066.ATEX.500 | 066.500.CP | 066.500 | 5.0 | 4 | 114 - 203 | 114 - 305 | 369 | 336 | 573 | 77.4 | 81.1 |

## Specifications and Dimensions




| PART CODE | WLL tonnes | MIN. RADIUS OF CURVE m | A mm | B mm | C mm | D mm | E mm | BEAM WIDTH F mm | G mm | MASS Kg |
|---|---|---|---|---|---|---|---|---|---|---|
| 014.200 | 2.0 | 0.7 | 210 | 276 - 322 | 100 | 20 | 21 | 76 - 203 | 320 | 8.1 |
| 014.320 | 3.2 | 1.1 | 246 | 334 - 374 | 111 | 20 | 25 | 76 - 203 | 330 | 14.3 |
| 014.600 | 6.0 | 1.4 | 286 | 384 - 463 | 124 | 25 | 33 | 100 - 305 | 454 | 27.4 |

# Trolley Selection

In accordance with statutory requirements (e.g. The Lifting Operations and Lifting Equipment Regulations 1998), all lifting operations, including those using beam trolleys, should be planned by a competent person; require risk assessment and the production of a method statement; and be executed by suitably trained operatives under the supervision of a responsible person. The specification of the beam trolley required within a lifting operation must be determined by a competent person.

It is not intended that the recommendations in this manual take precedence over existing plant safety rules and regulation or OHSA regulations. In the event that conflict exists between advice within this manual and a rule already set by an individual company, the more stringent of the two should take precedence.

Careful consideration should be given to the mass of the load being lifted and any dynamic factors that may affect the load on the beam trolley.

William Hackett beam trolleys are assembled, chained where appropriate to the height of lift specified in the UK.

A competent person should determine the jaw width required to fit the suspension beam, the drop beneath the beam and the method of moving the load along the beam.

William Hackett beam trolleys are available in a range of sizes, designs and configurations. The configurations are set out on previous pages.

William Hackett beam trolleys are suitable for most industrial applications, both permanent and temporary, and they are available in standard finish, corrosion protected and ATEX specification.

William Hackett beam trolleys can be used in a temperature range of -10°C to +55°C.

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.

# Pre-Use Checks

Before the beam trolley is issued from the designated storage location a competent person must ensure that the appropriate certification is in place for the trolley.

Safe use instructions should be made available.

Possession of the relevant certification does not absolve the user from his responsibility to carry out pre-use inspections.

Conducting thorough and consistent checks on a beam trolley immediately prior to use will help identify problems due to accidental damage, corrosion or inappropriate storage.

Points to check before each period of use are:

- If necessary the trolley should be cleaned before inspection
- The nameplate details should be clear and visible
- Check all nuts, bars, fasteners and spacers are in good condition and securely fastened
- Check side plates and suspension points for damage, excessive wear, excessive corrosion and signs of overloading
- Examine wheels and fixings for damage and free movement
- Hand chains should be checked for cuts, nicks, gouges, distortion and corrosion
- The trolley, when mounted, should be traversed without load to ensure free and smooth movement along the beam
- Ensure that the beam is fitted with end stops
- Ensure that the beam and structure has sufficient strength to support the load

**If any of these points are not satisfied the beam clamp MUST NOT be used.**

# Safe Use Information

Do not attempt lifting operations unless you understand the use of the equipment, the lifting and slinging procedures and you have been suitably trained.

William Hackett beam trolleys are not designed for lifting people and should not be used for that purpose.

Use appropriate personal protective equipment (PPE).

Ensure that the lifting appliance is compatible with the beam trolley.

Check the correct engagement of the hooks. The hooks should be free to articulate within the load attachment points without overcrowding.

Ensure that the suspension structure has sufficient load bearing strength and capacity to support the load.

William Hackett beam trolleys should not be side loaded.

Establish a clearly defined zone around the area of the lifting operation.

Always stand aside from the load when operating the hoist and moving the beam trolley and ensure that no one enters the lift zone unintentionally during the lifting operation.

Ensure that the hand chains are not twisted, and do not create a trip hazard.

Do not shock load the beam trolley.

Take the load steadily and move the load slowly and steadily along the beam.

Do not expose beam trolleys 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.

Do not leave suspended loads unattended. In an emergency cordon off the working area and establish safe exclusion zones.

Never return a damaged beam trolley to stores; it should be reported to a competent person.

**Note: The following instructions are also applicable to combined hoist units.**

Ideally the trolley 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.

**Installation from the beam end**

1. Check that the beam width is within the trolley's stated range. **NEVER** use a trolley on a beam outside of its range of adjustment.
2. Remove the nylon insert locking nuts, conical washers and side plate from one side of the trolley.
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 trolley side plates ensuring that the specified clearances between the trolley wheel flange and the beam flange are correct. **(0.5t > 5t = 1.5mm - 3mm, 5t> = 2mm - 3.5mm, i.e. Beam flange width plus 2 times clearance dimension)**, ensure the hanging plate or the combined hoist hanging plate is centered in the trolley assembly and central to the beam flange.
4. Replace the side plate, surplus spacer washers, conical end washers and nylon insert locking nuts. **Note:** Ensure the correct amount of spacer washers used so that the conical washers and nylon insert locking nuts are fully seated.
5. All fixings can now be secured, ensure the locking nuts nylon inserts are engaged fully with the nut thread.
6. The trolley can now be installed from the end of the beam, ensure the beam end stop is reinstalled securely.
7. After installation operate the trolley unloaded along the length of the beam ensuring the trolley is free to transverse. Do not use a trolley that sticks, slips or has any form of malfunction.

**Installation when access to the beam end is not available**

1. Check that the beam width is within the trolley's stated range. **Never** use a trolley on a beam outside of its range of adjustment.
2. Remove the nylon insert locking nuts, conical washers and side plate from one side of the trolley.
3. After calculating the required wheel flange to beam flange spacing assemble the required number of spacer washers equally inside the trolley side plates ensuring that the specified clearances between the trolley wheel flange and the beam flange are correct. **(0.5t > 5t = 1.5mm - 3mm, 5t > = 2mm - 3.5mm, i.e. Beam flange width plus 2 times clearance dimension),** ensure the hanging plate or the combined hoist hanging plate is centered in the trolley assembly and central to the beam flange.
4. Position the partial assembly onto the beam flange, install the side plate, surplus washers, conical washers and nylon insert locking nuts. Ensure the correct amount of spacer washers used so that the conical washers and nylon insert locking nuts are fully seated and the trolley assembly is secure.
5. After installation operate the trolley unloaded along the length of the beam ensuring the trolley is free to transverse. Do not use a trolley that sticks, slips or has any form of malfunction.

# Assembly Instructions for Adjustable Trolleys

**Adjustable Trolley**

1. Using the adjustment bar, open the trolley so that it can be passed over the beam flange.
2. Close the trolley until the wheel flanges have the correct clearance from the beam flange **(3.2t < 2.5mm 6t = 3mm i.e. Beam flange width plus 2 times clearance dimension).**
3. Once the correct wheel flange to beam flange clearance is achieved the threaded adjustment bar should then be secured using the locking handle, this is important to ensure the trolley remains safe and secure in use.
4. After installatio, operate the trolley unloaded along the length of the beam ensuring the trolley is free to transverse. Do not use a trolley that sticks, slips or has any form of malfunction.

# 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 on suitable racks within a container a manner that prevents accidental mechanical damage and where the load chains are clear from the ground.

If a beam trolley 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:

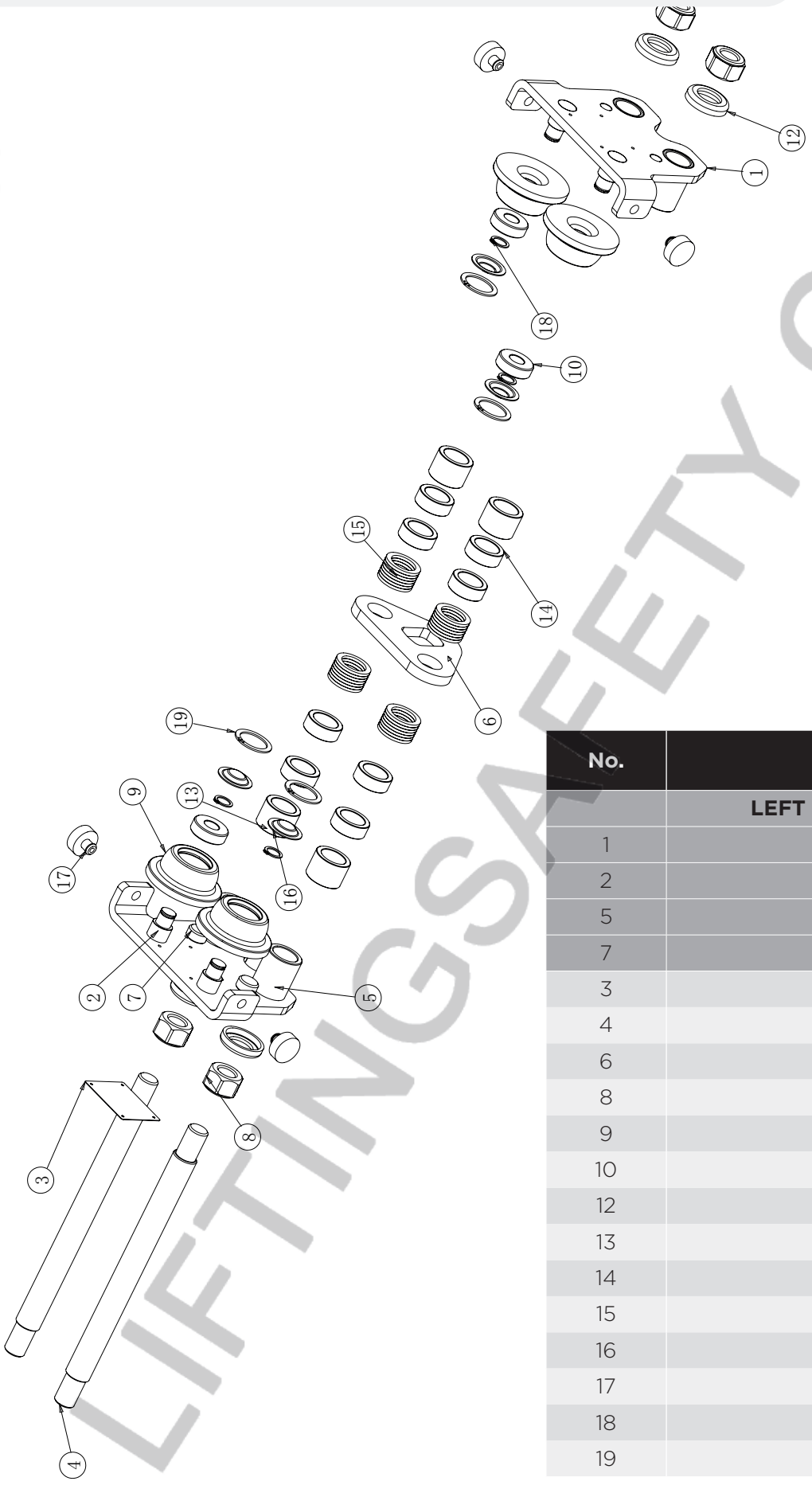
- water/sea water;
- temperatures higher than can be comfortably tolerated by the hand
- temperatures below freezing point
- solvents
- corrosive chemicals or fumes
- grit, sand and wind-blown dust.

Any defects should be reported to the responsible person and damaged trolleys should be quarantined.

Duty holders and actual users of lifting equipment, including hoists, trolleys 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.

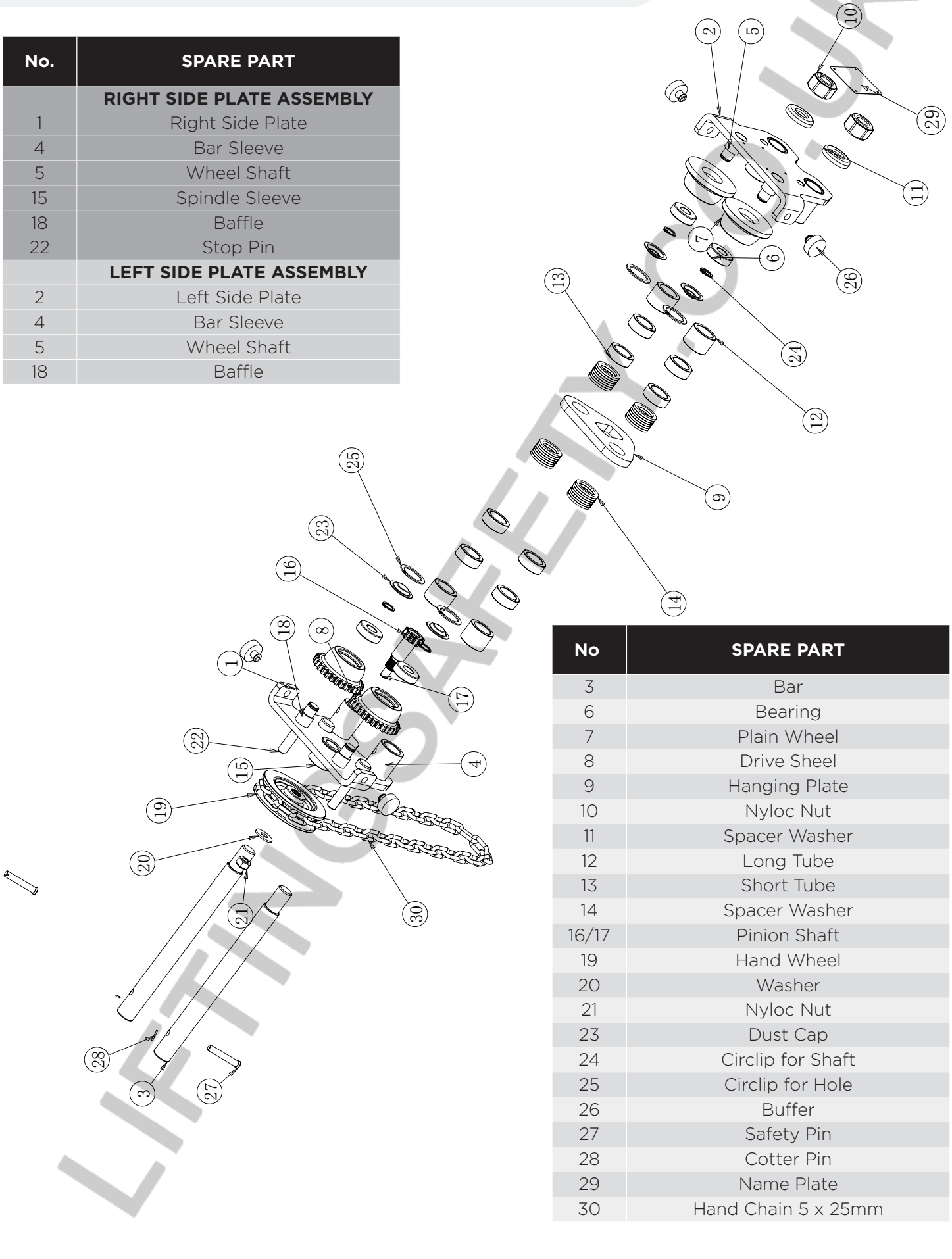
# Parts Explosion for Push Trolley




| No. | SPARE PART |
|---|---|
| | **LEFT SIDE PLATE ASSEMBLY** |
| 1 | Left Side Plate |
| 2 | Wheel Shaft |
| 5 | Bar Sleeve |
| 7 | Baffle |
| 3 | Name Plate |
| 4 | Bar |
| 6 | Hanging Plate |
| 8 | Nyloc Nut |
| 9 | Plain Wheel |
| 10 | Bearing |
| 12 | Spacer Washer |
| 13 | Long Tube |
| 14 | Short Tube |
| 15 | Spacer Washer |
| 16 | Dust Cap |
| 17 | Buffer |
| 18 | Circlip for Shaft |
| 19 | Circlip for Hole |

# Parts Explosion for Geared Trolley

| No. | SPARE PART |
|---|---|
| | **RIGHT SIDE PLATE ASSEMBLY** |
| 1 | Right Side Plate |
| 4 | Bar Sleeve |
| 5 | Wheel Shaft |
| 15 | Spindle Sleeve |
| 18 | Baffle |
| 22 | Stop Pin |
| | **LEFT SIDE PLATE ASSEMBLY** |
| 2 | Left Side Plate |
| 4 | Bar Sleeve |
| 5 | Wheel Shaft |
| 18 | Baffle |




| No | SPARE PART |
|---|---|
| 3 | Bar |
| 6 | Bearing |
| 7 | Plain Wheel |
| 8 | Drive Sheel |
| 9 | Hanging Plate |
| 10 | Nyloc Nut |
| 11 | Spacer Washer |
| 12 | Long Tube |
| 13 | Short Tube |
| 14 | Spacer Washer |
| 16/17 | Pinion Shaft |
| 19 | Hand Wheel |
| 20 | Washer |
| 21 | Nyloc Nut |
| 23 | Dust Cap |
| 24 | Circlip for Shaft |
| 25 | Circlip for Hole |
| 26 | Buffer |
| 27 | Safety Pin |
| 28 | Cotter Pin |
| 29 | Name Plate |
| 30 | Hand Chain 5 x 25mm |

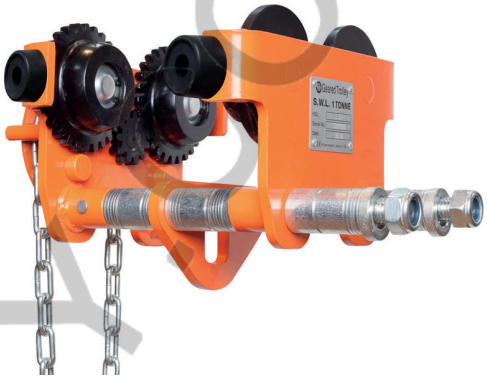
# Warranty

When supplied new the trolley will be supplied with a Declaration of Conformity which sanctions the use of the product for a maximum period of 12 months before re-certification is required by a competent person.

This product is a lifting appliance and should be thoroughly examined by a competent person at least every 12 months, or following each period of deployment.

William Hackett guarantee the performance of the trolley for a period of 12 months from the date of sale subject to the purchaser and users complying with the safe use, storage, routine maintenance and servicing instructions, and there being no excessive wear and tear or misuse of the product.

These points do not affect the purchasers statutory rights.



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