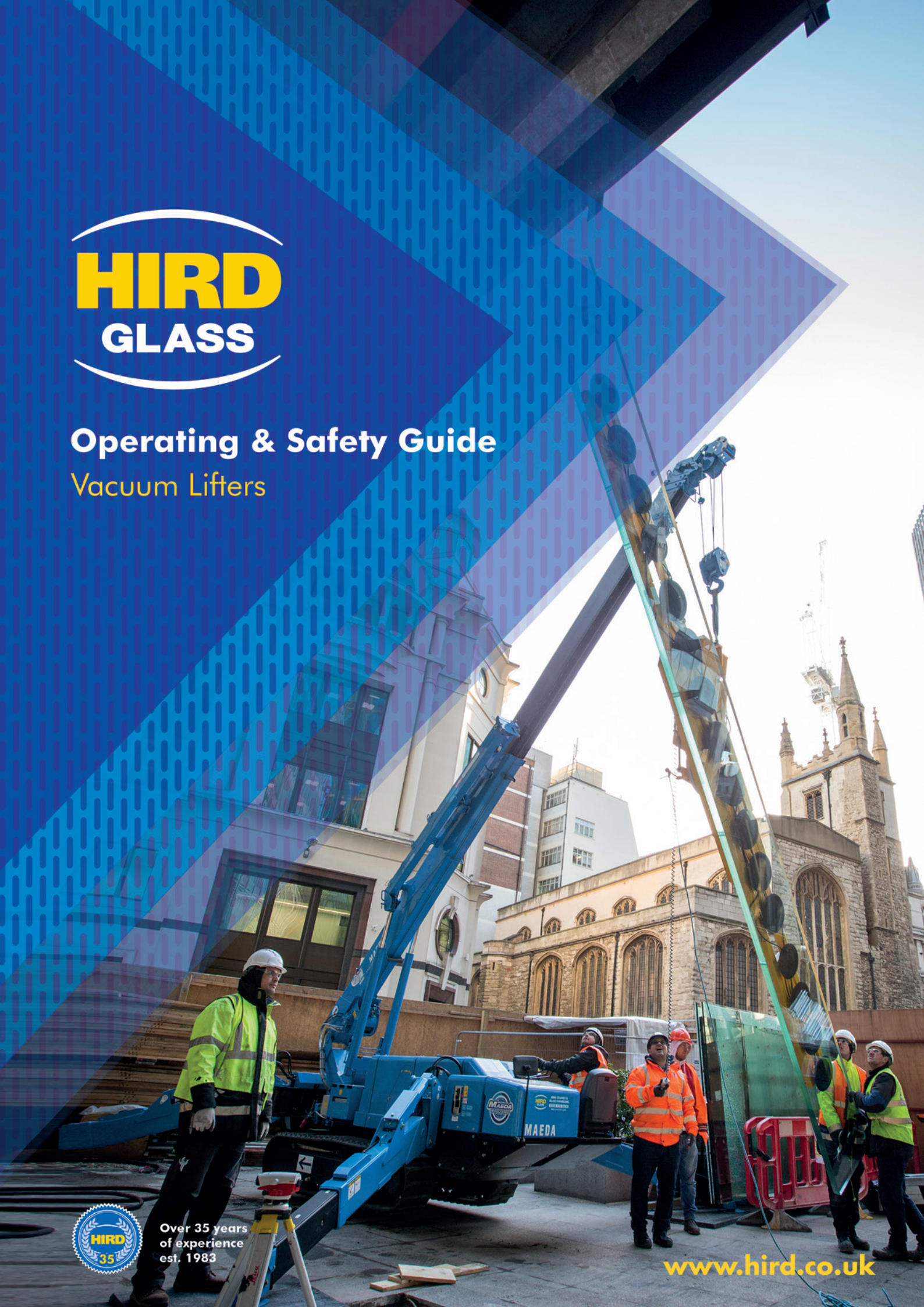




Operating & Safety Guide

Vacuum Lifters



Over 35 years
of experience
est. 1983

www.hird.co.uk



Glass Vacuums

We stock a large range of glass vacuum lifters – vital pieces of equipment that are used in conjunction with mini cranes and spider cranes for glass installation.

Our fleet of glass vacuum lifters includes units such as the versatile MT2, capable of lifting up to 135kg with its two suction pads, through to the Hydraulica 2000 – a large vacuum lifter capable of lifting up to 2000kg in weight using 26 suction pads, through to the Hydraulica 3500, affectionately known as Brutus, a vacuum lifter capable of lifting up to 3500kg in weight using up to 12 suction pads.

Before any piece of equipment leaves a Hird depot to go on hire, a rigorous test procedure is carried out to make sure we supply you with only the very best and safest machine.

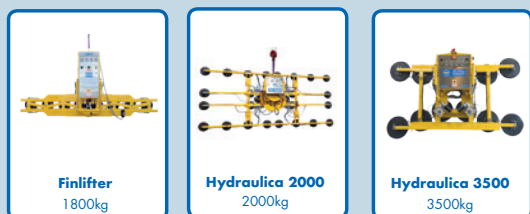
Under LOLER and PUWER, it is a legal requirement to have equipment tested and thoroughly examined at regular intervals - annually for material handling and every six months for personnel lifting equipment.

- We provide the expertise required to keep not only our own machines but also your machines in a legal and safe working condition.
- Work can be carried out either at your site or at one of our workshop facilities.



Technical advice and support

We are able to offer all our customers technical advice and support over the phone as a first point of call.



If you have any concerns about your lift, or require additional training, please contact the Hird Team on: 0203 174 0658



Operating & Safety Guide – Vacuum Lifters

The Weight of load is the primary consideration when identifying your glass lifting machine.

To calculate the glass weight

Length (m) x Height (m) x Thickness (mm) x 2.5

So if you had a piece of glass that was 2070mm x 3500mm and 6mm thick

Weight = 2.070 x 3.500 x 6 x 2.5 = 108.675kg

For the double or triple glazed panels – Simply add the thickness of the panels, ignore the air space. You may however need to consider the weight of the surrounding frame.

Wind conditions can have an impact when controlling glass panels with vacuum lifters – especially when suspended below the hook.

We recommend that vacuum lifters can be safely used up to wind speeds of 18mph.

Do not use the glass vacuum lifter in **rainy conditions**. Water can harm the machines electrical and vacuum systems if water is injected into the machine, increasing the risk of slipping or falling when the glass is in contact with the vacuum pads.

We advise that vacuum lifters should only be used between **temperatures of 0 and 40 degrees** centigrade.

- 1 Ensure the lift has been thoroughly planned** – obtain a copy of the method statement and risk assessment.
- 2 Ensure you wear the appropriate Personal Protective Equipment (PPE).**

This includes:



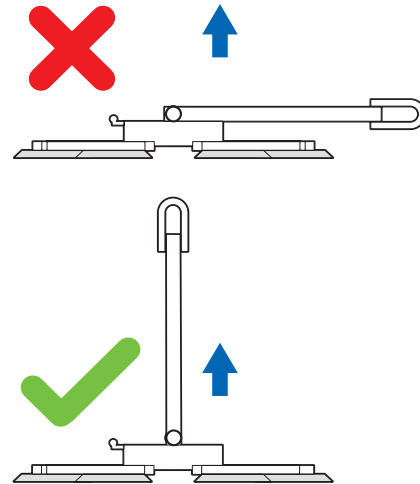
Also the task may require the use of additional items such as a harness and lanyard.

- 3 Operator must read and understand the vacuum lifter manual prior to use.**
Operator manuals are available from Hird on 0203 174 0658
- 4 Operators must be authorised to use the equipment. Loads must only be applied by:**
 - a. A competent person**
 - b. Maintenance personnel performing their duties**
 - c. Authorised inspectors**
- 5 Operator must check the lifter has a valid test and inspection (LOLER) date from a competent person within the previous six months.**
- 6 Operators must be in a fit state to carry out the lift. Illness, alcohol and drug influence may impair your judgment.**

If in doubt – DO NOT LIFT

- 7 If your lift is in conjunction with a mobile or fixed crane – the slinger/signaller must be a qualified person.**
- 8 Ensure the load to be lifted doesn't exceed the Safe Working Load (SWL) of the vacuum lifter.**
- 9 Clean the load surface prior to applying the vacuum pads. Dirt and moisture may reduce the effectiveness of the vacuum and increase the chance of slipping.**
- 11 Manufacturers recommend the outer pad is no further than 500mm from the edge of a load.**
- 10 Ensure the lifter is applied within 40mm of the centre of gravity.**

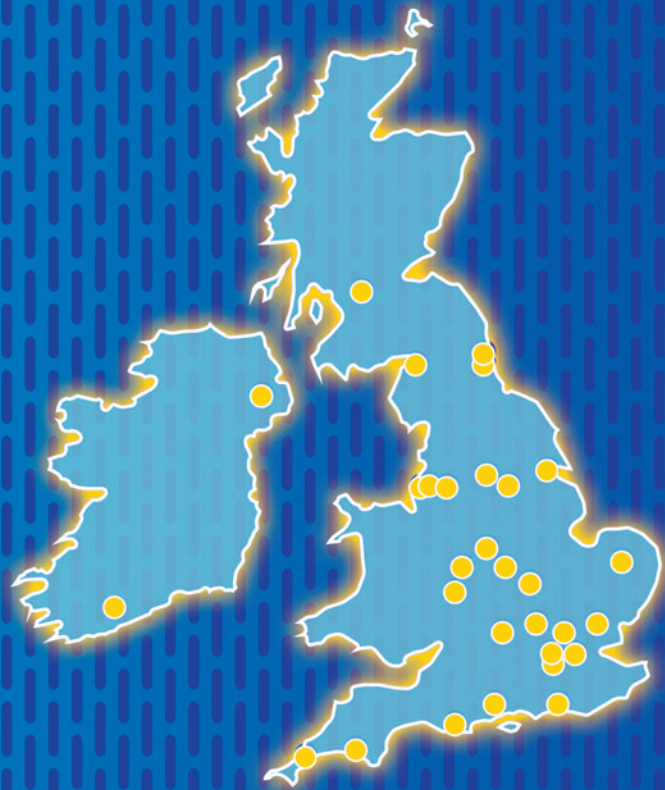
- 12 Never allow personnel to ride the load.**
- 13 Never lift a faulty or damaged load.**
- 14 Never lift from a rotated position or rotate off centred loads.**
- 15 Never lift above people.**
- 16 Lifter must not be used for side pulls or sliding.**
- 17 Never lift a load from a flat position with the lift bar locked.**



- 18 Achieve and maintain the safe level of vacuum prior to lift.**
- 19 Prior to any lifting - Lift the load 50mm for 30 seconds. Check the vacuum remains stable – Does the vacuum drop 5% within ten minute period?**

If it does – DO NOT USE

- 20 Watch the load at all times and ensure you have adequate personnel to guide the load where required. Observe the vacuum lifter for any warning signs from audible or visual alerts.**
- 21 Never leave a suspended load unattended.**
- 22 Before releasing the vacuum – ensure the load is fully supported.**
- 23 Never release tilt and rotation latches simultaneously.**
- 24 In the event of a fault, never attempt to repair or tamper with the machine. Contact Hird immediately for assistance.**



UK Hire Network

Northern 01482 227333

Central 01302 341659

Southern 0203 174 0658



Approved UK & Ireland distributor

Mini Cranes
www.valla-cranes.co.uk



UK and Ireland distributor

Vacuum Robots
www.winlet.co.uk



authorised dealer

Load Monitoring System
www.3b6.co.uk

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