

VACUUM SUCTION SYSTEMS

HASS TRANSPORT WAGONS

SSEMBLY

NDUSTRIAL CRANES

> AUNILIAKI EQUIPMENT

Chain Lifts Helm rails Stair climbers



From an idea to global player

The history of the transport and lifting specialist started in 2006 – with a brilliant idea and only two employees. Today, more than 10 years later, Heavydrive GmbH is one of the world's leading companies for glass assembly equipment.



"We are very proud to have successfully established ourselves on the highly competitive market over the last few years and we look to the future with new innovative assembly solutions," says managing director Guenter Uebelacker.

In 2005, mechanical engineer Guenter Uebelacker found a market niche in glass assembly. Existing mini crawler cranes on the transport and lifting market were able to lift and position loads. What they could not do, however, was drive under load. He developed a lightweight and stable transport device, which thanks to its clever construction guarantees stability by the transported goods themseves. The HDL product series was born and shortly thereafter registered at the German patent office. The demand was huge: with the new HDL series, the company became the global market leader within just a few years.

From Swabia across the world

In 2007, the first large-scale international project followed: glazing the façades of seven high-rise buildings in London City. Among other things, Heavydrive was responsible for the complicated structural calculations.



The reliable single-source service Heavydrive provides is also much in demand on the Arabian Peninsula. For the construction of the second highest building in the world at the time, the Royal Clock Tower in Mecca, Saudi Arabia, the company developed seven different MRK cranes with glass assembly equipment.

Thanks to its customised assembly and transport solutions for any construction site, Heavydrive is well established in the industry.

Visions for the future

With more than 30 employees now, Heavydrive continues to expand. Local subsidiaries, for example in Switzerland, the USA, Dubai and Russia, create even more customer proximity.

Managing director Guenter Uebelacker has a clear vision:

"Whenever I reach out to the world, I always do so with a view to the future. I do things nobody else has ever done before me. And we never lose sight of the goal: to be better than the market expects us to be."

To achieve this, Heavydrive keeps on developing and planning new and innovative solutions for a vast range of construction projects and situations worldwide.

Visit our website:

www.heavydrive.com

LIGATYCH VO.com

Your Transport and Lifting Specialist



Heavydrive® has gained a foothold in this sector thanks to its customised glass mounting and transport solutions for any construction site situation.

Our rental fleet includes different MRK mini cranes by manufacturers Maeda and Unic, various vacuum suction systems (VSG) with a load of up to 12,000 kg with counterweights up to 18,000 kg capacity, glass fitting equipment (GMG), motor chain hoists (MKZ), glass transport wagons (HDL) as well as assembly cranes (ML) up to 7.9 m. The company also rents out all-terrain telescopic loaders (GTS) and lifting platforms (GTB and SB).

At its headquarters, the company offers professional servicing and repairs on machinery and has its own cleaning facilities for both small- and large-scale equipment. Here, trained staff carry out maintenance and repairs on company-owned and external equipment and guarantee 100% machine operation. A dedicated testing area enables employees to check the equipment's vacuum power and adjust the vacuum suction systems for each construction site situation accordingly.

The company's central location in Tapfheim ensures quick and reliable delivery.



The equipment is stored in **two well-organised warehouses** and is **"on-call"** at all times. It can be shipped to Frankfurt and Cologne within 3 and 5 hours, respectively. For small equipment, Heavydrive even offers **worldwide overnight** delivery, including all customs and transport documents.

Our well thought-out assembly concept consists of individual components that can be put together individually according to the conditions and requirements of your construction site. We use internationally valid standards so that you can combine and complement your own equipment with Heavydrive® technology as well as possible.

From smaller, manually-operated individual systems to concepts involving tonnes of bearing load, you will always find the perfect solution at Heavydrive®.

Don't hesitate to contact us - we look forward to your inquiry!

www.heavydrive.com • sales@heavydrive.com

Your System Partner



Heavydrive® offers mounting concepts that are tailored exactly to your needs. Our overhead manipulators, for example, can be attached to any device or crane with the right adaptor.

This allows you to use your own machinery and rent any additional components you might need. It offers flexibility and saves time and money.



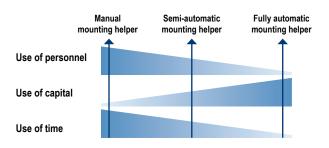
Intelligent and economic working methods

Show off your expertise to customers by always having the right equipment for your needs. Consider our rental options.

Benefits for you:

- · Save money by saving time
- · Optimal working conditions and the right equipment ensure fewer staff shortages

The following parameters are key for planning:



Don't hesitate to contact us we're happy to help!

Your one-stop shop for mounting concepts Combine these components according to your needs:

Manual: ML Assembly Lift

For product details, seefrom page 48

Semi-automatic: GMG

For product details. see from from page 58

Fully automatic: **MRK Assembly Cranes**

For product details. see from from page 266 For an overview,



VSGU Overhead Manipulators



For product details, see from page from page 82



VSG Vacuum Suction **Systems**

For product details, see from from page 92

For an overview, see page 354



HDL Glass Transport Wagons

For product details, see from page 224,

For an overview, see page 353



In many cases, purchasing equipment simply makes no sense, for example:

- You need the equipment only once, infrequently or for a limited period.
- Your own machine on site has broken down and you need a short-term replacement.
- You need the device/machine ASAP and can't wait for a new model to be delivered.
- · You would like to test the device first, before you buy.



Heavydrive offers tailor-made solutions and sound advice.

What happens when I RENT?

- We deliver the devices directly to your construction site in the morning and collect them afterwards.
- This means you can use the device for a full eight hours without encountering any operational difficulties on site. We use exact addresses and fixed times to guarantee that things go smoothly for both parties.
- We rent out devices and operating personnel all over Germany and the rest of the world.
- · Get in touch to find out more.

Sometimes purchasing makes more sense than renting, for example:

- The purchase price is so low.
- You need the equipment too often to rent it continuously or, even with the Heavydrive[®] 24-hour delivery service, you often need it at short notice.
- You have already rented the equipment and as your firm has constant use for it you have decided to buy a new device.
- You would like to buy a used Heavydrive® device.
- You would like to buy a device specially developed by Heavydrive® that meets your particular needs, or a specially extended device or machine.

Why rent from Heavydrive®?

- If you can't find an appropriate device, Heavydrive® will offer special self-built solutions and re-design equipment for any situation.
- You don't only need the machine, but everything with it, including an
 experienced operator, planning, organisation of multiple partners, etc.
- Heavydrive[®]'s equipment and/or operator can be on your building site within 24 hours.
- Heavydrive® does not offer one-size-fits-all or flat-rate solutions. We cater especially to your individual needs.
- Heavydrive® advises and looks after its customers.
- Heavydrive® provides you with suggestions and starting points for your current operation, and how it can be developed most efficiently.
- You'll receive services from Heavydrive® which exceed normal safety requirements.



Heavydrive® offers solutions:

- Any of our glass transport wagons and accessories can also be rented.
 However, many of our customers require them so often that they want one of their own. Don't hesitate to contact us we're happy to help!
- If you have rented one or more machines in the past and would now like to buy one new, enquire via email, telephone or fax.
- Another alternative to renting is to purchase used machines or equipment. Please enquire via email or alternatively by telephone or fax.
- We offer many unique self-developed solutions, such as crane extension tips and overhead glazing units. If you are interested in one of these individually modified machines or devices then enquire by e-mail. telephone or fax!

Meavychive.com

Have you seen our new App?



It's a fast, convenient and easy way to contact us or access our website at any time, even when you're on the move.

Advantages of the App at a glance

- Navigate our website quickly
- Access the digital copy of the Heavydrive catalogue with over 300 pages at any time
- Use the Heavydrive device finder in just one click
- Display relevant products using the device finder instead of wasting time browsing the catalogue
- Contact us more quickly
- Create watchlists and query lists specific to your construction site or project
- Save watchlists and query lists to your account
- It's even easier to send us photos or videos of your issue via WhatsApp
- And many more

In the App you have direct access in one click to:



Heavydrive® device finder (see page 10)

Heavydrive® WhatsApp Service (see page 11)





Heavydrive® website containing all devices and information

The Heavydrive isApp a 'progressive web application' (PWA). Install and use it on your smartphone like any other app.

The web app works like a native app, but it isn't downloaded from an App Store (Apple or Android) and there are no annoying updates (so it's virus-free!).

How to do it:

Open this URL on your smartphone:

https://heavydrive-en.app

The app opens in your browser. If you like it, you just have to "add to the home screen".



Instantly you'll have the **app icon** on your smartphone - without installation!

You'll find a detailed step-by-step guide to setting up the app on our website

at app.heavydrive.com



Heavydrive Device Finder

Do you need help choosing a glass mounting aid device for your construction site? Just enter a few details about the construction site conditions and the size and weight of the object that needs lifting:

Our new device finder will help you in your search!

We specifically developed the device finder as a quick and easy tool to help you figure out the best device for your project's construction site conditions.

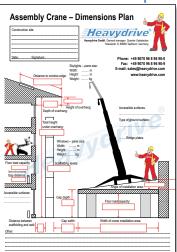
With just a few clicks, you can create a customised list of the tools you need.

The products are linked to the corresponding product pages, where you can find all the relevant information. It's easy to use, so even inexperienced users can navigate it easily.



Use our device finder: devicefinder.heavydrive.com

Dimension Plan for Enquiries



At sketch.heavydrive.com, you will find a PDF form to download and fill out online as a dimensions template.

This way, you can describe your situation to us in as much detail as possible and return it by fax/e-mail/post.

Heavydrive® WhatsApp Service

Fast - Competent - Free

Does this situation sound familiar? You're on the building site and suddenly everything stops:

- A device is damaged and needs spare parts
- You need assistance with device operations
- Special equipment is necessary due to an unexpected mounting situation. You'll need a solution.

No problem, we're here to help!



Via WhatsApp: +49 171 3407406

We are at your service:

- · For enquiries and offers
- · In difficult building site situations
- · For repairs and spare parts
- · Answering questions about device operations
- · And much more!

How it works:

Do you have a question, need a quick quotation or want to consult our experts?

Just send a WhatsApp message, with an image of the situation if appropriate.

That way we can immediately look into your enquiry and help you on the spot. Use the Heavydrive WhatsApp Service! We reply as soon as possible during business hours. Double check the exact times in our WhatsApp status.

The best part is that it's totally free - worldwide!

Simply save us as a contact in your address book.

Reparation Glazing / Service



Stone façade, Grenoble

In partnership with various assembly firms, we supply specialists and appropriate assembly personnel for:

- · Rope straining
- · Point holding systems
- Post-shelf constructions
- · Heavy steel constructions
- Foundations
- Floating façades
- · Heavy glazing up to 4 t
- Flat glazing

Heavydrive® -Services: We have the specialists for your projects

Luxembourg Airport

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Accident prevention regulation testing





We perform accident prevention regulation testing regularly and before every dispatch. We take personal responsibility for ensuring that every system that leaves our premises is thoroughly checked. On request we issue a certificate for every delivery.

We are happy to help with regularly renewing the accident prevention regulation certificate for any equipment you have purchased from us.

We'll also throw a special service into the bargain: regular accident prevention regulation testing of your devices. Mini crawler cranes and suction systems are professionally checked according to strict accident prevention regulation guidelines and are repaired quickly and reliably as needed.

Heavydrive® is the service point for mini crawler cranes for the manufacturers Maeda, Unic and Jekko (service with accident prevention regulation)





Crane training in theory and practice



When you rent or purchase our assembly cranes, you can also book crane training with us – the courses are flexible, tailored to your existing knowledge and practically oriented.

Many professional associations offer crane certificates, but most lack the practical aspect. The Heavydrive crane certificate offers everything in one place. Theory alone is not enough.

Our crane expert holds training courses in theory and practice at the headquarters in Tapfheim. The wide range of Heavydrive cranes, assembly devices and suction systems offers diverse opportunities for plenty of experience with the devices.

Why do I need a Crane Operator Certification?



For years, customers have required a crane certificate on construction sites, mainly for liability reasons.

A cautious crane operator with certification and experience causes less collateral damage than an operator with little instruction and no experience.

In addition, experience saves time and money in the long run.

Professional associations also require crane operators to have training (§ 29 German Trade Association D6).

The duration of the course depends on the knowledge of the participants and the necessary training time. For beginner level customers, the course normally lasts five working days. To receive a crane certificate, at the end of the course participants have to demonstrate their learning in a test. If they pass, the participants receive a certificate and a reference manual.

For further information, individual enquiries or to book a place on a course, our employees are available by phone on +49 9070 968 96 900 or by email at sales@heavydrive.com.

Your practical partner for practical solutions



Developer and Manufacturer

By renting our equipment we can continually improve it and constantly develop new customer-friendly building site solutions.

- · Glass transport wagons
- Crane tips
- Overhead manipulators
 - ...and much more.

We handle all the planning for you, from static analysis to final inspection.

Thanks to our **know-how of machine and system building**, we react **reliably and competently** to customer needs.



We are happy to operate for you both at home and abroad

- · Complete planning and realisation of concepts.
- · Static-dynamic FEM calculations.
- · Development, production, complete assembly.
- · Delivery and final inspection on the building site.

Enquire today!



9.6 m pane, Trieste harbour, Italy



Unlimited creativity in planning and construction with Heavydrive!

Architects, planners, project developers, estimators, and investors, get ready!



15 m pane, 5-star hotel in Rovinj, Croatia

Modern architecture relies heavily on glass as a building material. There are trends for futuristic design and large glass constructions. The sector is faced with more and more challenges: structural elements are becoming larger and heavier, mounting is becoming more complicated and the logistics more complex.

Glass mounting solutions tailor-made to your project

Are you planning an extraordinary project? Get the Heavydrive specialists on board during planning!

Start planning and project managing the equipment you will need for every construction phase from the outset. We can then quickly put together a package that will save you time and money!



You won't have to deal with unwanted surprises that could increase the cost of the project. There is no limit to how creative you can be!

Even from the design and planning phase of a project, it makes sense to think about implementation. This is becoming more and more important in the contracting phase.

We offer everything from planning to implementation, your one-stop shop.

We help you create your assembly flow plan (method statement) and assist you with formulating the worst-case scenario using optimal solutions, e.g. replacing existing glass panes.

With Heavydrive's expertise and special equipment, you will open up many design possibilities that would have been unthinkable in the past!

No emissions thanks to innovative technology



Heavydrive GmbH has a variety of emission-free systems, cranes and lifts for indoor assembly projects, so panes can be transported and installed indoors, even in winter. The systems are also extremely small and easy to handle so they can even be used in tight spaces.

For example: the flexible GMG glass assembly device. This compact mounting aid transports and installs panes weighing up to 1,000 kg. The GMG devices have a 24 V electrical motor. Fully charged, the battery lasts three to four days on a single charge.



The assembly cranes in the MRK range have a lifting capacity of up to 10 tonnes and are easy to use indoors.

The MRK 126 hybrid mini crawler crane, for example, has a 3-cylinder motor with a water cooling system. The crane has a 40 litre tank and can either be operated using the diesel motor or electronically at 15.2 KW or 2,500 rpm.

Since it was founded over ten years ago, the company has focused on innovative technologies like devices with electronic, battery or hybrid operation and therefore guarantees safe and emission-free operating conditions.





Heavydrive® Logistics and Workflow

- 1. Your request is received via e-mail, fax or telephone
- 2. The offer is prepared (usually within 1-2 days)
- 3. Order (your order)
- 4. Order confirmation, your countersigning and payment processing
- 5. The equipment is loaded onto a double palette and the packaging sealed per IPPC Standards
- 6. Pre-custom payment for the goods is made at the local customs office before delivery to the airport
- 7. Arrival at the destination airport
- 8. Transfer to a truck at the destination airport
- 9. Transport to the construction site
- 10. Use of the system







Example: Urgent operation in record time

It's every builder's nightmare. Shortly before the completion of a new mega store in the famous Dubai Mall, the huge glass pane in the entrance door broke. Within one week, Tapfheim-based company Heavydrive GmbH managed to replace the curved glass element using its expert team and equipment.

Tuesday:

Heavydrive was notified by mail and reacted immediately:

In no time, Heavydrive was in the process of preparing the dangerous goods declaration and deployment plan, processing the freight and packaging requests, and applying for a working visa for the crane driver.

Wednesday:

All 3 devices suitable for air freight were packaged according to IPPC standards and customs clearance was completed.

Thursday:

The equipment was shipped from Munich to Frankfurt Fraport Airport

Friday:

The equipment was on a direct flight to Dubai

Saturday:

Import customs clearance was completed, and the equipment was on its way to the customer

Sunday:

The crane diver arrived from Heavydrive; the equipment was unpacked and the sliding door was pre-assembled

Monday:

The shipped equipment was delivered to the construction site

Tuesday:

The glass panes in the shopping mall were replaced

Meavy Crive.com

Heavydrive on site at the Eiffel Tower

The first floor of the world-famous Eiffel Tower has been given a facelift.

Fitting the new façade, however, proved to be a very tricky task indeed. The panes were curved like waves and needed to be installed under eaves. Heavydrive used the compact and powerful assembly crane MRK 86.0, which is also suitable for use indoors. In combination with the overhead manipulator VSGU 450K and the vacuum suction system VSG PLR, which was specially developed for long curved panes, the crane operator can install large, curved panes anywhere.



Eiffel Tower, Paris, France

A trained, experienced Heavydrive crane operator ensures problem-free glass mounting on site. Thanks to Heavydrive's expertise and innovative technology, nothing stood in the way of completing the Eiffel Tower's new glass façade.

10 m high panes, angled and curved elements - a spectacular glass mounting project at Kö-Bogen

The unusual façade of the Libeskind buildings in Düsseldorf, Germany, presented an enormous challenge for construction experts. The façade, which extends **over 15,000 square metres**, **consists of 2,800 individual parts of different sizes**. The elements made of different materials are angled and curved. This complicated installation of 10 m high panes under **huge time pressure** pushed the structural and facade engineers to their limits.

This is why the Heavydrive GmbH experts were consulted early on in the planning phase.

Thanks to their great experience and broad range of vacuum suction systems, the company was able to establish a testing facility in no time at their main plant.



more than 40 suction systems from 300 to 5,000 kg available for hire, the experts were able to start very quickly.

The Kö-Bogen façade ele-

Since Heavydrive always has

ments are up to 2.5 metres by 8 metres in size and are concave and convex in shape. They are made of glass and natural sandstone and weigh between 500 and 1,200 kg.

The smart lifting technology from Heavydrive proved its worth in this complicated installation.

Kö-Bogen, Düsseldorf, Germany

Excellent architecture calls for a professional assembly team



Exhibition hall, Nuremberg, Germany

The 8,000-square-metre exhibition hall comprising 3,290 tonnes of steel and 2,750 square metres of glass was completed in just 18 months.

The installation of the curved convex and concave panes at often dizzying heights was not possible using conventional building cranes.

This is where Heavydrive came in with its innovative specialised equipment:
The different assembly cranes MRK

126.0, 158.0 and 195.0 and the overhead manipulator VSGU 1200 K were developed for extreme construction jobs and can transport any pane – no matter what the weight or shape – to its destination. With this equipment, our professional crane operators can even install the large, wave-like curved panes under eaves or overhangs with no problem.

Heavydrive devices are wind and weather resistant

In Trieste, the company installed panes weighing four tonnes under extreme conditions.



In Piazza Venezia, a spectacular construction project with a sensational view of the harbour was created.

One four-tonne pane and two 2-tonne panes were installed directly on the sea side of the building.

The challenges: The façade was offset into the building by 800 mm with a surrounding

gap of just 10 mm. The façade is right next to the sea. With no possibility of storing the panes in the port, they had to be transported over a distance of 40 metres. Gusts of wind grew stronger and stronger, eventually leading to a storm.

To install the three extremely heavy panes under these difficult conditions, Heavy-drive used its vacuum suction unit VSG 6000 K with quick-change system (SWS) with a capacity of up to seven tonnes when used with the counterweight traverse. The unit installs panes of up to 18 metres in length and 3.4 metres in height. With the counterweight traverse, the suction unit can safely go horizontally into any recess or under any building's eaves up to 2.5 metres.

At first, the largest of the three **panes weighing almost 4 tonnes** was installed. Via remote, the Heavydrive technician steered the pane above the sea directly to the façade. The system inserted the 9.6-metre long and 3.2-metre high pane exactly **to the millimetre under the eave**.

To install the two smaller **2.5 tonne panes**, a smaller suction system was used.

II GEVYVCITIVO.com

Lakhta Center, St. Petersburg

Flexible and lightweight, high load capacity for curved glass panes, suitable for temperatures as low as -20° C - Heavydrive® mounting solutions can meet the most extreme demands!



WhatsApp Service: +49 171 340 74 06

The Lakhta Tower in St. Petersburg (Russia) is one of Europe's most prestigious architectural feats, and at a height of 462 m, it will be the tallest building on the continent.

Like most futuristic constructions, it pushes standard mounting solutions to their limits: it's a job for the experts.

The façade construction company, Lindner Group KG, called in support from lifting and transportation specialists Heavydrive GmbH to plan, develop and implement the project. We became one of the main suppliers for the construction project.

The customer visited the Heavydrive factory site in Tapfheim to see the mounting solutions for themselves. The team carried out a field test that simulated the construction site conditions and demonstrated the system's functions with very convincing results.

From then on, the Lindner Group GmbH benefited from Heavydrive's one-stop service. The experts organised everything between making sure the system was safely packaged to transportation and customs paperwork.

The Challenge:

This mega project placed enormous requirements on the glass mounting equipment: it would need to be ultra-light and at the same time be able to bear heavy loads. The equipment also needed to be remote controllable and be able to function in temperatures as low as -20°C. Another challenge was that the frame of the suction system needed to be particularly flexible and lift curved panes.

The solution:

The development and construction of four VSG 600 K MH vacuum suction systems especially for the project. These systems have a 2-circuit system with a hydraulic pivot mechanism and motorised swivel function. The systems' functions are remote controllable and they are suitable for use in extreme, subzero temperatures.

Heavydrive GmbH also developed two counterweight traverses that can be connected to the VSG 600 K MH with a quick-change head.

Technicians on site



Heavy curved glass panes in confined spaces



FlyStation, Neufahrn

Bodyflght is the most current sports trend - here you can fulfil your dream of flying. In a Flight Chamber, a wind tunnel is used to simulate the free fall experience of skydiving.

Heavydrive has installed eight state-of-the-art indoor skydiving facilities, including one on a cruise ship, at FlyStation Munich in Neufahrn and in the Jochen Schweizer Arena in Taufkirchen near Munich.



The special feature of these systems is that they are completely made of glass.

The problem: The funnel-shaped glass tower consists of six large-scale composite glass panes. In the floor area, there is an arch for access.

The substructure, made up of steel beams 5.7 m long and weighing 500 kg, had to be lifted from the inside.

Ovation of the Seas, Meyer Werft in Papenburg

The core structure of the Flight Chambers on a cruise ship consists of 6 curved glass panes 5.5 m tall by about 1.8 m wide and weighing about 860 kg that have to be placed inside. Another challenge is the limited space available and the low ceiling load.

mounted emission-free: Flight Chambers



FlyStation, Neufahrn

The challenge: Heavy curved glass panes

This is where the experienced glass assembly specialists at Heavydrive® provide the perfect solution.

Emission-free, and therefore suitable for indoor use, assembly cranes, such as the MRK 86 and the MRK 144, were used. The vacuum suction systems from the VSG KR series for curved glass panes reliably placed the curved 2 x 7 m panes, even under such extremely difficult site conditions.

The assemblies were carried out by an experienced equipment operator from Heavydrive. Using a remote control, the suction system can easily pivot the glass panes vertically and horizontally.



Jochen Schweizer Arena in Munich



Ovation of the Seas, Singapore

Leavy@HV@.com

The Heavydrive lifting platform

remains installed on the tower so that the glass façade panes can be cleaned

Therefore, if it is necessary to replace a panel, this would also pose no

problems.

Special mounting solutions for use at the Royal **Clock Tower in Mecca**

Like a giant cut diamond the core of the architectural masterpiece sparkles in the sunshine.

In this gigantic hotel project, centred around the second highest skyscraper in the world and based on the Big Ben clock tower, Heavydrive® was deployed to work on the approx. 602 m Mecca Royal Clock Tower.



Overhead view of the construction site:

Where many others reach their limit, the transport and lifting specialist rises to the challenge.



About 400 triangular and trapezium-shaped panes of various sizes must be assembled on the facade of the Mecca Tower in the form of a cut diamond, at vertigo-inducing heights.

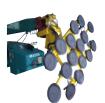
A tricky assignment which allowed the Heavydrive® expert technicians to put their planning skills to the test.

Mini cranes with vacuum suction systems for overhead mounting enable deployment in the most different corners of the building.

The cranes, with special overhead manipulators, are designed to lift extremely heavy glass panes even at dizzying heights.

For example, a 3-axis manipulator in the form of a cage, which is adapted to a mobile crane, makes it possible to precisely place the heavy 1,800-kilogram glass panes on the outside of the building, even at a height of 560 meters.

Workers either standing or lying in a cage can optimally position the heavy and delicate load.



This is unprecedented in the industry. A world's first, for which Heavydrive easily received TÜV certification.

For the first time in history, it is possible to precisely mount façade glass panes on site at a height of 602 m using a remote control.

Our app: app.heavydrive.com



View from the building site on the tower over Mecca.



The building site is being prepared 602 m above ground



The industrial crane MLK 72.0 with 4-axis manipulator, which set the triangular and trapezium-shaped glass panes of up to 1,800 kg.

Mounting extra-large panes in Dubai

In Dubai (United Arab Emirates), Heavydrive GmbH has impressed time and time again with its equipment and know-how.

In the Dubai Mall - a huge shopping centre with more than 1,200 shops - a highly experienced Heavydrive device operator installed 14 m high, 3 m wide curved panes over the main entrance.

The glass panes weighed 4 tonnes and had to be fitted under a 5.8 m overhang.

With the VSG 4000 KR vacuum suction system and the VSG 6000 counterweight traverse, the installation took place without a alitch.

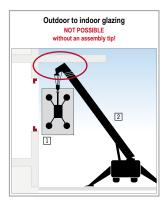


Heavydrive mounting devices in front of the Burj Khalifa



OUTDOOR Glazing





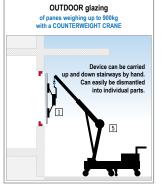


OUTDOOR glazing of panes weighing up to 800 kg with ASSEMBLY CRANE & ASSEMBLY TIP



□ Vacuum suction systems from p.92 □ Assembly cranes from p.266

OUTDOOR glazing of panes weighing up to 800kg with a ASSEMBLY LIFT



- ③ Glass assembly devices from p.58 ④ Assembly lifts from p.48
- **5 Counterweight cranes** from p.334

Leavy Crive.com

OUTDOOR Overhead Glazing



University of Wuerzburg, Germany



OUTDOOR glazing slanted or Overhead
of panes weighing up to 300kg
with a ASSEMBLY LIFT

□ Vacuum suction systems from p.92



Image above: Assembly lift ML79 and Overhead vacuum suction system working in tight space Image below: BV Miami Aventura Mall, USA



- 2 Glass assembly devices from p.58
- 3 Assembly lifts from p.48

Meavyon Ve.com

OUTDOOR Overhead Glazing



Jewish museum Frankfurt/Main, Germany



OUTDOOR glazing of panes weighing up to 10,000kg

☐ Vacuum suction systems from p.92 ☐ Assembly cranes from p.266



Image above: Trieste, Italy; lage below: Church in Poing, Germany



3 VSG Counterweight from p.198



OUTDOOR-to-INDOOR Glazing

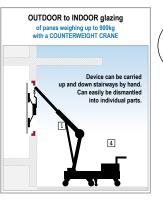


Promenade in Donauwoerth, Germany





 $\hfill\square$ Vacuum suction systems from p.92 \hfill Assembly cranes from p.266



- 3 Assembly lifts from p.48
- 4 Counterweight cranes from p.334



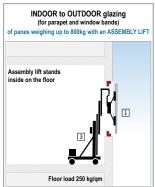


INDOOR-to-OUTDOOR Glazing

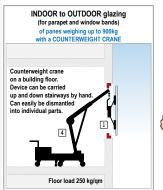


Schlüter Systems Iserlohn, Germany





☐ Vacuum suction systems from p.92 ☐ Assembly cranes from p.266





- 3 Assembly lifts from p.48
- 4 Counterweight cranes from p.334

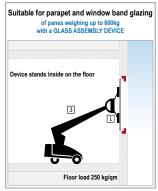


INDOOR Glazing

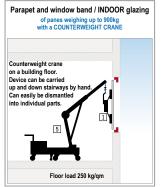


Bulletproof glass, European Central Bank, Frankfurt am Main, Germany





- □ Vacuum suction systems from p.92 □ Assembly cranes from p.266
- Parapet and window band / INDOOR glazing of panes weighing up to 800kg with an ASSEMBLY LIFT Assembly lift stands inside on the floor Floor load 250 kg/gm



- 3 Glass mounting devices from p.58 4 Assembly lifts from p.48
- 5 Counterweight cranes from p.334
- www.heavydrive.com sales@heavydrive.com

Meavy Chive.com

TOP-to-BOTTOM Glazing

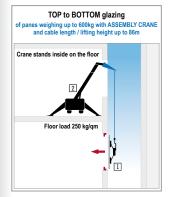


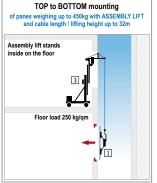
Ovation of the Seas, MEYER WERFT, Papenburg, Germany

☐ Vacuum suction systems from p.92 ☐ Assembly cranes from p.266



FlyStation Neufahrn near Munich, Germany





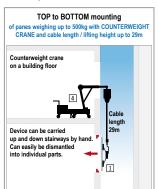
3 Assembly lifts from p.48

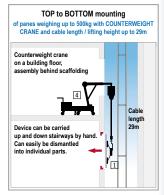


TOP-to-BOTTOM Glazing



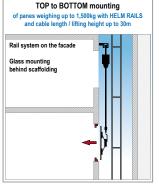
Accurate guidance of the huge pane between the narrow scaffolding, villa in Moscow





- TOP to BOTTOM mounting
 of panes weighing up to 1,500kg with HELM RAILS
 and cable length / lifting height up to 30m

 Rail system on the facade
- 5 Helm rails from p.324



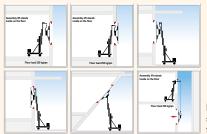
6 Chain lifts from p.328





- Manual / Battery driven Assembly Helpers

Assembly lifts with a capacity of 800 kg and a 7.9 m lift height



Learn more about glass mounting solutions with assembly lifts from p.48

- Semi-Automatic Assembly Helpers Glass assembly equipment with a capacity of up to 1,000 kg







Learn more about solutions with glass assembly devices from p.58

- Fully Automatic Assembly Helpers
Overhead manipulators with a capacity
of up to 2,500 kg







Learn more about overhead assembly solutions from p.80





46

LIGAYYQITIYA.com

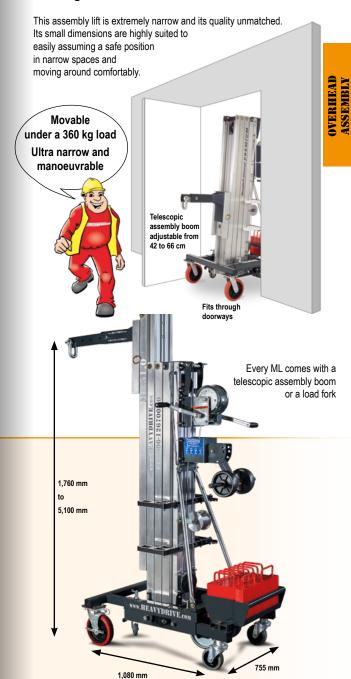
ML 51.0 Assembly lift with a lift height of 5.15 m and a capacity of 360 kg.

Only 1.76 m high!



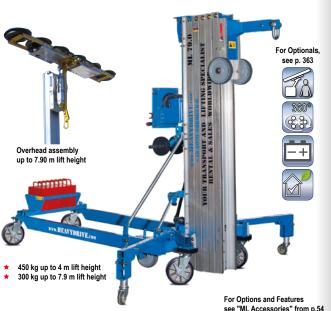
see "ML Accessories" from p.54		
<u>Model</u>	ML 51.0	
Capacity	360 kg	
Lift Height	5.15 m	
Carriage	Castors for solid floors, limited off-road suitability	
Net Weight	144 kg	
Transport Dimensions (LxWxH) in mm	1,080 x 755 x 1,760	
Net Weight incl. 9 x 16 kg counterweights	288 kg	
Add-on device:		
Crane jib	Adjustable crane jib 420 - 660 mm	
Load fork	670 mm tooth length, 550 mm wide	
Options	Mast lift via translation unit with 3 speeds via hand crank or cordless screwdriver	
Optional	See "ML Accessories" from p.54	
Transport	Fits in a van standing	
Heavydrive® delivers different models with lift heights of 1.7 m, 2.8 m, 4 m and 5.1 m on request.		
Find more information at www.heavydrive.com.		

Lift large loads from a small base



Leavy GAV e.com

ML 79 Assembly lift with a lift height of 7.9 m



	see "ML Accessories" from p	
<u>Model</u>	ML 79.0	
Capacity	450 kg (up to 4m), 300 kg	
Lift Height	7.90 m	
Carriage	Castors for solid floors, limited off-road suitability	
Net Weight	200 kg	
Working Position	L 2,220 mm x W 2,140 mm	
Transport Dimensions (LxWxH)	960 mm x 840 mm x 2,004 mm	
Net Weight incl. 8 x 16 kg counterweights	332 kg	
Add-on device: Crane jib Load fork Crane boom Overhead manipulator	420 - 660 mm 600 mm wide, 800 mm tooth length 300 kg capacity, up to 30 m hoisting capacity Capacity up to 450 kg	
Standard	Incl. 4 steering rollers each Standard load fork 1 - gear winch	
Options	Mast lift via gear box with 3 speeds via hand crank or cordless screwdriver	
Overhead Suction System	Up to 450 kg capacity	
Transport	Fits in a van	
Heavydrive® delivers different models with lift heights of 3.50 m, 5.0 m, 6.5 m and 7.9 m on request.		



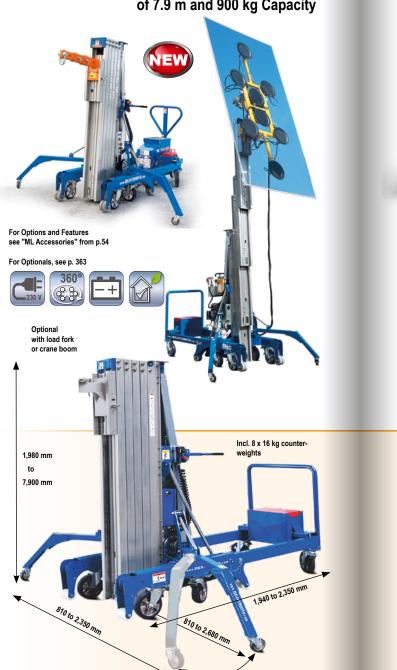
This assembly lift is brilliant. With a fantastic lift height of 7.9 m, it helps to safely manoeuvre loads of up to 300 kg (from a height of 4 m).

One of the undeniable advantages of this assembly lift is that during glass pane mounting, the vacuum suction cups can be moved to the façade problem-free since Heavydrive® uses counter weights. With conventional lifts, for exhibition stand construction or sound engineering, the lifting carriage is below the lifted object.

Last but not least, this practical all-rounder is folded by hand. It is hand-operated and therefore requires very little servicing.



ML 79 - 800 Assembly lift with a lift height of 7.9 m and 900 kg Capacity







Model	ML 79.0-800		
Capacity	900 kg (up to 3.5 m), 850 kg (up to 6.5 m), 800 kg (up to 7.9 m)		
Lift Height	7.90 m		
Carriage	Castors for solid floors, limited off-road suitability Jib feet at front: Carriage L 2,350 mm x W 2,350 mm Jib feet at rear (90° to the side): Carriage L 1,940 mm x W 2,680 mm		
Working position with no jib feet	L 1,940 x W 810 x H 1,980 mm		
Transport Dimensions (LxWxH) in mm	1,100 x 810 x 1,980 mm		
Net Weight incl. 8 x 16 kg counterweights	543 kg (up to 595 kg depending on mast lift drive type)		
Options:	See "ML Accessories" from p.54		
Standard	each including 4 steering rollers standard load fork 1 - gear winch Lugs for transport via forklift bags forklift pockets		
Overhead Suction System	Up to 600 kg capacity		
Transport	Fits in a van		
Heavydrive® delivers different models			

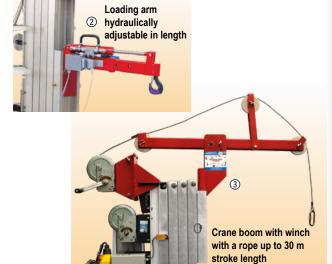
Heavydrive® delivers different models with lift heights of 3.5 m, 5.0 m, 6.5 m and 7.9 m on request.

Find more information at www.heavydrive.com.

LIGAVYOLITVO.com

ML Accessories









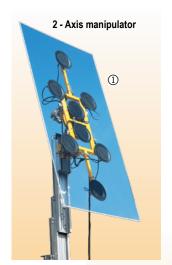


Attachments:	Description:	ML 51.0	ML 79.0	ML 79.0-800
① Manual loading fork	up to 2-3 steps 420 - 620 mm	х	х	х
② Loading arm/ electro-hydraulic	1400 000		х	
③ Manual crane boom	1 to 30 m			х
4 Load fork above 5 Load fork below	lands for anything X X X		х	
Further information can be found at www.heavydrive.com.				

Meavy GMV e.com

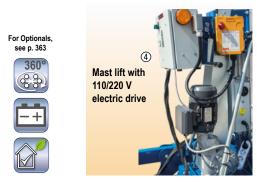
Overhead Assembly Concepts

ML Accessories



Mast lift with gear box for hand crank or cordless screwdriver

















Manual, with electric or battery drive



<u>Attachments</u>	Description	ML 51.0	ML 79.0	ML 79.0-800
① Automatic 2 - Axis manipulator VSGU 600 K	elec. pivot 90° up/down, electr. fully rotating			х
② Manual 3 - Axis manipulator VSGU 450 K	Tilt 90 ° up / down infinitely variable lockable, full rotation, 45° lockable, swivel sideways at 45° to the left / right	х	х	х
③ Mast lift with gear box for hand crank or cordless screwdriver	3 speeds, slow / medium / fast	х	х	х
4 Mast lift with 110/220 V electric drive	Hand-radio control on / off with 2 speeds			х
⑤ Mast lift with battery drive	Battery pack with detachable wagon			х
	Further information can be foun	d at <u>ww</u>	w.heavy	drive.com.





The all-terrain GMG glass assembly device



This compact mobile assembly aid transports and places glass panes with mm-precision with a load capacity of up to 1,000 kilograms.

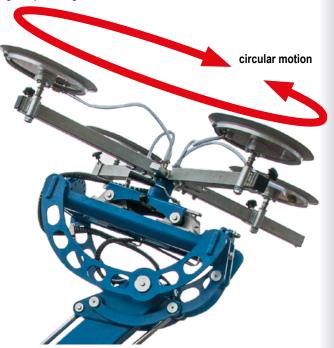
The low ceiling load capacity allows for problem-free glazing of heavy structural window elements.

The compact design fully supports the operator during the load handling processes. All functions are fully automatic for safety.

GMG devices have a 24-Volt electric drive. The charged battery can last for three to four working days on a single charge.

The advantages of the GMG glass assembly device

Complete elaborate manipulator head, which allows for more precise fine adjustment of the glass pane, without causing the glass pane to go off track.



Larger angles and distances possible than with the competing products. For example, it is possible to insert a pane into a horizontal frame without tilting it.



Peerless on the market:

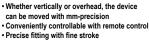
Fine adjustment of the glass pane without changing the angle!



What makes us different from the competitors:

- Because of their design, competitive devices can usually move only 10 cm leftright, in circular motion. As a result, the glass pane tilt and must be readjusted
- Competitive devices do not usually have a suction system with a fine stroke capability. Since only the lift arm has a fine stroke, the glass pane is always swinging and tilting and needing to be readjusted
- More fine stroke between 0-200/500 mm vertical and 100 mm horizontal

GMG 350 - Movable under a 350 kg load





Self-driving equipment ideal for window mounting:
Movable under a 350 kg load, even in narrow spaces!



For Optionals, see p. 363

Lifting height 2,870 mm

For Options and Features see "GMG Accessories"from p.76





Find more images and videos of our devices in action at www.heavydrive.com

Transporting glass panes through bottlenecks such as doors is also possible laterally



Meavy of Ave.com

OVERHEAD

<u>Model</u>	GMG 350
Capacity	Movable with 350 kg load in the front Movable with 250 kg load on the side
Telescopic System:	
Extension:	470 mm
	380 - 850 mm in front of bumper
Boom Angle Boom Type	90° / - 45°
Lifting height middle suction frame vertical	Automatic 2.870 mm
Lifting height middle suction	2.870 mm
frame horizontal	1.000 mm
Table Height	1,000
Suction System:	
Suction	min. 660 x 540 mm up to max. 1,450 x 1,450 mm
Pane vertical dimensions max.	3,450 x 3,450 mm
Pane horizontal dimensions max.	2,450 x 2,450 mm
Suction Cups:	Ø 4 x 275 mm, 2-circle system
Turning Angle: Tilt Angle:	360 ° manually, 45 ° lockable 90 °
Lifting Tower	
Vertical Precision Lifting Horizontal Precision Lifting	500 mm 100 mm
Carriage	
Drive	Hydrostatic, infinitely variable, front wheel drive
Wheels	All-terrain, foamed
Motor:	
Туре	Battery drive 2x 12 V 95 Ah
Power	Electric 24 V with 220 V / 110 V - Charger lasting time 3-4 working days without recharging
<u>Dimensions:</u>	
L x W x H in mm	1,450 x 690 x 1,570 (carriage)
	L 1,830 to 2,300 mm (before the suction frame)
Weight unloaded Incl. counterweight (removable)	512 kg 617 kg (7 x 15 kg steel plates)
Safety System	Load limiters
Rental Options	See pages 58 - 61
	I

Transport

Tilt Angle: Lifting Tower Vertical Precision Lifting

Carriage Drive

Wheels

Wei

Horizontal Precision Lifting

GMG 575 - Movable under a 575 kg load





For Optionals, see p. 363





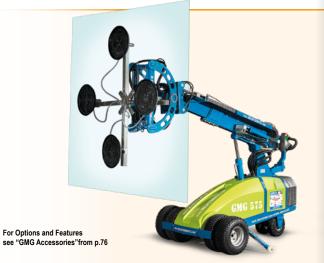








	<u> </u>
Model	GMG 575
Capacity	575 kg frontal movement 350 kg sideways movement
Telescopic System:	
Extension:	1,070 mm; 800 mm - 1,870 mm before the bumper
Boom Angle	90° / - 45°
Boom Type Lifting height middle suction frame vertical	3,400 mm
Lifting height middle suction frame horizontal	3,800 mm
Table Height	1,000 mm
Suction:	
Suction in square	min. 730 x 730 mm up to max. 1,300 x 1,300 mm
Suction in line	730 - 1,600 mm
Pane vertical dimensions max.	4,540 x 4,540 mm
Pane horizontal dimensions max.	2,540 x 2,540 mm
Suction Cups:	Ø 4 x 360 mm, 2-circle system
Turning Angle:	180 ° automatically



Motor:	
Туре	Battery drive 2x 12 V 150 Ah
Power	Electric 24 V with 220 V / 110 V - Charger lasting time 3-4 working days without recharging
Dimensions: L x W x H in mm	2,000 x 890 x 1,500 (carriage) L 2,800 - 3,850 (overall)

90°

200 mm

100 mm

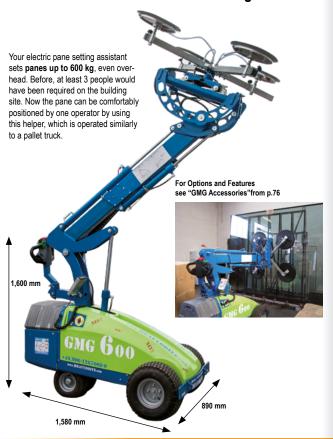
All-terrain, foamed

Hydrostatic, fully adjustable, front wheel drive

	1,025 kg 1,300 kg (21 x 13 kg steel plates)
Safety System	Load limiters

Rental Options see "GMG Options" from page 76 Transport on carriage or pallet

GMG 600 - Movable under a 600 kg load



For Optionals, see p. 363

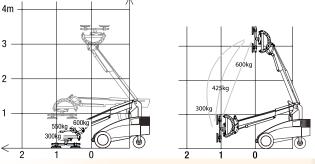












Always in stock!

Best suited for window mounting : horizontal suction up to 1,000 mm off the ground!



Table Height

Lifting Tower

Pane vertical dimensions max.

<u>Model</u>	<u>GMG 600</u>
Capacity	600 kg frontal movement 300 kg pushing + sideways movement
Telescopic System:	
Extension:	750 mm 500 - 1,250 mm before the bumper
Boom Angle	90° / - 15°
Boom Type	Automatic
Lifting height middle suction frame vertical	2,870 mm
Lifting height middle suction frame horizontal	3,000 mm

Suction:	
Suction in square	740 x 740 mm to 1,250 x 1,250 mm
Suction in line	740 - 1,600 mm

1,000 mm

3,250 x 3,250 mm

Pane norizontal dimensions max.	2,250 X 2,250 mm
	H 1,000 mm
Turning Angle:	Ø 4 x 360 mm, 2-circle system
Tilt Angle:	360 ° manually, 45 ° lockable

200 mm 100 mm

Horizontal Frecision Litting	100 111111
<u>Carriage</u>	
Drive	Hydrostatic, fully adjustable, front wheel drive
Wheels	All-terrain, foamed
Motor:	
Туре	Battery drive 2x 12 V 95 Ah
Power	Electric 24 V with 220 V / 110 V - Charger

	lasting time 3-4 working days without recharging
<u>Dimensions:</u>	
L x W x H in mm	1,580 x 875 x 1,600 (Carriage)
	L 2,100 to 2,850 mm (before the suction frame)
Weight unloaded Incl. counterweight (removable)	865 kg 1,060 kg (13 x 15 kg steel plates)
Safety System	Load limiters

See pages 58 - 61

on carriage or pallet

Rental Options

Transport

Meany Chive.com

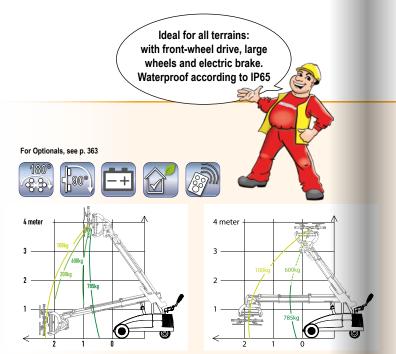
GMG 785 - Up to 785 kg capacity



The GMG 785 is a **battery-operated window robot with a lifting capacity of 785 kg**. This machine was developed to facilitate the transport and assembly of window parts and similar airtight pieces. In addition, the GMG 785 can be supplied with other specially-manufactured lifting and aiding devices that enable the **transport and handling of other types of heavy loads**.

The GMG 785 has all-terrain front-wheel drive and a modern electrohydraulic system for handling lifted pieces.

Large window sections for your new building can now be easily placed with mm precision. The wide tyres make the machine suitable for all terrains. The lift can be conveniently moved using a transporter or trailer.





ee "GMG Accessories"from p.76		V 0
Model	GMG 785	
Capacity	785 kg frontal movement 300 kg sideways movement	
Telescopic System:		
Extension:	1,830 mm 660 - 2,420 mm before the bumper	
Boom Angle	- 90° / +45°	
Boom Type Lifting height middle suction frame vertical	Automatic 4.000 mm	
Lifting height middle suction	4,000 11111	
frame horizontal	4,400 mm	
Table Height	950 mm	
Suction:		
Suction in square	L 800 x W 800 mm to L 1,200 x W 1,200 mm	
Suction in line	L 800 to 1,520 mm	
Pane vertical dimensions max.	L 3,200 x W 3,200 mm	
Pane horizontal dimensions max.	L 1,700 x W 1,700 mm	
Suction Cups:	Ø 4 x 400 mm, 2-circle system	
Turning Angle: Tilt Angle:	180 ° automatically 90 °	
Lifting Tower		
Vertical Precision Lifting Horizontal Precision Lifting	200 mm 75 mm	
Carriage		
Drive	Hydrostatic, fully adjustable, front wheel drive	
Wheels	All-terrain, foamed	
Motor:		
Туре	Battery drive 2 x 12 V - 150 Ah	
Power	Electric 24 V with 220 V / 110 V - Charger lasting time 3-4 working days without recharging	
<u>Dimensions:</u>		
L x W x H in mm	1,880 x 890 x 1,795 (frame)	
	L 2,500 to 2,650 mm (before the suction frame)	
Weight unloaded Incl. counterweight (removable)	1,200 kg 1,473 kg (273 kg = 21 x 13 kg steel plates)	
Safety System	Load limiters	
Rental Options	See "GMG Options" from page 76	
Transport	on carriage or pallet	

Transport

GMG 1000 - Movable under a 1000 kg load



GMG 1000 can easily handle loads up to 1,000 kg loads (in standard version / with suction system for curved glass up to 750kg).

Equipped with a battery suction system, two 24V high-performance vacuum pumps, and a high-performance hydraulic system with proportional technology, all manoeuvres can be made by one person using the stepless radio remote control.

This machine was developed to facilitate the transport and mounting of window parts and similar airtight pieces. In addition, the GMG 1000 can be supplied with other specially-manufactured lifting and aiding devices that enable the transport and handling of other types of heavy loads. The GMG 1000 has all-terrain frontwheel drive and a modern electro-hydraulic system for handling lifted pieces.

For Optionals, see p. 363

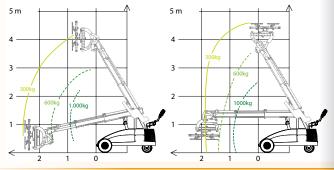














Ideal for mounting big and heavy panes or window and door elements up to 1,000 kg

For Options and Features see "GMG Accessories" from p.76

•	see "GMG Accessories" from p./6	
Model	GMG 1000	6 <
Capacity	1,000 kg frontal movement 300 kg sideways movement	
Telescopic System:		
Extension:	1,830 mm	
Boom Angle	660 - 2,420 mm before the bumper - 90° / +45°	
Boom Type Lifting height middle suction frame vertical	Automatic	
Lifting height middle suction	4,000 mm	
frame horizontal	4,400 mm	
Table Height	950 mm	
Suction:		
Suction in square	L 830 x W 830 mm to L 1,200 x W 1,200 mm	
Suction in line	L 920 to 1,550 mm	
Pane vertical dimensions max.	L 3,200 x W 3,200 mm	
Pane horizontal dimensions max.	L 1,700 x W 1,700 mm	
Suction Cups:	Ø 4 x 400 mm, 2-circle system	
Turning Angle: Tilt Angle:	180 ° automatically 90 °	
Lifting Tower		
Vertical Precision Lifting Horizontal Precision Lifting	200 mm 75 mm	
Carriage		
Drive	Hydrostatic, fully adjustable, front wheel drive	
Wheels	All-terrain, foamed	
Motor:		
Туре	Battery drive 2 x 12 V - 150 Ah	
Power	Electric 24 V with 220 V / 110 V - Charger	
	lasting time 3-4 working days without recharging	
Dimensions:		
L x W x H in mm (Carriage)	1,930 x 870 x 1,795	
L x W x H in mm (overall)	2,560 x 870 x 1,795	
Weight unloaded	1,340 kg	
Incl. counterweight (removable)	1,850 kg (442 kg = 34 x 13 kg Steel plates)	
Safety System	Load limiters	
Rental Options	See "GMG Options" from page 76	
Transport	on carriage or pallet	

GMG M 1000 - Power Glass Crawler

the all-terrain glass handler!

The GMG M 1000 is a state-of-the-art glass robot featuring absolute all-terrain mobility and dynamic load balancing. It was designed and built to start at the level where all the other glass robots guit!

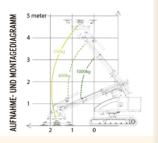
Its excellent manoeuvrability makes it suitable for any terrain.

It works even in tight spaces, with minimal ground pressure and without any need for support, regardless of the situation!





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M	lo	de	<u>le</u>

Capacity

Telescopic System:

Extension:

Boom Angle

Boom Type Lifting height middle suction

frame vertical

Lifting height middle suction frame horizontal

Table Height

Suction:

Suction in square

Suction in line

Pane vertical dimensions max.

Pane horizontal dimensions max. **Suction Cups:**

Turning Angle: Tilt Angle:

Lifting Tower

Vertical Precision Lifting Horizontal Precision Lifting

Carriage

Drive

Wheels

Motor: Type

Power

Dimensions: LxWxHinmm (Carriage) L x W x H in mm (overall)

Weight unloaded Incl. counterweight (removable)

Safety System

Rental Options

Transport

GMG M 1000

1,000 kg frontal movement 300 kg sideways movement

1.830 mm

660 - 2,420 mm before the bumper - 90° / +45°

Automatically

5,100 mm (with raised carriage)

4.200 mm

950 mm

L 830 x W 830 mm to L 1.200 x W 1.200 mm

L 920 to 1,550 mm

L 3,200 x W 3,200 mm L 1,700 x W 1,700 mm

Ø 4 x 400 mm, 2-circle system

180° automatically

200 mm 75 mm

Chains, fully adjustable, electric, all-terrain

Battery drive 24 V - 180 Ah Electric 24 V with 220 V / 110 V - Charger

lasting time 3 - 4 working days on a single charge

2,180 x 1,470 - 1,640 x 2,125 2,830 x 1,470 - 1,640 x 2,830

More stability through

automatic track widening 2,600 kg 2,800 kg

Load limiters

See "GMG Options" from page 76

on carriage or pallet



GMG M 1400 - Power Glass Crawler

the all-terrain glass handler!

The GMG M 1400 is a state-of-the-art glass robot featuring absolute all-terrain mobility and dynamic load balancing. It was designed and built to start at the level where all the other glass robots quit!

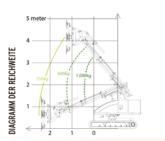
Its excellent manoeuvrability makes it suitable for any terrain.

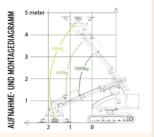
It works even in tight spaces, with minimal ground pressure and without any need for support, regardless of the situation!

With the "Dynamic Levelling System", device levelling works completely automatically, even on steep terrain or uneven ground.

The GMG M 1400 is levelled independently and simultaneously, both on the longitudinal axis up to 15° (27%) and on the transverse axis up to 14° (25%), so that parts may be transported and mounted safely and effectively in any situation.

























		SRE
Model	GMG M 1400	
Capacity	1,400 kg frontal movement 300 kg sideways movement	
Telescopic System: Extension: Boom Angle Boom Type Lifting height middle suction frame vertical Lifting height middle suction frame horizontal Table Height	1,830 mm 660 - 2,420 mm before the bumper - 90° / +45° Automatically 5,100 mm (with raised carriage) 4,200 mm 950 mm	
Suction: Suction in square Suction in line	L 830 x W 830 mm to L 1,200 x W 1,200 mm L 920 to 1,550 mm	
Pane vertical dimensions max.	L 3,200 x W 3,200 mm	
Pane horizontal dimensions max.	L 1,700 x W 1,700 mm	
Suction Cups: Turning Angle: Tilt Angle: Lifting Tower Vertical Precision Lifting	Ø 4 x 400 mm, 2-circle system 180° automatically 90°	
Horizontal Precision Lifting	75 mm	
<u>Carriage</u> Drive Wheels	Chains, fully adjustable, electric, all-terrain	
Motor: Type Power	Battery drive 24 V - 180 Ah Electric 24 V with 220 V / 110 V - Charger lasting time 3 - 4 working days on a single charge	
Dimensions: L x W x H in mm (Carriage) L x W x H in mm (overall)	2,180 x 1,470 - 1,640 x 2,125 2,830 x 1,470 - 1,640 x 2,830 More stability through automatic track widening	
Weight unloaded Incl. counterweight (removable)	2,600 kg 2,800 kg	

See "GMG Options" from page 76

Load limiters

Safety System

Rental Options

Transport

GMG Options



Your multi-purpose machine with many possible options and combinations.

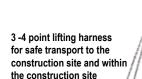
Twin wheels on both sides for driving on uneven ground.





Lateral tilt protection for safe movement on all terrain.







<u>Options</u>		<u>350</u>	<u>575</u>	<u>600</u>	<u>785</u>	<u>1000</u>
① Twin wheels	2 additional foamed wheels for load distribution	х	х	х	х	х
2 Lateral tilt protection	2 booms with support roller, fold-out & secured	х	х	х	х	х
③ Lift truck platform	Steel platform for transport to the construction site and within the construction site, accessible from 2 sides	х	х	х	х	х
④ Lifting harness	3 - 4 point lifting harness for transport to the construction site and within the construction site	х	х	х	х	х
	Further information can be found at	www.heavydriv	e.com			

GMG Options



Load Fork: GMG 575 / GMG 600



Load Hook: GMG 350





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Load Hook: GMG 575 / GMG 1000 Angle adapter: GMG 350



<u>Attachments</u>	Description	<u>350</u>	<u>575</u>	<u>600</u>	<u>785</u>	<u>1000</u>
① Load fork	300 kg capacity, L 660 x W 600 H 960 mm	х	х	х	х	х
② Load hook	Receiving device with swivel hook	х	-	-	-	-
③ Load hook	Receiving device with swivel hook		х	х	х	х
Remote control radio	Wireless control panel with practical carrying strap, rechargeable battery	х	х	х	х	х
⑤ Angle adapter	Adapter for placing panes on tables	х	-	-	-	-
	Further information can be found at	www.heavydrive	.com			

VSGU - 3 - Axis - Overhead manipulator for assembly cranes or loading cranes for panes - up to 2,500 kg capacity

Up to 600 kg capacity for light panes

Up to 1,600 kg capacity for medium to heavy panes

Up to 2,500 kg capacity for heavy panes

Glass mounting at Hans-Peter Porsche Traumwerk, Berchtesgaden, Germany

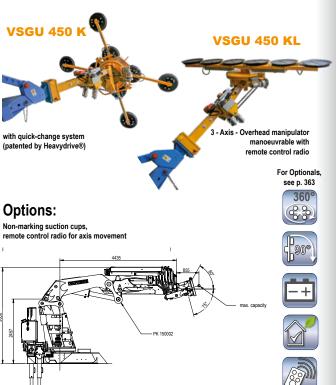




Victoriei Office Building in Bucharest, Romania



VSGU - 3 - Axis - Overhead manipulator for assembly cranes or loading cranes for light panes - up to 600 kg capacity



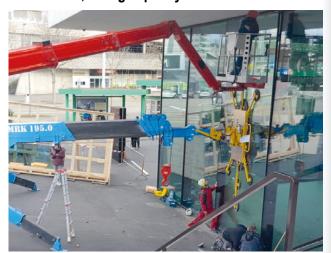


	VSGU - Lightweight Overhead Assembly Solution				
Model	<u>VSGU 300 K</u>	<u>VSGU 300 K</u> <u>VSGU 450 KL</u> <u>VSGU 600 K</u>			
Capacity	300 kg 450 kg 600 kg				
Suction Cups	6	6	8		
Net Weight	150 kg	150 kg	170 kg		
Function: Rotate Tip Tilt angle up/down	360° motorised 30° left / right motorised 110° motorised				
Dimensions: L x W x H in mm	1,000 x 400 x 500				
Motor	Battery-powered 12 V				
Transport	On trolley				
Options	Adapter to crane boom				
		Adaptable suction system	em		





VSGU - 3 - Axis - Overhead manipulator for assembly cranes or loading cranes for moderately heavy panes - up to 1,600 kg capacity



Manipulator VSGU1600K and assembly crane MRK 195 in action: 1.2 t pane, glazing under protrusion (St. Jakobshalle in Basel, Switzerland)



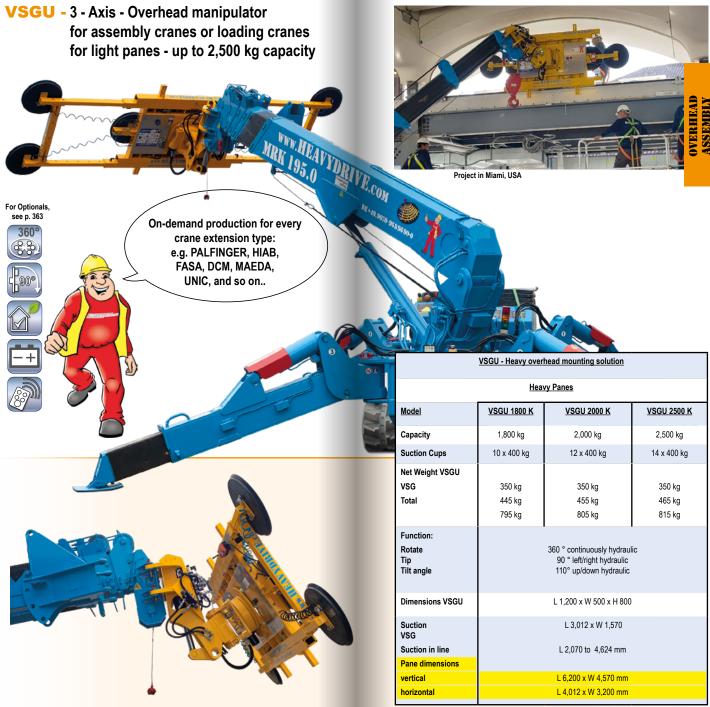


BV Miami Aventura Mall, USA

VSGU - Heavy Overhead Assembly Solution				
	<u>Moderatel</u>	y heavy panes		
<u>Model</u>	<u>VSGU 900 K</u>	<u>VSGU 1200 K</u>	<u>VSGU 1600 K</u>	
Capacity	900 kg	1,200 kg	1,600 kg	
Suction Cups	12 x 150 kg	2 x 150 kg + 6 x 400 kg	6 x 150 kg + 6 x 400 kg	
Net Weight VSGU VSG Total	125 kg 135 kg 260 kg	165 kg 130 kg 295 kg	165 kg 135 kg 300 kg	
VSGU dimension in mm	L 1,270 x W 800 x H 640	L 1,050 x W 670 x H 620	L 1,050 x W 670 x H 620	
Function: Rotation Swivelling Tilting	360 ° fully rotating motor 30 ° left / right hydraulic 110° hydraulic up / down			
Dimensions VSGU		L 1,270 x W 800 x H 640		
Suction VSG	L 2,040 x W 1,080 mm to L 3,340 x W 1,560 mm			
Suction in line Pane dimensions	L 2,040 to 3,340 mm			
vertical		L 6,340 x W 4,560 mm		
horizontal	L 4,340 x W 2,560 mm			

Assembly of VSGU on crane booms





Meavyorty@.com

7-axis manipulator

The ALL-ROUNDER FOR EVERYONE



Optional: Radio Remote Control

Further 4 axes are made available by Merlo, Manitou, Hiab, Cramer etc.

Extremely low overhead suction point of 1m above the floor



7-axis manipulator with remote control to accommodate using an indoor or all-terrain telescopic forklift.

The manipulator can be mounted very easily by placing the forklift in the forklift pockets at the bottom of the unit or by using the automatic forklift hook. The axles can be controlled by a single person by a radio remote control.

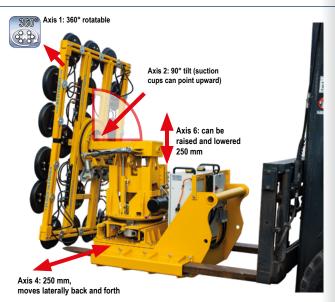
Once secured, it will be ready to go.

The correct suction system on the manipulator is determined in advance with our technicians.

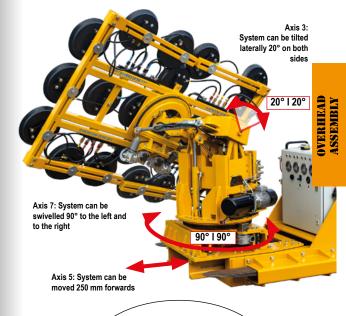








Model	VSG STU 500 K	<u>VSG STU</u> 1000 K	<u>VSG STU</u> <u>1500 K</u>	<u>VSG STU</u> 2000 K
1st Axis:	VSG suction sy	stem motorised	full 360° turning	
2nd Axis:	VSG suction sy vertical with an		pivoting 0-100°, 0°	horizontal to 90°
3rd Axis:			the left / 20° to the of the telescopic for	
4th Axis:	Side-shift hydra	aulic movement l	eft / right 250 mm	
5th Axis:	Hydraulic forwa 250mm	ard / backward m	ovement of the suc	ction manipulator
6th Axis:	Hydraulic raisir by 250 mm	Hydraulic raising / lowering of the manipulator by 250 mm		
7th Axis	Manipulator rotating tower 90° to the left or 90° to the right for lateral transport, e.g. through gates or side glazing			
Net Weight in kg	1,000			
Operation	all axes can be moved simultaneously with radio remote control			
Battery drive	24 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)			
Storage & transportation	loaded with forklift			
Connection to telescopic lift truck manual	Forklift pockets on the side of the device, mechanically secured by screws			
Connection to telescopic lift truck automatic	Placement into fork lifter hook, hydraulically screwed			
Transport dimensions in mm	L 2,050 x W 1,200 x H 1,600 with suction frame, basic unit H 1,000			
Deepest over-head suction size	unbeatable 1,1	30 mm above gr	ound	







Find more images and videos of our devices in action at www.heavydrive.com

Suction frame Model S2	VSG 2000 K MH L
Capacity	2,000 kg
Suction Cups	20 x T15
Pane vertical dimensions max.	5,660 x 3,530 mm
Pane horizontal dimensions max.	4,660 x 2,530 mm
Suction area (LxW) in mm (base frame)	2,150 x 1,200
Suction area (LxW) in mm with attachment arms	3,660 x 1,530
Safety System	4-circuit system
Battery	24 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)



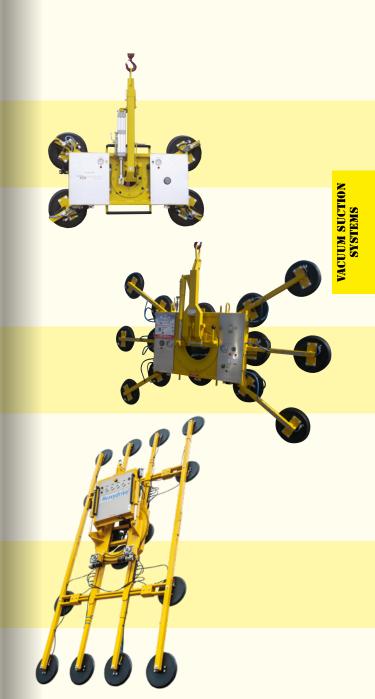


For flat and curved panes, coated and porous panes, panels and glass fins

- VSG for light panes
Vacuum suction system up to 900 kg capacity

- VSG for medium weight panes
Vacuum suction systems up to 1,500 kg capacity

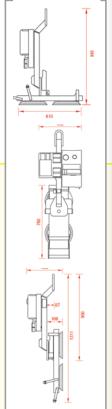
- VSG for heavy panes
Vacuum suction system over 2,000 kg capacity



VS[©] 135 **P**L - Vacuum suction system Up to 135 kg capacity – rotating



Dimensions of VSG 135 PL in mm



Particularly suited for mounting thin and curved panes (e.g. windscreens)



View all suction systems from p.354 for a better comparison.

Model	VSG 135 PL
Capacity	135 kg
Suction Cup	2 x T13
Weight	34 kg
Overall depth in mm	400
Pane vertical dimensions max.	2,610 x 1,210 mm
Pane horizontal dimensions max.	1,610 x 1,210 mm
Suction (L x W) in mm	610 x 210
Tilting / rotation	90° manually / 90° to the left and to the right
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley

Improve performance, safety and durability with: cupcleaner.heavydrive.com



VS© 3000 **K** - Vacuum suction system Up to 300 kg capacity







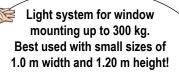




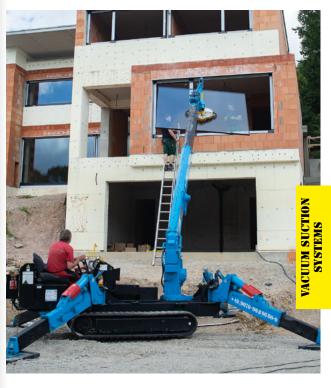












View all suction systems from p.354 for a better comparison.

<u>Model</u>	VSG 300 K
Capacity	300 kg
Suction cup	4 x T15, individually lockable
Weight	34 kg
Overall depth in mm	200
Pane vertical dimensions max.	2,900 x 1,680 mm
Pane horizontal dimensions max.	1,900 x 1,680 mm
Suction (LxW) in mm	900 x 680
Suction (LxW) in mm with extension arms	-
Tilt / Turn / Lock	90° / 360° / 45° manually
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Accessories	830 mm long load arm
Optional	570 mm short load arm
Storage & Transport	On trolley

VSG 320 PL





VS© 320 № - Vacuum suction system for building sites, up to 320 kg capacity



Panes up to 320 kg

LIGAYYQITIYA.com

Rotates 360° and tilts 90°





New Edeka building in Dillingen



Find more images and videos of our devices in action at www.heavydrive.com

<u>Model</u>	VSG 320 PL
Capacity	320 kg
Suction Cup	4 xT 13
Weight	34 kg
Overall depth in mm	233
Pane vertical dimensions max.	3,290 x 1,305 mm
Pane horizontal dimensions max.	2,290 x 1,305 mm
Suction (LxW) in mm	1,290 x 305
Tilt / Turn / Lock	90° / 180° / 90° manually
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	Aluminium case



Depth 230 mm







<u>Model</u>	<u>VSG 320 P</u>
Capacity	320 kg
Suction Cup	4 x T13
Weight	58 kg
Overall depth in mm	283
Pane horizontal dimensions max.	2,769 x 3,642 mm
	1,769 x 1,642 mm
Suction (LxW) in mm	769 x 642
Suction (LxW) in mm with extension arms	1,643 x 1,152
Tilt / Turn / Lock	90° / 360° / 90° manually
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)

On trolley

Storage & Transport

Vacuum suction unit for glass panes weighing up to 450 kg, rotates 360°, automatically lockable every 45°, swings out 90°.

Secured by a dual-circuit vacuum system.





View all suction systems from p.354 for a better comparison

Model

Capacity Suction cup

Weight

Overall depth in mm Pane vertical dimensions max.

Suction (L x W) in mm

(base frame)

Suction (L x B) in mm with extension arms Tilt / Turn / Lock

Safety

Battery Pack

Storage & Transport

Pane horizontal dimensions max.



For Optionals,
see p. 363











For Optionals, see p. 363

Suitable for

window mounting from 1 x 1.2 m to 2.5 x 2.5 m













160 mm

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<u>Model</u>	VSG 450 KS (extra flat)
Capacity	450 kg
Suction Cup	6 x T15
Weight	60 kg
Overall depth in mm	160 mm
Pane vertical dimensions max.	3,300 x 2,780 mm
Pane horizontal dimensions max.	2,300 x 1,780 mm
Suction (L x W) in mm	1,300 x 780 mm
Suction (L x B) in mm with extension arms	-
Tilt / turn / lock	90° / 360° / 90° manually
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley

On trolley

VSG 450 K 450 kg

6 x T15

45 kg 200

3.900 x 2.500 mm

1,900 x 1,680 mm

90° / 360° / 45° manually

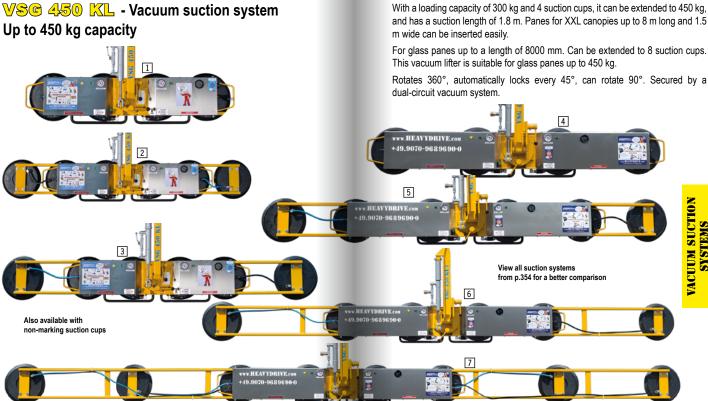
12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)

900 x 680

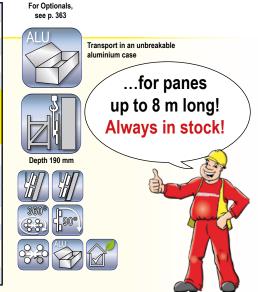
2.100 x 680

2-circuit system

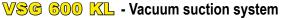


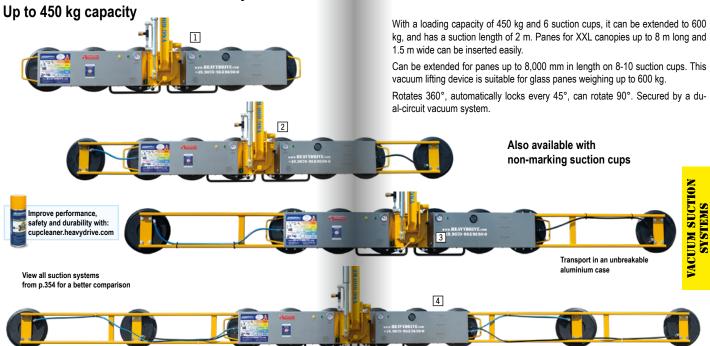


Model	450 KL 2	450 KL 3	450 KL 4		450 KL 6
Capacity	450 kg				
Suction Cup		4 - 8 x T15, in	dividually lockable ar	ms	
Weight	40 kg	55 kg	60 kg		80 kg
Overall depth in mm			190		
Pane vertical dimensions max.	4,000 x 2,300 mm	5,000 x 2,300 mm	6,000 x 2,300 mm		8,000 x 1,300 mm
Pane horizontal dimensions max.	3,000 x 1,300 mm	4,000 x 1,300 mm	5,000 x 1,300 mm		7,000 x 1,300 mm
Suction (LxW) in mm	1,330 x 300	1,330 x 300	4 2,000 x 300		2,000 x 300
Suction (LxW) in mm with extension arms	2 2,000 x 300	3 3,000 x 300	5 4,000 x 300	-	6 5,000 x 300 7 6,000 x 300
Tilt / Turn / Lock	90° / 360° / 90° manually				
Safety	2-circuit system				
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)				
Storage & Transport	Aluminium case				









Model	600 KL 2	600 KL 4	600 KL 6
Capacity	600 kg		
Suction Cup		6 - 10 x T15	
Weight	82 kg	101 kg	116 kg
Overall depth in mm		190	
Pane vertical dimensions max.	4,000 x 2,300 mm	6,000 x 2,300 mm	8,000 x 2,300 mm
Pane horizontal dimensions max.	3,000 x 1,300 mm	5,000 x 1,300 mm	5,000 x 1,300 mm
Suction (LxW) in mm	1 2,000 x 300	2,000 x 300	2,000 x 300
Suction (L x B) in mm	-	2 4,000 x 300	3 5,000 x 300
with extension arms		1,000 x 000	4 6,000 x 300
Tilt / Turn / Lock	90° / 360° / 90° manually		
Safety	2-circuit system		
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)		
Storage & Transport	Aluminium case		



VS ■ 500 ■ - Vacuum suction system Up to 500 kg Capacity

Adjustable thanks to its extension arms, this vacuum suction lifter is suitable for glass panes of up to 500 kg and 6000 mm in length. Rotates 360°, automatically locks every 45°, can rotate 90°.

Secured by a dual-circuit vacuum system. Transported on a trolley.

Also available with non-marking cups for coated panes.





Find more images and videos of our devices in action at www.heavydrive.com

View all suction systems from p.354 for a better comparison

<u>Model</u>	<u>VSG 500 P</u>
Capacity	500 kg
Suction Cup	8 x T13
Weight	91 kg
Overall depth in mm	290 mm
Pane vertical dimensions max.	4,118 x 3,829 mm
Pane horizontal dimensions max.	3,118 x 2,829 mm
Suction (LxW) in mm	1,188 x 829
Suction (LxW) in mm	2,330 x 1,490 or
with extension arms	(optional 4,050 x 700)
Tilt / Turn / Lock	90° / 360° / 45° manually
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous
	use, without recharging (recharging via 220V plug)
Storage & Transport	On trolley













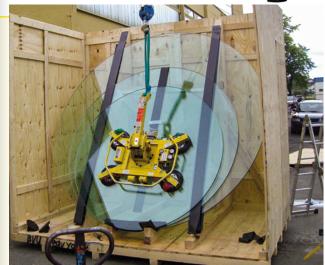




For panes up to 6000 mm long!

24 hour delivery across Europe!





Meavyon ve.com

VS © 6000 **K** - Vacuum suction system Up to 600 kg capacity



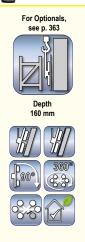
With 4 arms that can be added or removed instantly.

VS © 600 **KS** - Extra narrow version Up to 600 kg capacity



Model	VSG 600 K
Capacity	600 kg
Suction Cup	8 x T 15
Weight	65 kg
Overall depth in mm	200
Pane vertical dimensions max.	4,200 x 3,300 mm
Pane horizontal dimensions max.	3,200 x 2,300 mm
Suction (L x W) in mm (base frame)	810 x 700
Suction (LxW) in mm with extension arms	2,200 x 1,300
Tilt / Turn / Lock	90°/ 360° / 90° manually
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley





<u>Model</u>	VSG 600 KS (Extra slim)
Capacity	600 kg
Suction Cup	8 x T15
Weight	105 kg
Overall depth in mm	160 mm
Pane vertical dimensions max.	4,400 x 3,300 mm
Pane horizontal dimensions max.	3,400 x 2,300 mm
Suction (LxW) in mm (Base frame)	1,300 x 780
Suction (LxW) in mm with extension arms	2,400 x 1,300
Tilt / Turn / Lock	90° / 360° / 90° manually
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley



VS[©] **750 KS** - Extra narrow version Up to 750 kg capacity



Perfectly suited to glazing behind a scaffolding

<u>Model</u>	VSG 750 KS (extra flat)
Capacity	750 kg
Suction Cup	10 x T15
Weight	120 kg
Overall depth in mm	160 mm
Pane vertical dimensions max.	4,140 x 3,360 mm
Pane horizontal dimensions max.	3,140 x 2,360 mm
Suction (LxW) in mm	1,300 x 780
(Base frame)	
Suction (LxW) in mm with extension arms	2,140 x 1,360
Tilt / Turn / Lock	90° / 360° / 90° manually
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley

VS © 900 KS - Extra narrow version Up to 900 kg capacity



Perfect glazing even behind scaffolding due to the small depth of only 160 mm!

View all suction systems from p.354 for a better comparison



nparison.	
Model	VSG 900 KS (extra flat)
Capacity	900 kg
Suction Cup	12 xT15
Weight	140 kg
Overall depth in mm	160 mm
Pane vertical dimensions max.	4,350 x 3,170 mm
Pane horizontal dimensions max.	3,350 x 2,170 mm
Suction (LxW) in mm (Base frame)	1,300 x 780
Suction (LxW) in mm with extension arms	2,350 x 1,170
Tilt / Turn / Lock	90° / 360° / 90° manually
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharching (recharging via 220 V plug)
Storage & Transport	On trolley

For Optionals,

Depth





Find more images and videos of our devices in action at www.heavydrive.com

View all suction systems from p.354 for a better comparison

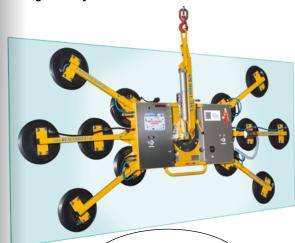
Model	<u>VSG 1000 K H</u>
Capacity	1,000 kg
Suction Cup	14 x T15, individually lockable
Weight	180 kg
Overall depth in mm	380
Pane vertical dimensions max.	3,330 x 3,192 mm
Pane horizontal dimensions max.	2,330 x 2,192 mm
Suction (L x W) in mm (base frame)	1,125 x 862
Suction (LxW) in mm with extension arms	3,330 x 1,192
Tilt / Turn / Lock	90° hydraulically / 360° fully, / 90° manually
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley



VSG 1000 KS - Extra narrow version

This model is very similar to the 1000 K H model. Its only difference is that **it is significantly thinner.**

LIGAYYQITIVO.com



The suction cups can each be continuously adjusted!





Model	VSG 1000 KS (extra flat)
Capacity	1,000 kg
Suction Cup	14 x T15
Weight	180 kg
Overall depth in mm	220 mm
Pane vertical dimensions max.	4,800 x 3,600 mm
Pane horizontal dimensions max.	3,800 x 2,600 mm
Suction (LxW) in mm	1,500 x 1,500 mm
(Base frame)	
Suction (LxW) in mm with extension arms	2,800 x 1,600 mm
Tilt / Turn / Lock	90° manually lowering cylinder / 360° fully and manually, 90° lockable
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley





View all suction systems from p.354 for a better comparison



Find more images and videos of our devices in action at www.heavydrive.com

Model S1	<u>VSG 1000 K MH</u>
Capacity	1,000 kg
Suction Cup	14 x T15, individually lockable
Weight	206 kg
Overall depth in mm	313
Pane vertical dimensions max. in mm	4,998 x 3,290
Pane horizontal dimensions max. in mm	3,998 x 2,290
Suction (L x W) in mm (base frame)	1,363 x 1,290
Suction (LxW) in mm with extension arms	2,998 x 1,290
Tilting / rotation	90° / 360° motorized rotation
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley

For Optionals, see p. 363

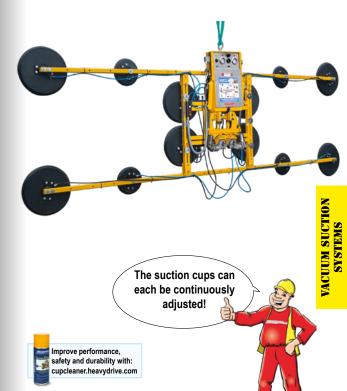












P counterweight system	
Model S1	<u>VSG 1000 K MH 5</u>
Capacity	1,000 kg
Suction Cup	14 x T15, individually lockable
Weight	230 kg
Overall depth in mm	313
Pane vertical dimensions max. in mm	6,900 x 3,740
Pane horizontal dimensions max. in mm	5,900 x 2,740
Suction (LxW) in mm with extension arms	4,900 x 1,740
Suction (L x W) in mm (base frame)	1,363 x 1,290
Tilting / rotation	90° / 360° full rotation / 90° lockable
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley

Optional with





Can be rotated and tilted by remote control, either by motor or hydraulically!

No purchase necessary -

rent at a low cost!

<u>Model</u>	VSG 1200 K H	<u>VSG 1200 K MH</u>
Capacity	1,200 kg	
Suction Cup	16 x T15, indivi	dually lockable
Weight	240 kg	
Overall depth in mm	380	
Pane vertical dimensions max.	4,800 x 2,862 mm	
Pane horizontal dimensions max.	3,800 x 1,862 mm	
Suction (L x W) in mm (base frame)	1,125 x 862	
Suction (LxW) in mm with extension arms	2,800 x 862	
Pivoting	90° hydraulically by remote control	
Rotation / locking	360° manually / 90° lockable	360° fully motorised
Safety	2-circuit system	
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)	
Storage & Transport	On trolley	

VS© 1350 KS - Extra narrow version up to 1,350 kg capacity **★**





in action at www.heavydrive.com



For Optionals, see p. 363 View all suction systems from p.354 for a better comparison

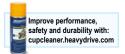


Model	VSG 1350 KS (extra flat)
Capacity	1,350 kg
Suction Cup	14 x T15
Weight	180 kg
Overall depth in mm	220
Pane vertical dimensions max.	4,500 x 3,600 mm
Pane horizontal dimensions max.	3,500 x 2,600 mm
Suction (LxW) in mm	1,500 x 1,500
(Base frame)	
Suction (LxW) in mm with extension arms	2,500 x 1,600
Tilt / Turn / Lock	90° manually lowering cylinder / 360° continuously and manually, 90° lockable
Safety	4-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley

VSG 1500 K MH L

Up to 1,500 kg capacity







VSG 1500 K MH L

Can be rotated and tilted by remote control

Model S2

	ptionals, p. 363
<u>\(\)</u>	3



Easy to handle via remote control

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MOGET 32	<u>V3G 1300 K WIT L</u>
Capacity	1,500 kg
Suction Cup	10 x T15 / 4 x T40
Weight	305 kg
Overall depth in mm	380
Pane vertical dimensions max.	6,000 x 3,300 mm
Pane horizontal dimensions max.	5,000 x 2,300 mm
Suction (L x W) in mm (base frame)	1,750 x 1,300
Suction (LxW) in mm with extension arms	4,000 x 1,300
Tilting / rotation	90 ° hydraulically / 360° full motor driven by remote control
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley

VSG 1500 KS - Extra narrow version Up to 1,500 kg capacity





Extra narrow: With a depth of only 220 mm this system fits comfortably between the scaffolding and the façade!

<u>Model</u>	VSG 1500 KS (extra flat)
Capacity	1,500 kg
Suction Cup	6 x T15 + 6 x T40
Weight	270 kg
Overall depth in mm	220, Extra Narrow!
Pane vertical dimensions max.	4,900 x 3,560 mm
Pane horizontal dimensions max.	3,900 x 2,560 mm
Suction (L x W) in mm (base frame)	2,070 x 1,070
Suction (LxW) in mm with extension arms	2,900 x 1,560
Tilting / rotation	90° manually lowering cylinder / 360° fully and manually, 90° lockable
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley

VACUUM SUCTION SYSTEMS

VSG 2000 K MH L

Up to 2,000 kg capacity





Improve performance, safety and durability with: cupcleaner.heavydrive.com

Both models: Fully automatically rotatable via remote control



Find more images and videos of our devices in action at www.heavydrive.com

View all suction systems from p.354 for a better comparison.



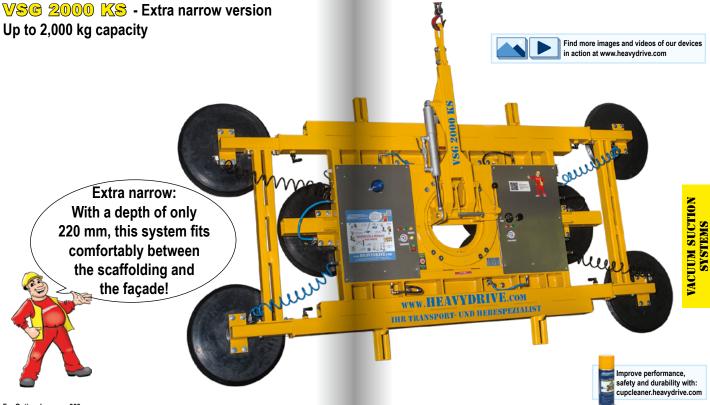
Model S2	VSG 2000 K MH L
Capacity	2,000 kg
Suction Cup	16x T15 + 4 x T40
Weight	305 kg
Overall depth in mm	380
Pane vertical dimensions max.	5,660 x 3,530 mm
Pane horizontal dimensions max.	4,660 x 2,530 mm
Suction (L x W) in mm (base frame)	2,150 x 1,200
Suction (LxW) in mm with extension arms	3,660 x 1,530
Tilting / rotation	90° hydraulic / 360° full motor driven by remote control
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley







Model S2	VSG 2000 K MH L 5
Capacity	2,000 kg
Suction Cup	16 x T15 + 4 x T40
Weight	305 kg
Overall depth in mm	380
Pane vertical dimensions max.	7,280 x 4,220 mm
Pane horizontal dimensions max.	6,280 x 3,220 mm
Suction (L x W) in mm (base frame)	2,150 x 1,200
Suction (LxW) in mm with extension arms	5,280 x 2,220
Tilting / rotation	90° hydraulically / 360° continuous motor driven by a remote control
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley



For Optionals, see p. 363



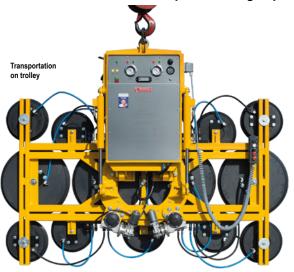
VSG 2000 KS in use in Miami, USA



View all suction systems from p.354 for a better comparison

Model	VSG 2000 KS (extra flat)
Capacity	2,000 kg
Suction Cup	10 x T40, individually lockable
Weight	515 kg
Overall depth in mm	220
Pane vertical dimensions max.	5,630 x 3,576 mm
Pane horizontal dimensions max.	4,630 x 2,576 mm
Suction (L x W) in mm (base frame)	2,070 x 1,576
Suction (LxW) in mm with extension arms	3,630 x 1,576
Tilting / rotation	90° manually with lowering cylinder / 360° continuously and manually, 90° lockable
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley



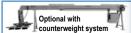


For Optionals, see p. 363









Easy to handle

via wired remote control	
Model S3	<u>VSG 2000 K MH</u>
Capacity	2,000 kg
Suction Cup	10 x T15 + 4 x T40, individually adjustable
Weight	400 kg
Overall depth in mm	380
Pane vertical dimensions max.	6,000 x 3,300 mm
Pane horizontal dimensions max.	4,000 x 1,300 mm
Suction (LxW) in mm (Base frame)	1,750 x 1,300
Suction (LxW) in mm with extension arms	4,000 x 1,300
Tilting / rotation	90° hydraulic / 360° motor driven via remote control
Safety	4-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley

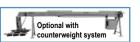
VSC 2500 K MH = Vacuum suction system Up to 2,500 kg capacity



For Optionals, see p. 363











Find more images and videos of our devices in action at www.heavydrive.com

View all suction systems from p.354 for a better comparison

Model S3	<u>VSG 2500 K MH</u>
Capacity	2,500 kg
Suction Cup	12 x T40, individually lockable
Weight	600 kg
Overall depth in mm	380
Pane vertical dimensions max.	8,700 x 3,650 mm
Pane horizontal dimensions max.	7,700 x 2,650 mm
Suction (L x W) in mm (base frame)	3,400 x 2,650
Suction (LxW) in mm with extension arms	6,700 x 1,650
Tilting / rotation	90° hydraulic / 360° motor driven via remote control
Safety	4-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley

LIGHTYCHTYG.com



Model S3	VSG 3000 K MH
Capacity	3,000 kg
Suction Cup	12 x T40
Weight	680 kg
Overall depth in mm	420 mm
Pane vertical dimensions max.	6,090 x 4,000 mm short arms 7,890 x 4,000 mm long arms
Pane horizontal dimensions max.	5,090 x 3,000 mm short arms 6,890 x 3,000 mm long arms
Suction (LxW) in mm min. (base frame)	2,250 x 1,500
Suction (LxW) in mm max. with extension arms	4,090 x 2,000 short arms 5,890 x 2,000 long arms
Tilting / rotation	90° hydraulically / 360° continuous motor driven by a remote control
Safety	4-circuit system
Battery Pack	2 x 12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley

VS© 3500 **K MH** = Up to 3,500 kg capacity



View all suction systems from p.354 for a better comparison

Storage & Transport



For Optionals, see p. 363

Optional with counterweight system













On trolley





New Headquarters of Real Madrid

View all suction systems from p.354 for a better comparison.

Model S3	VSG 3500 K MH
Capacity	3,500 kg
Suction Cup	12 x T40
Weight	1,100 kg
Overall depth in mm	380
Pane vertical dimensions max.	11,700 x 3,970 mm
Pane horizontal dimensions max.	9,673 x 2,970 mm
Suction (LxW) in mm	4,143 x 1,970
(Base frame)	
Suction (L x W) in mm with extension arms	8,673 x 1,970
Tilting / rotation	90° hydraulically / 360° continuously motorised
Safety	4-circuit system
Battery Pack	2 x 12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	on transport rack





Pavement café in Trieste



Find more images and videos of our devices in action at www.heavydrive.com





Mounting of 9x3 m-pane SNEGIRI-ECO in Moscow at -10°C

Perfectly suited for huge panes up to 9 m long, up to 3.8 m wide and weighing up to 4,500 kg.

Choose the highest safety standards with a 4-circuit system!

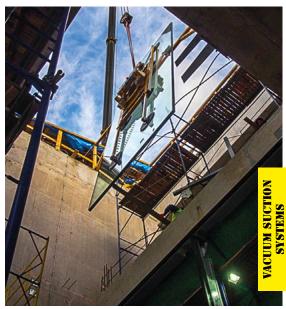


For Optionals, see p. 363

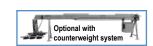


Easy to handle via





Mounting of 9x3 m-pane SNEGI-RI-ECO in Moscow at -10°C



View all suction systems from p.354 for a better comparison.

Tien an Subtract Systems from p. 5004 for a Sector Companion.	
Model S4	VSG 4500 K MH
Capacity	4,500 kg
Suction Cup	16 x T40
Weight	1,350 kg
Overall depth in mm	550
Pane vertical dimensions max.	9,000 x 3,810 mm
Pane horizontal dimensions max.	8,000 x 2,810 mm
Suction (LxW) in mm	4,300 x 1,810
(Base frame)	
Suction (LxW) in mm with extension arms	7,000 x 1,810
Tilting / rotation	90° hydraulically / 360° fully motor driven by remote control
Safety	4-circuit system
Battery Pack	2 x 12 V, 3-4 days continuous use, on a single charge (recharging via 220 V plug)
Storage & Transport	on transport rack

VSC 5000 K MH - Up to 5,000 kg capacity



Deployment at a Mormon church in Salt Lake City

Currently the BIGGEST SYSTEM on the market! E Lifts, rotates and pivots panes up to 24 metres in length, 3.2 m wide and weighing up to 5,000 kg with the highest level of safety and precision! 24 hour delivery!



LIGAYYOLTIVO.com

Deployment at a Mormon church in Salt Lake City





View all suction systems from p.354 for a better comparison.

Model S4	VSG 5000 K MH
Capacity (Glass)	5,000 kg
Suction Cup	20 x T40
Weight	2,500 kg
Overall depth in mm	550
Pane vertical dimensions max.	14,073 x 4,200 mm short arms 20,073 x 4,200 mm long arms
Pane horizontal dimensions max.	13,073 x 3,200 mm short arms 19,073 x 3,200 mm long arms
Suction (LxW) in mm (Base frame)	6,123 x 1,900
Suction (L x W) in mm with extension arms	12,073 x 2,200 short arms 18,073 x 2,200 long arms
Tilt / Turn / Lock	90° hydraulically / 360° continuously - motorised
Safety	4-circuit system
Battery Pack	2 x 12 V, 3-4 days continuous use, on a single charge (recharging via 220 V plug)
Storage & Transport	on transport rack



VS © 6000 **K** MH - Up to 6,000 kg capacity



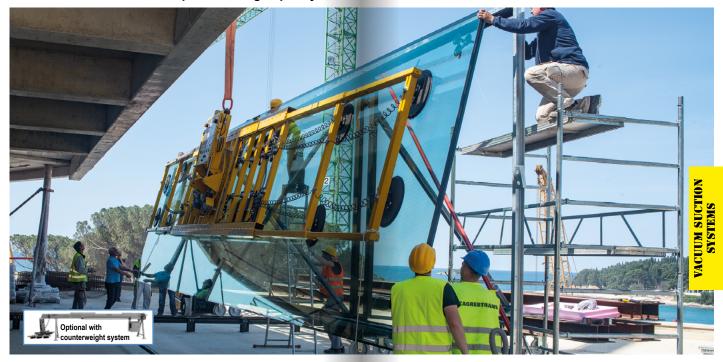
Model S4	<u>VSG 6000 K MH</u>
Capacity (Glass)	6,000 kg
Suction Cup	20 x T40
Weight	2,500 kg
Overall depth in mm	550
Pane vertical dimensions max.	14,073 x 4,200 mm short arms 20,073 x 4,200 mm long arms
Pane horizontal dimensions max.	13,073 x 3,200 mm short arms 19,073 x 3,200 mm long arms
Suction (LxW) in mm (Base frame)	6,123 x 1,900
Suction (LxW) in mm with extension arms	12,073 x 2,200 short arms 18,073 x 2,200 long arms
Tilt / Turn / Lock	90° hydraulically / 360° continuously motorised
Safety	4-circuit system
Battery Pack	2 x 12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	on transport rack

The unit can
vertically rotate and tilt
glass panes and even completely
prefabricated façade elements by
90 degrees via remote control.

This makes it possible, for example,
to mount the glass plate flat
into the frame.

View all suction systems
from p.354 for a better comparison.

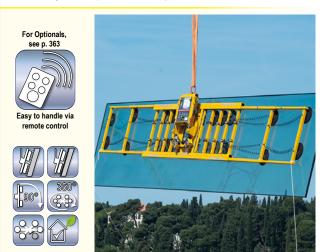




Model S5	VSG 8000 K MH
Capacity (Glass)	8,000 kg
Suction cup	32 x T40
Weight	2,700 kg
Overall depth in mm	550
Pane vertical dimensions max.	16,073 x 4,200 mm short arms 22,073 x 4,200 mm long arms
Pane horizontal dimensions max.	15,073 x 3,200 mm short arms 21,073 x 3,200 mm long arms
Suction (LxW) in mm (Base frame)	8,123 x 1,900
Suction (LxW) in mm with extension arms	14,073 x 2,200 short arms 20,073 x 2,200 long arms
Tilt / Turn / Lock	90° hydraulically / 360° continuously motorised
Safety	4-circuit system
Battery Pack	2 x 12 V, 3-4 days continuous use, without recharching (recharging via 220 V plug)
Storage & Transport	on transport rack



View all suction systems from p.354 for a better comparison.

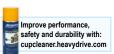






View all suction systems from p.354 for a better comparison.

Model S5	<u>VSG 10000 K MH</u>
Capacity (Glass)	10,000 kg
Suction Cup	40 x T40
Weight	3,800 kg
Overall depth in mm	690
Pane vertical dimensions max.	16,073 x 4,200 mm short arms 22,073 x 4,200 mm long arms
Pane horizontal dimensions max.	15,073 x 3,200 mm short arms 21,073 x 3,200 mm long arms
Suction (LxW) in mm (Base frame)	8,123 x 1,900
Suction (LxW) in mm with extension arms	14,073 x 2,200 short arms 20,073 x 2,200 long arms
Tilt / Turn / Lock	90° hydraulically / 360° continuously motorised
Safety	4-circuit system
Battery Pack	2 x 12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	on transport rack



For Optionals, see p. 363



Easy to handle via remote control











Jumbo panes are the current trend! Heavydrive is constantly expanding its portfolio to meet the highest demands. Now up to 10 t.



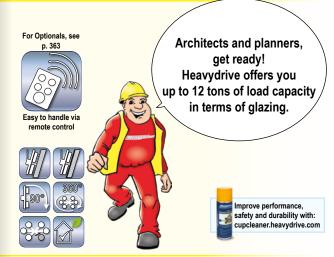




Model S5	VSG 12.000 K MH
Capacity (Glass)	12,000 kg
Suction Cup	48 x T40
Weight	4,100 kg
Overall depth in mm	690
Pane vertical dimensions max.	16,073 x 4,200 mm short arms 22,073 x 4,200 mm long arms
Pane horizontal dimensions max.	15,073 x 3,200 mm short arms 21,073 x 3,200 mm long arms
Suction (LxW) in mm (Base frame)	8,123 x 1,900
Suction (LxW) in mm with extension arms	14,073 x 2,200 short arms 20,073 x 2,200 long arms
Tilt / Turn / Lock	90° hydraulically / 360° continuously motorised
Safety	4-circuit system
Battery Pack	2 x 12 V, 3-4 days continuous use, without recharching (recharging via 220 V plug)
Storage & Transport	on transport rack



View all suction systems from p.354 for a better comparison.





VSG 270 - 1000 KR -

from 270 to 1,000 kg of load capacity

Suction systems for panes weighing from 200 to 1,000 kg for external and internal radii from 450 mm (concave or convex curved and wavy panes).

These systems are adaptable to any pane size.

Adjustable to fit on the pane by slidable and rotatable suction cups and by using different attachment arms



For Optionals, see p. 363









800 kg Messe Bau, Munich



View all suction systems from p.354 for a better comparison.



Model Series G1	VSG 270/405 PLR	VSG 400 KR	VSG 600 KR	VSG 800 KR	VSG 1000 KR
Capacity	270/ 405 kg	400 kg	600 kg	800 kg	1,000 kg
Suction Cup	4 x T13 / 6 x T13	16 x T5	24 x T5	32 x T5	40 x T5
Weight	34 / 38 kg	220 kg	276 kg	320 kg	420 kg
Overall depth in mm	233		> 380		
Pane vertical/horizontal dimensions max.	2,290 x 1,890 mm	3,200 x 2,600 mm	4,200 x 2,600mm		1
Min. Suction (L x W) in mm (base frame)	1,290 x 254	variable up to 1,200 x 1,000	variable up to 1,200 x 1,000		1,000
Max. Suction (L x W) in mm (base frame)	1,770 x 254	variable up to 2,200 x 1,600	variable up to 3,200 x 1,600		
Tilting / rotation	90° / 180°	90° hydraulically / 360° full rotation using remote control			rol
Safety	2-circuit system	Warning device: dual-circuit vacuum system			em
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)				
Storage & Transport	Aluminium case	On trolley			

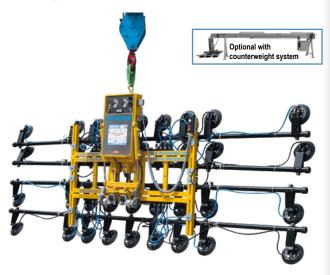
VSG 1000 KR - VSG 1500 KR

Up to 1,500 kg capacity

The system can be used with a sliding suspension eyelet of up to 250 mm!

These systems can also be operated using an adapter plate with a counterweight (see page 198).

Additionally, an optional forklift-shoe adapter can be easily screwed to the counter plate.



View all suction systems from p.354 for a better comparison.

view all suction systems from p.3	o from ploot for a better comparison.			
Model Series G2	VSG 1000 KR	VSG 1250 KR	<u>VSG 1500 KR</u>	
Capacity	1,000 kg	1,250 kg	1,500 kg	
Suction Cup	40 x T5	48 x T5	60 x T5	
Weight	456 kg	480 kg	540 kg	
Overall depth in mm	> 380			
Pane vertical/horizontal dimensions max. in mm	4,800 x 2,600	4,800 x 2,600	4,800 x 2,600	
Min. suction (L x W) in mm (base frame)	variable up to 1,800 x 1,000	variable up to 1,800 x 1,000	variable up to 1,800 x 1,000	
Max. Suction (L x W) in mm (base frame)	variable up to 3,800 x 1,600	variable up to 3,800 x 1,600	variable up to 3,800 x 1,600	
Tilting / rotation	90° hydraulically / 360° continuously motor driven by a remote control			
Safety	Warning device: dual-circuit vacuum system			
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)			
Storage & Transport	On trolley			







For curved panes with inside / outside radius from 450 mm









For Optionals, see p. 363



Easy to handle via remote control



Fig. above: Rund 4 Wien, Vienna; Placing 500 kg curved panes

Heavydrive® provides the optimal suction systems for all the challenges of modern architecture!

24 hours delivery



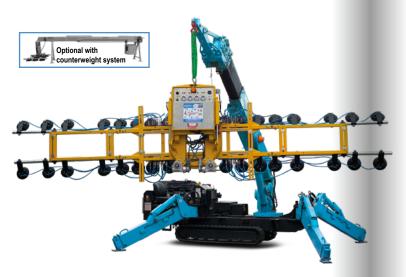




Find more images and videos of our devices in action at www.heavydrive.com

Leavy Crive.com

VSG 1500 KR - VSG 3000 KR



For Optionals, see p. 363



Easy to handle via remote control



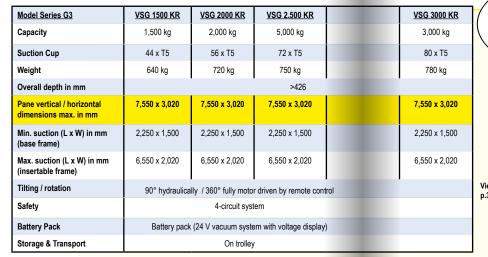
Improve performance, safety and durability with: cupcleaner.heavydrive.com





Flight Chamber Meyer Werft, Papenburg, Germany; VSG 1500 KR





Safe to use
even with extremely large panes
under difficult conditions!
Extractable from the inside and
outside radius!



VSG 3000 KR - VSG 5000 KR





For Optionals, see p. 363

Meavy GMV 9.com



Easy to handle via remote control





cupcleaner.heavydrive.com

These systems can also be operated using an adapter plate with a counterweight (see page 198).





Find more images and videos of our devices in action at www.heavydrive.com

View all suction systems from p.354 for a better comparison.

Model Series G 4	VSG 3000 KR	VSG 3500 KR	VSG 4000 KR		VSG 4500 KR	VSG 5000 KR
Capacity (Glass)	3,000 kg	3,500 kg	4,000 kg		4,500 kg	5,000 kg
Suction Cup	80 x T5	96 x T5	108 x T5		126 x T5	136 x T5
Weight	2,528 kg	2,569 kg	2,600 kg		2,647 kg	2,673 kg
Overall depth in mm			> 556			
Pane vertical / horizontal dimen-	13,073 x 2,200	13,073 x 2,200	13,073 x 2,200		13,073 x 2,200	13,073 x 2,200
sions max. in mm	19,073 x 2,200	19,073 x 2,200	19,073 x 2,200		19,073 x 2,200	19,073 x 2,200
Min. suction (L x W) in mm (base frame)	6,123 x 1,900	6,123 x 1,900	6,123 x 1,900	-	6,123 x 1,900	6,123 x 1,900
Max. suction (L x W) in mm (short	12,073 x 2,200	12,073 x 2,200	12,073 x 2,200		12,073 x 2,200	12,073 x 2,200
/ long extension frames)	18,073 x 2,200	18,073 x 2,200	18,073 x 2,200	-	18,073 x 2,200	18,073 x 2,200
Tilting / rotation	90° hydraulically / 360° fully motor driven by remote control					
Safety	4-circuit system					
Battery Pack	Bat	Battery pack (24 V vacuum system with voltage display			voltage display)	
Storage & Transport		on transport rack				

Safe to use even with extremely large panes under difficult conditions!

Fits easily to inside and outside radius!



Vacuum suction systems for mega-heavy curved panes up to 8,000 kg



VSG 5000 KR = VSG 8000 KR

Shifting the chain hanger eyelets every 250mm possible.

These systems can also be operated using an adapter plate with a counterweight (see page 198).









For Optionals, see







View all suction systems from p.354 for a better comparison.

Model Series G5	VSG 5000 KR	VSG 5500 KR	VSG 6000 KR		VSG 7000 KR	VSG 8000 KR
Capacity (Glass)	5,000 kg	5,500 kg	6,000 kg		7,000 kg	8,000 kg
Suction Cups	136 x T5	152 x T5	160 x T5		188 x T5	216 x T5
Weight	3,793 kg	3,835 kg	3,856 kg		3,928 kg	4,000 kg
Overall depth in mm		> 850			> 850	
Pane vertical /	15,073 x 2,200	15,073 x 2,200	15,073 x 2,200		15,073 x 2,200	15,073 x 2,200
horizontal dimensions max. in mm	21,073 x 2,200	21,073 x 2,200	21,073 x 2,200		21,073 x 2,200	21,073 x 2,200
Min. suction (L x W) in mm (base frame)	8,123 x 1,900	8,123 x 1,900	8,123 x 1,900		8,123 x 1,900	8,123 x 1,900
Max. suction (L x W) in mm (short	14,073 x 2,200	14,073 x 2,200	14,073 x 2,200		14,073 x 2,200	14,073 x 2,200
/ long extension frames)	20,073 x 2,200	20,073 x 2,200	20,073 x 2,200	-	20,073 x 2,200	20,073 x 2,200
Tilting / rotation	90° hydraulically / 360° continuously			motor driven by r	emote control	
Security	4-circuit system					
Battery		Battery pack (24 V vacuum system			with voltage displ	lay)
Storage & transportation		on transport rack				

Safe to use even
with extremely large panes
under difficult conditions!
Shifting the
chain hanger eyelets every
250 mm possible.





VSG 270 - 1000 KRSP -

from 270 to 1,000 kg of load capacity

Suction systems for panes weighing from 200 to 1,000 kg with external and internal radii from 450 mm (spherically curved, convex and concave wavy panes).

These systems are adaptable to any pane size.

Adjustable to fit on the pane by slidable and rotatable suction cups and by using different attachment arms







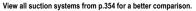






Victoriei Office Building in Bucharest / Romania







Model Series G1	VSG 270/405 RSP	VSG 400 RSP	VSG 600 RSP	VSG 800 RSP	VSG 1000 RSP
Capacity	270/ 405 kg	400 kg	600 kg 800 kg 1,000		1,000 kg
Suction Cup	4 x T13 / 6 x T13	16 x T5	24 x T5	32 x T5	40 x T5
Weight	34 / 38 kg	220 kg	276 kg	320 kg	420 kg
Overall depth in mm	233		> 380		
Pane vertical/horizontal dimensions max.	2,290 x 1,890 mm	3,200 x 2,600 mm	4,200 x 2,600mm		1
Min. Suction (L x W) in mm (base frame)	1,290 x 254	variable up to 1,200 x 1,000	variable up to 1,200 x 1,000		1,000
Max. suction (L x W) in mm (base frame)	1,770 x 254	variable up to 2,200 x 1,600	variable up to 3,200 x 1,600		1,600
Tilting / rotation	90° / 180°	90° hydraulically / 360° full rotation using remote control			rol
Safety	2-circuit system	Warning device: dual-circuit vacuum system			em
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)				
Storage & Transport	Aluminium case	On trolley			



VSG 1000 KRSP - VSG 1500 KRSP

Up to 1,500 kg capacity

Shifting the chain hanger eyelets every 250mm possible.

These systems can also be operated using an adapter plate with a counterweight (see page 198).

Additionally, an optional forklift-shoe adapter can be easily screwed to the counter plate.



View all suction systems from p.354 for a better comparison.

Model Series G2	<u>VSG 1000 RSP</u>	VSG 1250 RSP	<u>VSG 1500 RSP</u>		
Capacity	1,000 kg	1,250 kg	1,500 kg		
Suction Cup	40 x T5	48 x T5	60 x T5		
Weight	456 kg	480 kg	540 kg		
Overall depth in mm		> 380			
Pane vertical/horizontal dimensions max. in mm	4,800 x 2,600	4,800 x 2,600	4,800 x 2,600		
Min. suction (L x W) in mm (base frame)	variable up to 1,800 x 1,000	variable up to 1,800 x 1,000	variable up to 1,800 x 1,000		
Max. suction (L x W) in mm (base frame)	variable up to 3,800 x 1,600	variable up to 3,800 x 1,600	variable up to 3,800 x 1,600		
Tilting / rotation	90° hydraulic / 360° continuous motor driven via remote control				
Safety	Warning device: dual-circuit vacuum system				
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)				
Storage & Transport		On trolley			



Easy to handle via remote control

Victoriei Office Building in Bucharest / Romania



For Optionals, see p. 363

For spherically curved panes with inside / outside radius from 450 mm

Heavydrive optimal suct all the challe archi 24 hour

Heavydrive® provides the optimal suction systems for all the challenges of modern architecture!

24 hours delivery



Leavyontye.com

VSG 1500 KRSP - VSG 2000 KRSP





For Optionals, see p. 363





Easy to handle via remote control

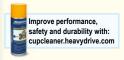
View all suction systems from p.354 for a better comparison.

M - 1-10 - 2 00	V00 4500 D0D	V00 0000 D0D		
Model Series G3	<u>VSG 1500 RSP</u> <u>VSG 2000 RS</u>			
Capacity	1,500 kg	2,000 kg		
Suction Cup	44 x T5	56 x T5		
Weight	640 kg	720 kg		
Overall depth in mm	>426			
Pane vertical / horizontal dimensions max. in mm	7,550 x 3,020	7,550 x 3,020		
Min. suction (L x W) in mm (base frame)	2,250 x 1,500	2,250 x 1,500		
Max. Suction (L x W) in mm (insertable frame)	6,550 x 2,020	6,550 x 2,020		
Tilting / rotation	90° hydraulic / 360° continuous motor driven via remote control			
Safety	4-circuit system			
Battery Pack	Battery pack (24 V vacuum system with voltage display)			
Storage & Transport	On trolley			



Victoriei Office Building in Bucharest / Romania Placing a spherically curved pane, H 4,783 x W 2,762 mm

Safe to use even
with spherically curved panes
under difficult conditions!
Extractable from the inside and
outside radius!





Find more images and videos of our devices in action at www.heavydrive.com

Meavy GMV 9.com

VS **© W** for winter glazing



EIB-Europ. Investment-Bank in Luxembourg

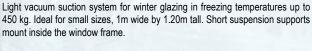


They leave no traces on vapour-coated and anti-reflective panes



Coated and vapour-coated panes, etc. are sensitive, and thus we have special non-marking suction cups for residue-free work on all our vacuum lifters.

winter glazing, up to 450 kg of load capacity



VS@W 450 K - Vacuum suction system for



<u>Model</u>	<u>VSGW 450 K</u>
Capacity	450 kg
Suction Cup	6 x T15
Weight	45 kg
Overall depth in mm	200
Pane vertical dimensions max.	3,900 x 2,500 mm
Pane horizontal dimensions max.	1,900 x 1,680 mm
Suction (L x W) in mm (base frame)	900 x 680
Suction (L x B) in mm with extension arms	2,100 x 680
Tilt / Turn / Lock	90° / 360° / 45° manually
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley

For Optionals, see











VSGW 900 **KS** - Vacuum suction system for winter glazing, up to 900 kg capacity, extra flat



Perfect glazing, even behind scaffolding, thanks to the ultra slim structure, only 160 mm deep!

View all suction systems from p.354 for a better comparison.

	Model	VSGW 900 KS (Extra Slim)
	Capacity	900 kg
For Optionals, see p. 363	Suction Cup	12 xT15
(20° n.	Weight	140 kg
	Overall depth in mm	160 mm
	Pane vertical dimensions max.	4,350 x 3,170 mm
T	Pane horizontal dimensions max.	3,350 x 2,170 mm
	Suction (L x W) in mm (base frame)	1,300 x 780
	Suction (L x W) in mm with extension arms	2,350 x 1,170
	Tilt / Turn / Lock	90° / 360° / 90° manually
360	Safety	2-circuit system
	Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
	Storage & Transport	On trolley

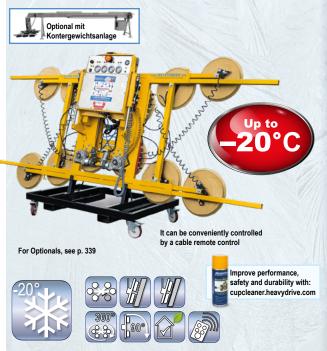


Model	VSGW 1500 KS (Extra Slim)
Capacity	1,500 kg
Suction Cup	6 x T15 + 6 x T40
Weight	270 kg
Overall depth in mm	220, Extra Narrow!
Pane vertical dimensions max.	4,900 x 3,560 mm
Pane horizontal dimensions max.	3,900 x 2,560 mm
Suction (L x W) in mm (base frame)	2,070 x 1,070
Suction (L x W) in mm with extension arms	2,900 x 1,560
Tilt / Turn / Lock	90° manually lowering cylinder / 360° continuously and manually, 90° lockable
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, on a single charge (recharging via 220 V plug)
Storage & Transport	On trolley



Optional with counterweight system

VSGW 2500 K MH - Vacuum suction system for winter glazing, up to 2,500 kg capacity





Find more images and videos of our devices in action at www.heavydrive.com

View all suction systems from p.354 for a better comparison.

Model S3	VSGW 2500 K MH
Capacity	2,500 kg
Suction Cup	12 x T40, individually lockable
Weight	600 kg
Overall depth in mm	380
Pane vertical dimensions max.	8,700 x 3,650 mm
Pane horizontal dimensions max.	7,700 x 2,650 mm
Suction (L x W) in mm (base frame)	3,400 x 2,650
Suction (LxW) in mm with extension arms	6,700 x 1,650
Tilting / rotation	90° hydraulic / 360° motor driven via remote control
Safety	4-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley

VSGW 6000 **K** MH - Vacuum suction system for winter glazing, up to 6,000 kg capacity



Model S4	VSGW 6000 K MH
Capacity	6,000 kg
Suction Cup	20 x T40
Weight	2,500 kg
Overall depth in mm	550
Pane vertical dimensions max.	14,073 x 4,200 mm short arms
	20,073 x 4,200 mm long arms
Pane horizontal dimensions max.	13,073 x 3,200 mm short arms
	19,073 x 3,200 mm long arms
Suction (LxW) in mm	6,123 x 1,900
(Base frame)	
Suction (LxW) in mm	12,073 x 2,200 short arms
with extension arms	18,073 x 2,200 long arms
Tilt / Turn / Lock	90° hydraulically / 360° continuously - motorised
Safety	4-circuit system
Battery Pack	2 x 12 V, 3-4 days continuous use, without recharching (recharging via 220 V plug)
Storage & Transport	on transport rack

VS[©] P for panels up to 24 m



Vacuum suction device for panels made by manufacturers like Brucha, Roma, etc., such as wall panels, roof panels, sheet metal roofing parts, façade parts, sandwich panels, and virtually any sheet-like surface.

With extension arms, the system can support panels up to 24 m wide.

- · Fits all common profile dimensions
- · All cups can be locked and stacked individually
- · All cups can be moved sideways, depending on the panel structure

View all suction systems from p.354 for a better comparison.



With special suction cups that fit perfectly between inside the flanges!

Improve performance, safety and durability with: cupcleaner.heavydrive.com



LIGATY QUITY G.com

Only 233 mm deep



For uniquely shaped panels, the suction cups can be shut off individually



With remote control for suctioning & dismantling (also by radio)

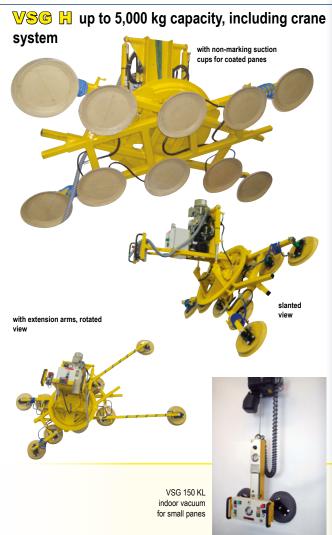


in aluminium case

				9	-
<u>Model</u>	VSGP 600 - 8 K for panels up to 8 m	VSGP 600 - 12 K for panels up to 12 m		VSGP 600 - 18 K for panels up to 18 m	VSGP 600 - 24 K for panels up to 24 m
Capacity	600 kg			600 kg	
Suction Cup	12 x T10E	W		12 x T10EW	
Weight	180 kg	200 kg		220 kg	240 kg
Overall depth in mm	233	233		233	
Panel max. vertical dimensions	8,500 x 3,000 mm	12,500 x 3,000 mm		18,500 x 3,000 mm	24,551 x3,000 mm
Panel max. horizontal dimensions	8,500 x 2,000 mm	12,500 x 2,000 mm		18,500 x 2,000 mm	24,551 x 2,000 mm
Suction (L x W) in mm(base frame)	1,000 x 3,000		1,000 x 3,000		
With extension arms in mm	4,500 x 1,000	5,500 x 1,000		6,500 x 1,000	8,551 x 1,000
Tilt / Turn / Lock	90° with cylinder / 360° continuous		manually, 90° lockable		
Safety	Warning device, dual-circuit vacuum system				
Battery Pack	Battery pack (12 V vacuum system with voltage display)				
Storage & Transport	Aluminium case				

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Used for steel and sheet metal plates, windows, doors and any type of glass.

Vacuum suction systems for the indoor assembly of glass panes for window manufacturers, glass refiners, ...

- · Lifting and lowering device operated pneumatically, electronically or hydraulically
- · Lifting cylinder or chain hoist
- · Quick venting through the Venturi nozzle
- · Two-hand control
- · Remote control
- · Fully controllable rigid column lifting unit
- · Electronic or hydraulic rotary control
- · External power supply 220/380 V or battery mode
- · Rotate / swivel device automatically or manually
- · Adjustable frame





EIB-Europ. Investment-Bank in Luxembourg



Non-Marking suction cups

They leave no traces on vapour-coated and anti-reflective panes



Coated and vapour-coated panes, etc. are sensitive, and thus we have special non-marking suction cups for residue-free work on all our vacuum lifters.

For Optionals, see p. 363

VSC 450 **K** - Vacuum suction system for vapour-coated panes, up to 450 kg of load capacity

Lightweight vacuum suction system for coated and vapour-coated panes up to 450 kg. Ideal for small sizes with 1m wide and 1.20m tall. The short suspension enables mounting in narrow areas.



View all suction systems from p.354 for a better comparison.		
Model	<u>VSGB 450 K</u>	
Capacity	450 kg	
Suction Cup	6 x T15	
Weight	45 kg	
Overall depth in mm	200	
Pane vertical dimensions max.	3,900 x 2,500 mm	
Pane horizontal dimensions max.	1,900 x 1,680 mm	
Suction (L x W) in mm (base frame)	900 x 680	
Suction (L x B) in mm with extension arms	2,100 x 680	
Tilt / Turn / Lock	90° / 360° / 45° manually	
Safety	2-circuit system	
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)	
Storage & Transport	On trolley	





VSGB 900 KS - Vacuum suction system for vapour-coated panes, up to 900 kg capacity, extra flat



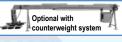
Perfect glazing, even behind scaffolding, thanks to the ultra slim structure, only 160 mm deep!

View all suction sys-	
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For Optionals, see	Sι
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<u>Model</u>	VSGB 900 KS (extra flat)
Capacity	900 kg
Suction Cup	12 xT15
Weight	140 kg
Overall depth in mm	160 mm
Pane vertical dimensions max.	4,350 x 3,170 mm
Pane horizontal dimensions max.	3,350 x 2,170 mm
Suction (LxW) in mm (Base frame)	1,300 x 780
Suction (LxW) in mm with extension arms	2,350 x 1,170
Tilt / Turn / Lock	90° / 360° / 90° manually
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley

VSGB 1500 KS - Vacuum suction system for vapour-coated panes, up to 1,500 kg capacity, slim version









VACUUM SUCTION SYSTEMS



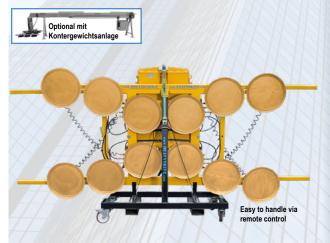




Extra slim: At only 220 mm deep, this device always fits between the scaffolding and the façade!

<u>Model</u>	VSGB 1500 KS (extra flat)
Capacity	1,500 kg
Suction Cup	6 x T15 + 6 x T40
Weight	270 kg
Overall depth in mm	220, extra flat!
Pane vertical dimensions max.	4,900 x 3,560 mm
Pane horizontal dimensions max.	3,900 x 2,560 mm
Suction (L x W) in mm (base frame)	2,070 x 1,070
Suction (LxW) in mm with extension arms	2,900 x 1,560
Tilting / rotation	90° manually lowering cylinder / 360° fully and manually, 90° lockable
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley





For Optionals, see p. 363





View all suction systems from p.354 for a better comparison.

Model S3	VSGB 2500 K MH	
Capacity	2,500 kg	
Suction Cup	12 x T40, individually lockable	
Weight	600 kg	
Overall depth in mm	380	
Pane vertical dimensions max.	8,700 x 3,650 mm	
Pane horizontal dimensions max.	7,700 x 2,650 mm	
Suction (L x W) in mm (base frame)	3,400 x 2,650	
Suction (LxW) in mm with extension arms	6,700 x 1,650	
Tilting / rotation	90° hydraulic / 360° motor driven via remote control	
Safety	4-circuit system	
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)	
Storage & Transport	On trolley	

VSCB 6000 **K MH** - Vacuum suction system for vapour-coated panes, up to 6,000 kg capacity



For Optionals, see p. 363



Model S4	VSGB 6000 K MH
Capacity	6,000 kg
Suction Cup	20 x T40
Weight	2,500 kg
Overall depth in mm	550
Pane vertical dimensions max.	14,073 x 4,200 mm short arms 20,073 x 4,200 mm long arms
Pane horizontal dimensions max.	13,073 x 3,200 mm short arms 19,073 x 3,200 mm long arms
Suction (LxW) in mm (Base frame)	6,123 x 1,900
Suction (LxW) in mm with extension arms	12,073 x 2,200 mm short arms 18,073 x 2,200 long arms
Tilt / Turn / Lock	90° hydraulically / 360° continuously - motorised
Safety	4-circuit system
Battery Pack	2 x 12 V, 3-4 days continuous use, without recharching (recharging via 220 V plug)
Storage & Transport	on transport rack

VS€S for stone and other rough or porous surfaces



Fig. above: Hypobank Headquarters, Munich; Fig. below: Tribune Ice Arena, Augsburg



Special cups

for rough surfaces such as dense stone slabs, plastic sheets, concrete, etched surfaces, wood panels, screen printing plates and much more.





For Optionals, see p. 363

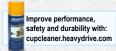
VSGS 450 **K** - Vacuum suction system for stone, up to 450 kg of load capacity



Lightweight vacuum suction system for coated and vapour-coated panes up to 450 kg. Ideal for small sizes with 1 m wide and 1.20 m tall.

I Garyo IIV G.com

The short suspension enables mounting in narrow areas.



Model	VSGS 450 K
Capacity	450 kg
Suction Cup	6 x T15
Weight	45 kg
Overall depth in mm	200
Pane vertical dimensions max.	3,900 x 2,500 mm
Pane horizontal dimensions max.	1,900 x 1,680 mm
Suction (L x W) in mm (base frame)	900 x 680
Suction (L x B) in mm with extension arms	2,100 x 680
Tilt / Turn / Lock	90° / 360° / 45° manually
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)

Storage & Transport

View all suction systems from p.354 for a better comparison.

For Optionals, see p. 363









On trolley



VSGS 900 **KS** - Vacuum suction system for stone, up to 900 kg capacity, extra flat



Perfect glazing, even behind scaffolding, thanks to its ultra slim structure, just 160 mm deep!

View all suction systems from p.354 for a better comparison.

For Optionals, see p. 363		
Month of the Control		
360		

Model	VSGS 900 KS (Extra Slim)
Capacity	900 kg
Suction Cup	12 xT15
Weight	140 kg
Overall depth in mm	160 mm
Pane vertical dimensions max.	4,350 x 3,170 mm
Pane horizontal dimensions max.	3,350 x 2,170 mm
Suction (LxW) in mm (Base frame)	1,300 x 780
Suction (LxW) in mm with extension arms	2,350 x 1,170
Tilt / Turn / Lock	90° / 360° / 90° manually
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley

VSCS 1500 KS - Vacuum suction system for stone, up to 1,500 kg capacity, slim version



<u>Model</u>	VSGS 1500 KS (Extra Slim)
Capacity	1,500 kg
Suction Cup	6 x T15 + 6 x T40
Weight	270 kg
Overall depth in mm	220, Extra Narrow!
Pane vertical dimensions max.	4,900 x 3,560 mm
Pane horizontal dimensions max.	3,900 x 2,560 mm
Suction (L x W) in mm (base frame)	2,070 x 1,070
Suction (LxW) in mm with extension arms	2,900 x 1,560
Tilting / rotation	90° manually lowering cylinder / 360° fully and manually, 90° lockable
Safety	2-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley

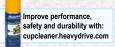


VSGS 2500 K MH - Vacuum suction system for stone up to 2.500 kg load capacity



For Optionals, see p. 363









Find more images and videos of our devices in action at www.heavydrive.com

View all suction systems from p.354 for a better comparison.

Model S3	VSGS 2500 K MH
Capacity	2,500 kg
Suction Cup	12 x T40, individually lockable
Weight	600 kg
Overall depth in mm	380
Pane vertical dimensions max.	8,700 x 3,650 mm
Pane horizontal dimensions max.	7,700 x 2,650 mm
Suction (L x W) in mm (base frame)	3,400 x 2,650
Suction (LxW) in mm with extension arms	6,700 x 1,650
Tilting / rotation	90° hydraulic / 360° motor driven via remote control
Safety	4-circuit system
Battery Pack	12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)
Storage & Transport	On trolley

VSGS 6000 K MH - Vacuum suction system for stone, up to 6,000 kg of load capacity



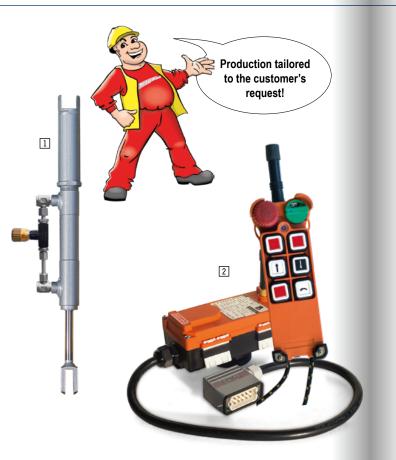


For Optionals, see p. 363





Model S4	VSGS 6000 K MH
Capacity	6,000 kg
Suction Cup	20 x T40
Weight	2,500 kg
Overall depth in mm	550
Pane vertical dimensions max.	14,073 x 4,200 mm short arms 20,073 x 4,200 mm long arms
Pane horizontal dimensions max.	13,073 x 3,200 mm short arms 19,073 x 3,200 mm long arms
Suction (LxW) in mm (Base frame)	6,123 x 1,900
Suction (LxW) in mm with extension arms	12,073 x 2,200 mm short arms 18,073 x 2,200 long arms
Tilt / Turn / Lock	90° hydraulic / 360° continuous - motorised
Safety	4-circuit system
Battery Pack	2 x 12 V, 3-4 days continuous use, without recharching (recharging via 220 V plug)
Storage & Transport	on transport rack







View all suction systems from p.354 for a better comparison.

Accessories	<u>Description</u> .	<u>Use</u>
1 Lowering cylinder	manual hydraulic cylinder for fully adjustable, manual lowering of vacuum-suction systems	All types of equipment with suspension arm, not in conjunction with the short arm.
2 Radio remote control	Radio module that controls all system motor functions with one or more hand transmitters,	All vacuum suction systems
3 Remote control	Remote control with spiral cable and quick-release connector,	All vacuum suction systems
4 Short arm	In tight spaces, especially for small panes or when glazing under lead, it is also ideal as an easy-to-exchange complement to the long arm.	Alternative for systems with normal arm, not in conjunction with a lowering cylinder
5 ISO holders	They protect the panes from slipping when they are hot and connected.	All vacuum suction systems
Further information can be found at www.heavydrive.com		



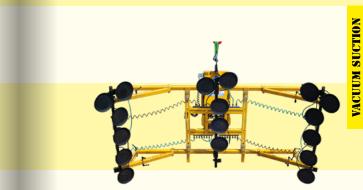
Special systems

to address the special challenges in glass construction

VSG ...L for glass fins
 Vacuum suction systems for panes
 up to 22 m tall



- VSG...KRQ for transversely curved panes Vacuum suction systems up to 4,000 kg capacity



- VSG...Konter: counterweight systems for vacuum suction systems with up to 18,000 kg capacity



 VSGSTU 7-axis manipulator with forklift up to 2,000 kg capacity





Glass fins—flat, narrow, very tall, glued glass plates—high rigidity makes them ideal replacements for steel, concrete or wooden supports.

Glass exceeds steel and concrete in stability! Therefore, more and more glass fins are used. Special suction systems are required for these extremely long and narrow panes. Heavydrive® provides you these suction systems in different sizes and capacities.

The illustrated system is a special version that is second to none! The frame has a suction length of 2,000 mm and can be extended up to 6 m span with extension arms.

See for yourself!

If you have questions, please ask and we'll be happy to assist you.



Special glass fins for panes from 180 mm width can be customized to your needs!!







View all suction systems from n 354 for a hetter comparison

/iew all suction systems from p.354										
Model L1	1 VSG 450 KL 6	2 VSG 600 KL 6								
Capacity	450 kg	600 kg								
Suction Cup	6 x T15	10 x T15								
Weight	40 kg	56 kg								
Overall depth in mm	230	230								
Pane vertical dimensions max.	8,000 x 2,300 mm	10,000 x 2,400 mm								
Pane horizontal dimensions max.	7,000 x 1,300 mm	9,000 x 1,400 mm								
Suction (L x W) in mm (base frame)	3 2,000 x 330	2,000 x 400								
With extension arms (LxW) in mm	6,000 x 330	6,000 x 400								
Tilting / rotation	90° lowering cylinder / 360	° full rotation, 90° lockable								
Safety	Warning device: dual-o	circuit vacuum system								
Battery Pack	Battery pack (12 V, 3-4 days continuous use, on a single charge (recharging via 220 V plug)									
Transport	Aluminiu	ım case								





VSG 600 KL 14 = VSG 3500 KL 14 up to 17 m wide

Glass fins-flat, narrow, very tall, glued plates-high rigidity makes them replacements for steel, concrete or wooden supports.

Glass exceeds steel and concrete in stability! Therefore, more and more glass fins are used. Special suction systems are required for these extremely long and narrow panes. Heavydrive® provides you these suction systems in different sizes and capacities.

The illustrated system is a special version that is second to none! The frame has a suction length of 4,000 to 6,000 mm and can be extended to 14 m.

See for yourself!

If you have questions, please ask and we'll be happy to assist you.





In 2011, the Heavydrive® VSG 1600 KL 10 system was used in Mecca / Saudi Arabia to lift the largest glass fins ever (L 16,670 x W 550 mm and weighing 1600 kg).

The glass fins were then used to stabilise the gigantic, vertical glass plates of the outer façade (L 16,670 mm x W 2,470 mm, weighing 4,500 kg).

Ideal for setting glass fins 550 mm wide and 17.35 m tall



VSG 2500

KL 14 2.500 ka

24 x T15 450 ka

880 kg

VACUUM SUCTION

VSG 3500 KL 14

3.500 ka 12 x T40

490 kg

892 kg

7,123 / 9,123 x 550 12,123 x 550 15,123 x 550 17.123 x 550 4,123 / 6,123 x 550

9.123 x 550

12 123 x 550

14.123 x 550



Find more images and videos of our devices in action at www.heavydrive.com

View all suction systems from p.354 for a better comparison.

9.123 x 330

12.123 x 330

14.123 x 330

	Model Series L2		VSG 600 KL 14 VSG 1000 KL 14 VSG 1500 KL 14 VSG 2000 KL 14 600 kg 1,000 kg 1,500 kg 2,000 kg 8 x T15 12 x T15 16 x T15 20 x T 15 450 kg 450 kg 450 kg 450 kg 820 kg 832 kg 846 kg 860 kg > 420 7,123 / 9,123 x 330 12,123 x 330 15,123 x 330 17,123 x 330 4,123/6,123 x 350				
	Capacity		600 kg	1,000 kg	1,500 kg	2,000 kg	
	Suction Cup		8 x T15	12 x T15	16 x T15	20 x T 15	
A STATE OF THE STA	Weight min.	-	450 kg	450 kg	450 kg	450 kg	
	Weight max.		820 kg	832 kg	846 kg	860 kg	
	Overall depth in mm	-				> 420	
	Pane dimensions (LxW) L4/6 in mm		7,123 / 9,123 x 330				
Even narrower glass fins	Pane dimensions (LxW) LA9 in mm		12,123 x 330				
up to 180 mm wide and up to 16 m tall	Pane dimensions (LxW) LA12 in mm				15,123 x 330		
can be handled quickly!	Pane dimensions (LxW) LA14 in mm				17,123 x 330		
our se numere quierry:	Suction (LxW) (Base frame) L4/6 in mm			4,	123/ 6,123 x 350)	

Suction (LxW) LA9 in mm

Suction (LxW) LA12 in mm

Suction (LxW) LA14 in mm

Tilting / rotation

Battery Pack

Storage & Transport

Safety

For Optionals, see p. 363





188

90° hydraulically / 360° continuously motor driven by a remote control

4-circuit system

Battery pack (24 V vacuum system with voltage display)

on transport rack

Glass fins—flat, narrow, very tall, glued glass plates—high rigidity makes them ideal replacements for steel, concrete or wooden supports.

Glass exceeds steel and concrete in stability! Therefore, more and more glass fins are used. Special suction systems are required for these extremely long and narrow panes. Heavydrive® provides these suction systems in different sizes and capacities.

The illustrated system is a special version that is second to none! The frame has a suction length of 6,000 mm and can be extended up to 14 m.

See for yourself! If you have questions, please ask and we'll be happy to assist you.



Current project info:

The Heavydrive®- VSG 5000 KL 14 system, was used to lift the largest glass fins in the world at the Lakhta Centre St. Petersburg / Russia (L 18,670 x W 550 mm, weighing 5,000 kg).

The slanted glass fins serve as load-bearing columns in the façade corner of the new GAZPROM headquarters. The bonded glass fin is a static load-bearing element.





Find more images and videos of our devices in action at www.heavydrive.com

View all suction systems from p.354 for a better comparison.

Model Series L3		VSG 3500 KL 14	VSG 4000 KL 14	VSG 4500 KL 14	VSG 5000 KL 14	VSG 6000 KL 14	VSG 7000 KL 14		
Capacity (Glass)		3,500 kg	4,000 kg	4,500 kg	5,000 kg	6,000 kg	7,000 kg		
Suction Cup		12 x T40	16 x T40	16 x T40	20 x T40	20 x T40	24 x T40		
Weight min. Weight max.					00 kg 00 kg				
Overall depth in mm		> 550							
Pane dimensions (LxW) L4/6 in mm Pane dimensions (LxW) LA9 in mm Pane dimensions (LxW) LA12 in mm Pane dimensions (LxW) LA14 in mm		7,123 / 9,123 × 550 12,270 × 550 15,270 × 550 19,270 × 550							
Suction (LxW) (Base frame) L4/6 in mm				4,550 / 6,	550 x 550				
Suction (LxW) LA9 in mm Suction (LxW) LA12 in mm Suction (LxW) LA14 in mm		9,270 x 550 12,270 x 550 14,270 x 550							
Tilting / rotation		90° hydraulically / 360° continuously motor driven by a remote control							
Safety	4-circuit system								
Battery Pack			Battery page	ck (24 V vacuum	system with vol	tage display)			
Storage & Transport				on trans	port rack				



For Optionals, see p. 363

Find your device: devicefinder.heavydrive.com

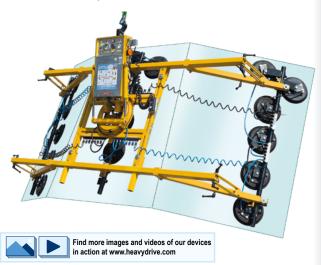




VSC 450 - 1200 KRQ -

for transversely curved panes up to 1,200 kg (pane is curved over the short side)

The VSG -KRQ systems are predominantly used for curved balustrade railings, curved aquarium screens in zoos, curved demarcation panes in showrooms and animal parks, as well as arched bridges. The stability results from the multi-bonded VSG sheets with a very flat deflection of > 4,000 mm.

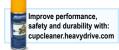


View all suction systems from p.354 for a better comparison.

view all suction systems from p.354 for a better comparison.						
Model Q1	<u>VSG</u> 450 KRQ	<u>VSG</u> 750 KRQ	<u>VSG</u> 1000 KRQ	<u>VSG</u> 1200 KRQ		
Capacity	450 kg	750 kg	1,000 kg	1,200 kg		
Suction Cup	10 x T15	12 x T15	14 x T15	16 x T15		
Weight	250 kg	270 kg	300 kg	315 kg		
Radius in mm	> 4000					
Overall depth	depending on the bend radius					
Max. vertical pane dimensions (LxW)	7,000 x 3,500 mm					
Max. horizontal pane dimensions		6,000 x	2,500 mm			
Suction (L x W) in mm (base frame)		4,000	x 1,500			
with extension arms		6,000	x 1,500			
Tilting / rotation	90° hydra	aulically / 360	° manually, 90	° lockable		
Safety	Warnin	g device: dual	-circuit vacuum	system		
Battery Pack	Battery pack (12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)					
Transport		On	trolley			



Suction radius
at least 4 m outer radius,
4-6 m suction width
extendible





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VSG 1200 - 2500 KRQ -

for transversely curved panes up to 2,500 kg (pane



is curved over the short side)

The VSG -KRQ systems are predominantly used for curved balustrade railings, curved aquarium screens in zoos, curved glass panel walls for show-rooms, viewing platforms and animal parks as barriers for protecting people.

The stability results from the multi-bonded VSG sheets with a very flat deflection of > 4,000 mm.

Fig. on the left: Glasstec 2018, Düsseldorf: Suction systems used for the production of this glass pane were delivered.





Suitable for max. pane dimensions of L 10,000 x W 3,200 mm

Model Q2	<u>VSG</u> 1200 KRQ	<u>VSG</u> 1500 KRQ	<u>VSG</u> 2000 KRQ	<u>VSG</u> <u>2500 KRQ</u>			
Capacity	1,200 kg	1,500 kg	2,000 kg	2,500 kg			
Suction Cup	16 x T15	16 x T15	20 x T15	24 x T15			
Weight	680 kg	730 kg	750 kg	1,350 kg			
Radius in mm		> 4000					
Overall depth in mm	> 380	- depending on the	e bend radius				
Max. vertical pane dimensions (LxW) in mm	12,673 x 4,500 mm						
Max. horizontal pane dimensions (LxW) in mm		11,673 x 3,500	mm				
Suction (L x W) in mm (base frame)		4,000 x 2,20	0				
With extension arms		10,673 x 2,50	00				
Tilting / rotation	90° hydraulically	360° fully motor d	riven by a remote	control			
Safety	Warning device: dual-circuit vacuum system						
Battery Pack		Battery pack (2 x 12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)					
Transport		On trolley / transpo	ort rack				





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VSC 2500 - 4000 KRQ -

for transversely curved panes up to 4,000 kg (pane

F. H.

is curved over the short side)

The VSG -KRQ systems are predominantly used for curved balustrade railings, curved aquarium screens in zoos, curved glass panel walls for showrooms, viewing platforms and animal parks as barriers for protecting people.

The stability results from the multi-bonded VSG sheets with a very flat deflection of > 4,000 mm.

VACUUM SUCTION SYSTEMS



Suitable for max. pane dimensions of L 20,000 x W 4,500 mm



Model LQ3	<u>VSG</u> 2500 KRQ	<u>VSG</u> 3000 KRQ	<u>VSG</u> 3.500 KRQ		<u>VSG</u> 4000 KRQ	
Capacity	2,500 kg	3,000 kg	3,500 kg		4,000 kg	
Suction Cup	24 x T15	28 x T15	32 x T15		36 x T15	
Weight	2,700 kg	2,900 kg	3,200 kg		3,350 kg	
Radius in mm		> 4,000				
Overall depth in mm	> 550	- depending on the	e bend radius			
Max. vertical pane dimensions (LxW) in mm		,073 x 4,200 mm s),073 x 4,200 mm l				
Max. horizontal pane dimensions (LxW) in mm		,073 x 3,200 mm s 9,073 x 3,200 mm l				
Suction (L x W) in mm (base frame)		6,540 x 2,20	0			
with extension arms		12,073 x 2,200 sho 18,073 x 2,200 lon				
Tilting / rotation	90° hydraulically	/ 360° fully motor	driven by remote c	ontrol		
Safety	Warning	device: dual-circuit	vacuum system			
Battery Pack	Battery pack (2 x 12 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)					
Transport		on transport ra	nck			



VSG Counterweight

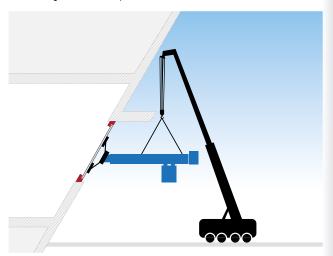
Safe installation of the pane in a vertical façade without additional support from the counterweight beams saves both personnel and time

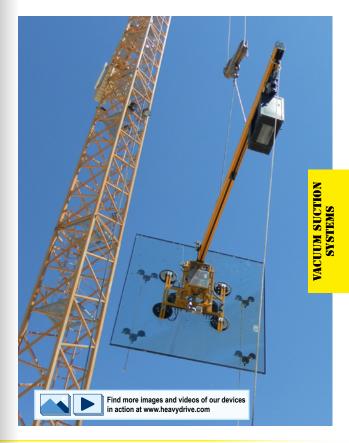
The suctioned glass pane is inserted vertically into the proper position on the façade. By applying the counterweight, the pane is pressed into its optimal installation position and can be placed on the glass supports with millimetre precision.

The maximum capacity of the counterweight system is the maximum weight of the glass or other material.

Here, the weight of the vacuum suction system or other clamping frames up to 2500 kg is already deducted!

This applies from the point of 3 m overhang. The 3-meter overhang applies from the front edge of the suction plate







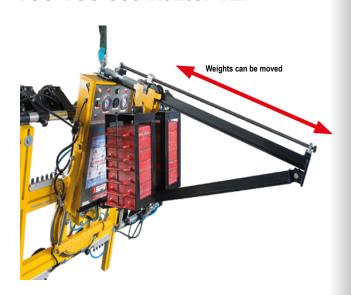
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VSG VSG 500 Konter-1.2



Heavy panes need no longer be pivoted by hand into a frame.

Heavydrive offers the ideal solution: the pivot aid. Directly mounted onto the suction system, the pivot aid enables panes to be tilted precisely to the millimetre with very little effort. By offsetting the weight of the pane, it can be positioned vertically or aligned perpendicular to the lower edge.



<u>Model</u>	<u>VSG</u> 300 Konter	<u>VSG</u> 500 Konter		
Load capacity (only Glass or other material)	500 kg	1,000 kg		
Length in mm	1,200 mm			
Dead weight including counterweight	290 kg	430 kg		
Suction Systems	S1 / Q1 / G1	S2 / Q2 / G2		

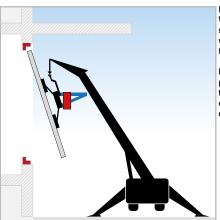


Fig. 1: When mounted to the suction system, the pane will always be tilted forwards.

In this position, it is not possible to safely lift the pane into the façade opening without causing damage!

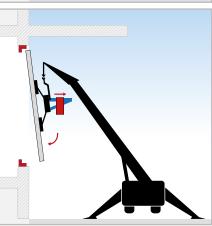


Fig. 2: Offsetting the weight of the pane means it can be tilted into vertical position.

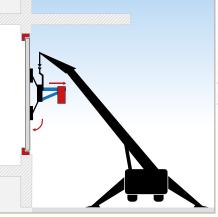


Fig. 3: By offsetting the weight further, the now vertical pane is placed exactly to the millimetre.

200



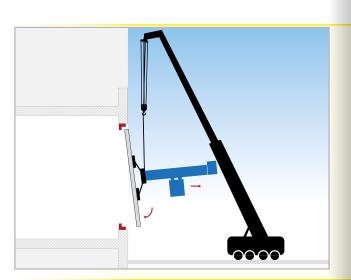
VSG 500 /1000 Konter-2.5 OV

There are different mounting options depending on the construction site situation:



Option 1: no overhang

Chains are mounted directly onto the suction system body 500 kg / 1,000 kg balancing weight possible up to S3/Q3/G3 $\,$



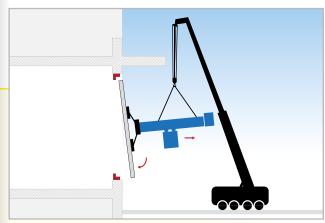
VSG 500 /1000 Konter-2.5 V

Mounting as a counterweight with two anchor points in order to manoeuvre the pane under an overhang: up to 2,000kg



Option 2: overhang of up to 500 mm

Four chains are mounted directly onto counterweight traverse 500 kg / 1,000 kg balancing weight possible up to S3/Q3/G3



<u>Model</u>	VSG 500 /1000 Konter-2.5 OV	<u>VSG 500</u> <u>Konter-2.5 V</u>			
Variation	OV	V			
Load capacity	500 kg	1.000 kg			
Length in mm	2,500				
Dead weight including counterweight	750 kg	1.250 kg			
Suction systems	S3 / Q3 / G3				

VSC Konter up to 3,500 kg capacity

for VSG 1000 -3500 single beam



Secure mounting of the pane under protrusions up to 3.0 m.

The suctioned glass pane is inserted vertically into the proper position on the façade. The suctioned glass can be tilted forward or backward, depending on the installation situation.

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Fine position adjustment is done by radio remote control. The system can be attached to any construction crane, tower crane, loading crane or mobile crane.

The crossbeam is suspended by a 4-strand chain suspension on the crane hook. The connection of the suction system with the crossbeam takes place at the construction site.

The proper suction system can be selected from the VSG product group.



Model	<u>VSG</u> 500 Konter	<u>VSG</u> 1000 Konter	<u>VSG</u> 1500 Konter	VSG 2000 Konter	VSG 3000 Konter	VSG 3500 Konter
Capacity	500 kg	1,000 kg	1,500 kg	2,000 kg	3,000 kg	3,500 kg
Length in m				4/6		
Weight including counterweight	1,600 kg	2,100 kg	2,600 kg	3,100 kg	4,100 kg	4,600 kg
Chain system			4-point chair	suspension		
Adaptation of add- on devices	Connection with SWS adapter up to VSG 3500 K MH in addition, each suction system can be freely hung				for series S 1 on a swivel hook adapter	-3 / Q 1-3 / G 1-3
Building overhang depth			uļ	to 3,000 mm		

VSC Konter 3500 Up to 7,000 kg Capacity for VSG 3500 - 7000

Secure mounting of the pane under protrusions up to 3.0 m.

The suctioned glass pane is inserted vertically into the proper position on the façade. The suctioned glass can be tilted forward or backward, depending on the installation situation. Fine position adjustment is done by radio remote control.

The system can be attached to any construction crane, tower crane, loading crane or mobile crane.

The crossbeam is suspended by a 4-strand chain suspension on the crane hook.

The connection of the suction system with the crossbeam takes place at the construction site.

The proper suction system can be selected from the VSG product group.







Model	VSG 3500 Konter	VSG 4000 Konter	VSG 4500 Konter	VSG 5000 Konter		VSG 6000 Konter	<u>VSG</u> 7000 Konter	
Capacity (Glass)	3,500 kg	4,000 kg	4,500 kg	5,000 kg		6,000 kg	7,000 kg	
Length in m	6							
Weight including counterweight	5,700 kg	6,300 kg	6,800 kg	7,000 kg	-	8,400 kg	8,400 kg	
Chain system		4-point chain suspension						
Adaptation of add-on devices		ection with SWS ach suction sys	for series S 3-4 / freely hung on a	Q 3-4 / G 3-4 swivel hook adapter				
Building overhang depth	Up to 3,000 mm							

Special assemblies connect to the steel beam:

Other subframes can also be connected to the crossbeam to lift customer-specific façade elements to the proper position on the building with millimetre precision.

VSG Konter 7,000 up to 16,000 kg @apa@fty for VSG 7000 - 16000







Secure pane mounting under protrusions up to 6.0 m.

The suctioned glass pane is inserted vertically into the proper position on the façade. The suctioned glass can be tilted forward or backward, depending on the installation situation.

Fine position adjustment is done by radio remote control. The system can be attached to any construction crane, tower crane, loading crane or mobile crane.

The crossbeam is suspended by a 4-strand chain suspension on the crane hook. The connection of the suction system with the crossbeam takes place at the construction site.

The proper suction system can be selected from the VSG product group.

Special assemblies connect to the crossbeam:

Other subframes can also be connected to the crossbeam to lift customer-specific façade elements to the proper position on the building with millimetre precision.





Find more images and videos of our devices in action at www.heavydrive.com

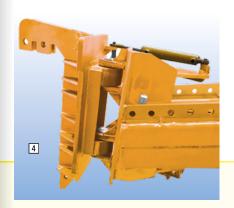


Model	<u>VSG</u> 7000 Konter	VSG 9000 Konter	<u>VSG</u> 10000 Konter	<u>VSG</u> 12000 Konter	<u>VSG</u> 14000 Konter	<u>VSG</u> 16000 Konter
Capacity (Glass)	7,000 kg	9,000 kg	10,000 kg	12,000 kg	14,000 kg	16,000 kg
Length in m		12		12		
Weight including counterweight	11,480 kg	13,480 kg	14,480 kg	16,480 kg	18,480 kg	20,480 kg
Chain system	4-point chain suspension		4-point chain suspension			
Adaptation of add-on devices	Connection with SWS adapter In addition, each suction system or		up to VSG 6000 K MH for series S 3-5 / Q 3-5 / G 3-5 hoisting strap can be freely hung on a swivel hook adapter			
Building overhang depth	up to 6,000 mm		up to 6,000 mm			



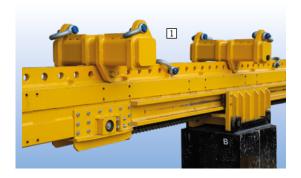






Accessories	<u>Description</u>	<u>Use</u>		
1 Hook adapter	Adapter for single crossbeam with swivel hooks up to 3.5 capacity	All suction systems with swivel hooks, other materials		
2 Angle adapter ET / DT	Angle adapter for single crossbeam and double crossbeams to insert components or glass panes with an angle up to 30° outwards or overhead	All suction systems S1-5 / Q 1-5 / G 1-5		
3 SWS straight adapter ET / DT	The quick-change system SWS is connected to the suction system or customer-specific design in 3 minutes with three secured locking pins	All suction systems S1-5 / Q 1-5 / G 1-5		
The side swivel adapter allows glass panes to be inserted with a maximum angle of 45° to the left / right.		All suction systems S1-5 / Q 1-5 / G 1-5		













Accessories	<u>Description</u>	<u>Use</u>
1 4-point holder ET	Load distribution on crossbeams for 4-point chain suspension	All suction systems S1-5 / Q 1-5 / G 1-5, other materials
2 2-compartment ET counterweight carrier	Carrier body for single crossbeam with 2-compartment holder	All suction systems S1-5 / Q 1-5 / G 1-5, other materials
3 3-compartment ET counterweight carrier	Carrier body for single crossbeam with 3-compartment holder	All suction systems S1-5 / Q 1-5 / G 1-5, other materials
4 3-compartment DT counterweight carrier	Carrier body for double crossbeam 3-compartment holder	All suction systems S1-5 / Q 1-5 / G 1-5, other materials
5 6-compartment SDT counterweight carrier	Carrier body for double crossbeam 6-compartment holder	All suction systems S1-5 / Q 1-5 / G 1-5, other materials







Find more images and videos of our devices in action at www.heavydrive.com





Accessories	<u>Description</u>	<u>Use</u>	Use	
Cranked Manipulator Adapter ETGM	Adapter for single crossbeam to accommodate 3-axis VSGU 600 K overhead manipulator for up to 600 kg capacity, adjustable angle 0° / 30° / 45° with top or bottom cranking options	All suction	All suction systems S1 / Q 1 / G 1	
Adapter for single crossbeam traight manipulator adapter ETMA Adapter for single crossbeam to accommodate 3-axis overhead manipulator from VSGU 300 K to VSG 1600 K for up to 1,600 kg capacity		All suction	All suction systems S1-5 / Q 1-5 / G 1-5	

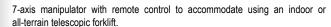
THE ALL-ROUNDER FOR EVERYONE



Radio remote control

Another 4 axes are provided by telescopic forklifts: Merlo, Manitou, Hiab, Cramer etc.





The manipulator can be mounted very easily by placing the forklift in the forklift pockets at the bottom of the unit or by using the automatic forklift hook. The axles can be controlled by a single person by a radio remote control.

Once secured, it will be ready to go.

The correct suction system for the manipulator is determined in advance with our technicians.

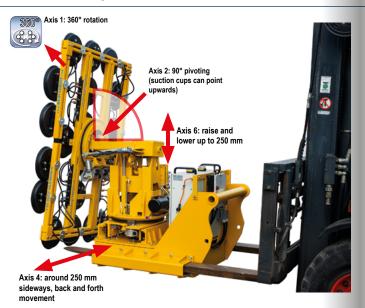






7 Achsen-Manipulatoren





Model	<u>VSG STU</u> 500 K	VSG STU 1000 K	<u>VSG STU</u> 1500 K	<u>VSG STU</u> 2000 K
1st Axis:	VSG suction system motorised full 360° turning			
2nd Axis:	VSG suction system hydraulic pivoting 0-100°, 0° horizontal to 90° vertical with an extra 10°			
3rd Axis:	Hydraulic sideways tilting 20° to the left / 20° to the right to compensate for the lateral tilt of the telescopic forklift			
4th Axis:	Side-shift hydra	aulic movement	eft / right 250 mm	
5th Axis:	Hydraulic forward / backward movement of the suction manipulator 250mm			
6th Axis:	Hydraulic raising / lowering of the manipulator by 250 mm			
7th Axis	Manipulator rotating tower 90° to the left or 90° to the right for lateral transport, e.g. through gates or side glazing			
Weight in kg	1,000			
Operation	all axes can be moved simultaneously with radio remote control			
Battery driven	24 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)			
Storage & Transport	loaded with forklift			
Connection to telescopic lift truck manual	Forklift pockets on the side of the device, mechanically secured by screws			
Connection to telescopic lift truck automatic	Placement into fork lifter hook, hydraulically screwed			
Transport dimensions in mm	L 2,050 x W 1,200 x H 1,600 with suction frame, basic unit H 1,000			
Deepest over-head suction size	unbeatable 1,1	30 mm above gr	ound	





Find more images and videos of our devices in action at www.heavydrive.com

Suction frame Model S2	VSG 2000 K MH L
Capacity	2,000 kg
Suction Cup	20 x T15
Max. vertical pane dimensions	5,660 x 3,530 mm
Max. horizontal pane dimensions	4,660 x 2,530 mm
Suction (L x W) in mm (base frame)	2,150 x 1,200
Suction (LxW) in mm with extension arms	3,660 x 1,530
Safety	4-circuit system
Battery Pack	24 V, 3-4 days continuous use, without recharging (recharging via 220 V plug)

I PEVVO IIV P.com

VHS = Up to 57 - 79 kg capacity

WHS 204 P

Can be used in temperatures as low as -15°C

- Suction plate: Flat, DM 204 mm
- Execution: Plastic ABS
- Suitable for flat, non-porous
- Also with special suction cups for rough surfaces



VHS 204 AL

Light and sturdy!







- Execution: Metal

- Also with special suction cups for rough surfaces







including protective case

WHS 204 PS

For structured glass!





VACUUM SUCTION

- Suction plate: Flat, DM 204 mm
- Execution: Metal
- Also with special suction cups for rough surfaces



Special price offers all the time !!! www.heavydrive.com

Only the best from the market leader!!

WHS 254 AL

For curved panes!

- Suction plate: concave, DM 254 mm - Execution: Metal
- Load capacity: 79 kg - Suitable for
- curved loads R > 330 mm
- Suitable for uneven surfaces
- Also with special
- suction cups for rough surfaces





including protective case

General features:

Safe handling

Suction on smooth surfaces

Red-Line indicator warns the user of possible vacuum loss

Release valve lever allows for quick and complete release of the material to be lifted

Refilling without removing the hand suction cup

Delivered in protective storage box

Up to 57 - 79 Kg Capacity



with practical. sturdy protective case



Heavydrive® Special cup cleaner

The best care for your suction pads.

Thoroughly cleans without leaving a residue.

Clean surfaces and suction pads are vital in order to be able to install panes safely and smoothly. The Heavydrive® special suction pad cleaner is a thorough, residue-free cleaning solution for the suction pads on our vacuum suction devices.



It even enhances grip and increases the service life of the pads.

Based on our expertise gained from years of experience in glass assembly and more than a thousand Heavydrive suction pads in use worldwide, we have developed a special cleaning fluid that thoroughly cleans suction pads and improves grip at the same time.

Forget about glass cleaners, detergents or spirits that actually diminish the loadbearing capacity of the pads!





Instructions for use: Spray liberally over the entire vertical surface to be cleaned.

There is no need to leave the cleaner to act.





Clean immediately with a sponge and then dry completely with a lint-free, absorbent cloth. Repeat as required.

Regular cleaning with the Heavydrive special suction pad cleaner increases the service life of suction pads. Because they are not cleaned and maintained properly, the load bearing capacity of more than half of all suction pads decreases before the date specified by the manufacturer. This can be prevented with regular cleaning using the Heavydrive special suction pad cleaner.

Class protective corners

The protective corners are attached to the pane corners. The two half-shells of the glass corner protectors are clamped with a knob.

Glass panes can then be easily parked on level ground.

Long panes can also be turned over the corner into the vertical position. The protective corners are ideal for flipping from long to short edges or vice versa. The glass corner is completely protected, preventing any breakage.

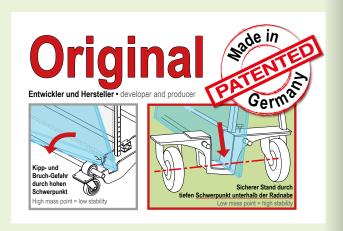
The corner is available with in opening widths of 30 mm / 60 mm / 90 mm!







HDL Glass Transport Wagon "Air" with pneumatic tyres



- Ideal for use off-road and on solid ground
- Highly shock-free transport
- For transporting panes and windows up to 2,400 mm tall
- The mobile assistant for all builders
- Ideal for transporting 1–2 windows at once

- Small and robust
 HDL 250 A in 2 clamp widths
 Up to 250 kg capacity
- Compact to transport several window elements
 HDL 400 BA and SA up to 400 kg capacity
- Diverse and adaptable
 HDL 600 A can be extended up to 2 m.
 Up to 600 kg capacity



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ERW 280 - up to 280 kg capacity adjustable height from 230 to 610 mm





This handy helper is small and robust for transporting glass up to 280 kg. Pneumatic tyres with 130 mm ground clearance that drives easily and safely over uneven ground on construction sites.

Optimally suited for moving window parts over long distances and curbs.

By adjusting the depth of the suction holder, the glass pane is held in place behind the soffit, and the frame remains undamaged.







Find an overview of all our glass transport wagons from p.224

A super small assistant which fits in every crate or car. Incl. robust anti slip fixture! Store Delivery
Find more images and videos of our devices in action at www.heavydrive.com

The state of the s		
<u>Model</u>	<u>ERW 280</u>	
Capacity	280 kg	
Weight	12 kg	
Material	Yellow chromate steel	
Operation	Single operator	
Max. pane dimensions in mm	L 1,500 x H 1,500	
Min. pane dimensions in mm	L 400 x H 400	
Dimensions in mm	L 230 x W 280 x H 980	
Flange distance in mm	W 130 x L 240	
Wheel Diameter	280 mm, pneumatic tyres	
Ground clearance of pane	230 mm up to 610 mm, adjustable height	
Suction cups for load securing	Ø 210 mm, depth adjustable up to 40 mm	
Deployment	Can be driven on terrain	
Delivery format	Cardboard box	



HDL 250 A - capacity up to 250 kg in 2 clamp widths: up to 60 mm or up to 95 mm

For transporting glass panes of up to 250 kg and 95 mm thickness. With pneumatic tyres and 130 mm ground clearance, it is also safe and easy to drive over bumpy building sites.

Major advantage: The glass pane or cargo is automatically clamped by its own weight. It cannot slip.

It is best to use 2 pieces, so that the edges of long glass panes are not damaged when tilted



<u>Model</u>	HDL 250 KSA	HDL 250 KBA
Capacity	250 kg	
Weight	6 kg	
Material	Coated blue steel	
Operation	Single o	perator
Max. pane dimensions in mm	L 3,000 x H 1,500	
Min. pane dimensions in mm	L 400 x H 1,500	
Dimensions in mm	L 300 x W 305 x H 300	
Flange distance in mm	L 300 x W up to 60	L 300 x W up to 95
Wheel Diameter	260 mm, pneumatic tyres	
Ground clearance of pane	130 mm	
Deployment	Can be driven on terrain	
Delivery format	Cardboard box	

HDL 300 A - Up to 300 kg capacity

This handy helper is small and robust for transporting glass panes weighing up to 300 kg and up to 150 mm thick. Air tyre with 130 mm ground clearance that drives easily and safely over uneven ground on construction sites.

It is best to use 2 pieces so that the edges of long glass panes are not damaged when tilting.





Find an overview of all our glass transport wagons from p.353		
Model	HDL 300 A	
Capacity	300 kg	
Weight	7 kg	
Material	Coated blue steel	
Operation	Single operator	
Max. pane dimensions in mm	L 2,500 x H 1,500	
Min. pane dimensions in mm	L 400 x H 1,500	
Dimensions in mm	L 500 x W 380 x H 260	
Flange distance in mm	L500 x W 150	
Wheel Diameter	260 mm, pneumatic tyres	
Ground clearance of pane	150 mm	
Deployment	Can be driven on terrain	
Delivery format	Cardboard box	



HDL 350 BAD - Up to 350 kg capacity, broad

The new HDL 350 BAD with 350 kg load capacity and only 255 mm usable width makes it possible to transport several light window parts at the same time.

With an additional guide rod or grab pole with protective handle, you can push or pull window parts over a curb. This pole can also be used as a parking aid. In addition, each wagon has a transport protection pad and a one-person handle for easy carrying after completion of work.

Major advantage:

Through its **triangular steering**, changing the direction is very quick. That makes this all-rounder **extremely manoeuvrable**.



The handlebar,
protective handle and parking aid
are perfect for
1-person operation!
24 hours delivery

Also available with handlebar



GLASS TRANSPORT WAGON



Find more images and videos of our devices in action at www.heavydrive.com

255 mm usable width

Find an overview of all our glass transport wagons from p.353

W 11 UDI 070 DAD	
Model	HDL 350 BAD
Capacity	350 kg
Weight	6 kg
Material	Yellow chromate steel
Operation	Single operator
Max. pane dimensions in mm	L 2,500 x H 1,500
Min. pane dimensions in mm	L 400 x H 1,500
Dimensions in mm	L 500 x W 460 x H 260
Flange distance in mm	L 500 x W 255
Wheel Diameter	260 mm, pneumatic tyres
Ground clearance of pane	140 mm
Deployment	Can be driven on terrain
Delivery format	Cardboard box



HDL Glass Transport Wagon "Air" with pneumatic tyres

LIGATYCH VO.com

HDL 400 SA - Up to 400 kg capacity, narrow

The new HDL 400 SA with a capacity of 400 kg and a usable width of only 155 mm makes it possible to transport several light window parts at the same time.

With an **additional guide rod or grab pole** with a **protective handle**, window parts can be pushed or pulled over kerbsides. This rod can also be used for safe placement. In addition, each wagon is equipped with a protective cover and a handle for **one-man operation** after the work is complete.



155 mm usable width

The handlebar,
protective handle and parking aid
are perfect for 1-person operation!
24 hours delivery

Find an overview of all our glass transport wagons from p.329

Model	HDL 400 SA
Capacity	400 kg
Weight	6 kg
Material	Yellow chromate steel
Operation	Single operator
Max. pane dimensions in mm	L 2,500 x H 1,500
Min. pane dimensions in mm	L 400 x H 1,500
Dimensions in mm	L 500 x W 360 x H 260
Flange distance in mm	L 500 x W 155
Wheel Diameter	260 mm, pneumatic tyres
Ground clearance of pane	150 mm
Deployment	Can be driven on terrain
Delivery format	Cardboard box

HDL 400 BA - Up to 400 kg capacity, broad

The new HDL 400 BA with a cargo capacity of 400 kg is comparable to the HDL 400 SA in terms of its features. However, with its fabulous usable width of 255 mm, it is optimally suitable for the transport of even thicker glass panes.



Both transport wagons are also available with the handlebars

M . J.1	LIDL 400 DA
Model	HDL 400 BA
Capacity	400 kg
Weight	6 kg
Material	Yellow chromate steel
Operation	Single operator
Max. pane dimensions in mm	L 2,500 x H 1,500
Min. pane dimensions in mm	L 400 x H 1,500
Dimensions in mm	L 500 x W 460 x H 260
Flange distance in mm	L500 x W 255
Wheel Diameter	260 mm, pneumatic tyres
Ground clearance of pane	150 mm
Deployment	Can be driven on terrain
Delivery format	Cardboard box

Meavy Crive.com

HDL 400 A - Up to 400 kg capacity

For panes and panels up to 400 kg, this 1-axle model is even more convenient than the less expensive HDL 400.

A faultless construction and pane tipping safeguard makes it easy to manoeuvre this wagon and the pane in a comfortable working position while keeping sight of approaching danger points.

Major advantage: Cargo can be parked unattended

With pneumatic tyres and 140mm ground clearance, it is also safe and easy to drive over bumpy building sites.



Find an overview of all our glass transport wagons from p.353

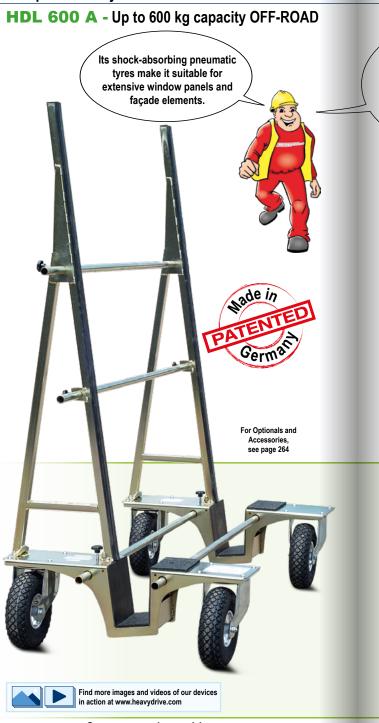
<u>Model</u>	<u>HDL 400 A</u>
Capacity	400 kg
Weight	20 kg
Material	Painted blue steel
Operation	Single operator
Max. pane dimensions in mm	L 2,500 x H 1,800
Min. pane dimensions in mm	L 500 x H 1,500
Dimensions in mm	L 500 x W 680 x H 1,450
Flange distance in mm	W 200 x L 500
Wheel Diameter	260 mm, pneumatic tyres
Ground clearance of pane	140 mm
Locking device for securing the load	500 mm adjustable height mounting bracket
Deployment	Can be driven on terrain
Delivery format	Cardboard box

HDL 500 TA - Heavy tandem wagon with a capacity of up to 500 kg



The new HDL 500 TA with a capacity of 500 kg is equipped with tandem wheels. Due to its safe 4-point base, the product guarantees a very stable position and shock absorption during transportation on uneven construction sites. This 95 cm-long wagon can also be delivered with a steering and pulling rod, as well as a secure rubber grip.

Model	HDL 500 TA
Capacity	500 kg
Weight	21 kg
Material	Yellow chromate steel
Operation	Single operator
Max. pane dimensions in mm	L 2,500 x H 1,500
Min. pane dimensions in mm	L 400 x H 1,500
Dimensions in mm	L 950 x W 490 x H 250
Flange distance in mm	W 255 x L 950
Wheel Diameter	250 mm, pneumatic tyres
Ground clearance of pane	140 mm
Suction cups for load securing	Ø 210 mm / 57 kg Capacity, adjustable height
Deployment	Can be driven on terrain
Delivery format	Cardboard box



Adjustable length from 500 to 2000 mm! Pneumatic tyres for every surface Including fully rotating total-stop wheels



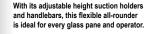
The shock-absorbing pneumatic tyres on the new HDL 600 A with a 600 kg load capacity are equipped with continuous total-stop. This ensures secure parking in any position or direction. In addition, it can be extended up to 2 m.

Find an overview of all our glass transport wagons from n 353

Find an overview of all our glass transport wagons from p.353		
Model	HDL 600 A	
Capacity	600 kg	
Weight	65 kg	
Material	Yellow chromate steel	
Operation	Single operator	
Max. pane dimensions in mm	L 4,000 x H 2,800	
Min. pane dimensions in mm	L 400 x H 1,500	
Dimensions in mm	L 2,000 x W 815 x H 1,800	
Flange distance in mm	W 110 x L 300 and can be extended up to 2,000	
Wheel Diameter	260 mm, pneumatic tyres	
Ground clearance of pane	120 mm	
Transport wagon ground clearance	75 mm	
Load securing	Safe position due to the low centre of gravity and the vertical position of the transported goods	
Deployment	Can be driven on terrain	
Delivery format	Secure wooden crate	



HD 700 BA Up to 700 kg capacity **Monster Off-Road Truck**







Find an overview of all our	glass	transport	wagons	from p.353
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<u>Model</u>	<u>HD 700 BA</u>	
Capacity	700 kg	
Weight	68 kg	
Material	Yellow chromate steel	
Operation	2-person operation	
Max. pane dimensions in mm	L 5,000 x H 2,800	
Min. pane dimensions in mm	L 2,400 x H 1,500	
Dimensions in mm	L 2,400 x W 600 x H 1,800	
Flange distance in mm	W 120 x L 2,400 and can be extended up to 3,800	
Wheel Diameter	350 mm, pneumatic tyres	
Ground clearance of pane	160 mm	
Transport wagon ground clearance	130mm	
Load securing	Safe position due to the low centre of gravity and the inclined position of the transported goods	
Deployment	Can be driven on terrain	
Delivery format	Secure wooden crate	



HDL Glass Transport Wagon

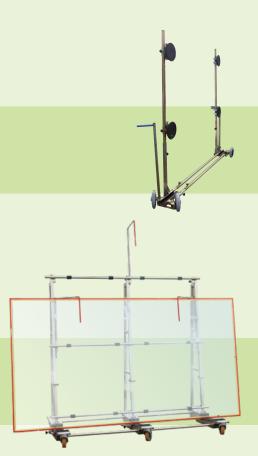
for heavy panes

- Dismountable and adjustable HDL 500: Extendible 500-1,200 mm capacity of up to 500 kg



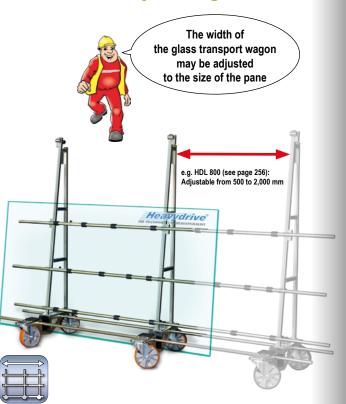
- Extra-thin for narrow sites
HD 1000:only 35 cm wide, up to 1000 kg capacity

- Stable, even for huge panes HDF 1000/3 with 3rd support Up to 1,000 kg capacity



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Advantages of HDL Glass Transport Wagons



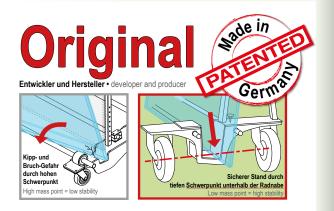


e.g. HDL 700 (see page 252): Transport glass panes min. 500 mm wide and max. 3,200 mm tall

> Safe and easy transport of the pane due to low center of gravity and soft driving comfort.

One-man operation!





WhatsApp-Service: +49 171 340 74 06

244

Advantages at a glance:

- Extremely lightweight construction; made of high-performance steel
- Optimal anti-slip protection through system buffer and rubber supports
- Secure placement due to its low centre of gravity (patented by Heavydrive®)
- Pane dimensions adjustable up to 3,200 mm
- Increased driving comfort
- Extremely low near-ground glass pane transport
- •1-person operation

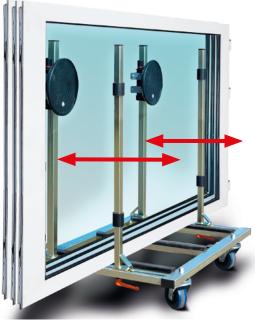
FT 300 Up to 300 kg capacity



Double safety with full-stop wheels: Brakes in direction and position with only one lever pressure!

Find an overview of all our glass transport wagons from p.353

Model	FT 300	
Capacity	300 kg	
Сарасіту	300 kg	
Weight	25 kg	
Material	Yellow chromate steel	
Operation	Single operator	
Max. pane dimensions in mm	L 2,000 x H 1,600	
Min. pane dimensions in mm	L 680 x H 1,000	
Dimensions in mm	L 850 x W 600 x H 970	
Flange distance in mm	Extendible W 0 up to 380 x L 300 up to 2,000	
Wheel Diameter	100 mm	
Ground clearance of pane	165 mm	
Load securing	vertical locking bars with adjustable width and lockability, some with suction holder	
Deployment	Can be driven on terrain	
Delivery format	in a secure box	



Sliding uprights that "clamp" the cargo between them, for example, when transporting more than one pane

loose parts.









HDL S 500 up to 500 kg capacity to turn the panes 85° down to 45°



Advantage:

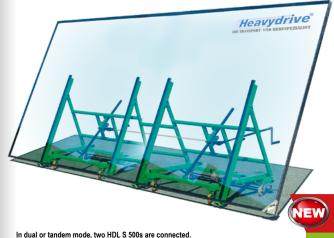
Using a mechanical hand crank, the glass pane can be turned horizontally up to 45°.

The upper edge of the glass pane is thereby lowered to allow for the passage through automatic sliding doors.

<u>Model</u>	<u>HDL S 500</u>	
Capacity	500 kg	
Weight	110 kg	
Material	Yellow chromate steel	
Operation	Single operator	
Max. pane dimensions in mm	L 2,500 x H 3,200	
In dual mode max. in mm	L 6,000 x H 3,200	
Min. pane dimensions in mm	L 1,500 x H 1,000	
Dimensions in mm	L 1,480 x W 600 x H 1.410	
Flange distance in mm	W 40 x L 1,500	
Wheel Diameter	100 mm	
Ground clearance of Pane	10 mm	
Incline adjustment	pivoting from 89° to 45°	
Load securing	Inclined support, anti-slip support	
Deployment	in corridors	
Delivery format	built on secure wooden pallet	

Double safety with full-stop wheels: Brakes in direction and position with only one lever pressure!

I Garyo IIV G.com



in dual or tandem mode, two HILLS Subsare connected.

Privoting is performed with a mechanical crank. As a result, very large jumbo glass panes up to 6,000 mm can be safely turned and moved.



Optional:

Glass protection corner with 30 mm / 60 mm / 90 mm wide opening available!

For description, see page 223

Find an overview of all our glass transport wagons from p.353



Meavychtve.com

HDL 500 up to 500 kg capacity - our best seller!



Twice as safe thanks to full-stop wheels: Brakes in direction and position with only one lever pressure!!

Demountable glass transport wagon which can be adjusted to the glass size



300 - 1,200 mm Length adjustable support

Air freight packed according to the IPPC standards



Extra low centre of gravity

Contains only 5 parts 24 hour delivery!

For Optionals and Accessories, see page 264

<u>Model</u>	HDL 500
Capacity	500 kg
Weight	32 kg
Material	Yellow chromate steel
Operation	Single operator
Max. pane dimensions in mm	L 2,500 x H 2,500
Min. pane dimensions in mm	L 500 x H 500
Dimensions in mm	L 1,200 x W 760 x H 1,440
Flange distance in mm	W 130 x L 300
Wheel Diameter	200 mm
Ground clearance of pane	120 mm
Load securing	low centre of gravity, inclined support, anti-slip support
Deployment	Can be partly driven on terrain
Delivery format	Wooden crate

HDL 600 Up to 600 kg capacity

The classic model from HEAVYDRIVE®: this model is based on the in-house original construction of the mobile glass frame. However, it is much more flexible than a simple glass stand on wheels. This glass transport rack is suitable for any size glass pane up to 4 m long and 3.2 m tall.



Find an overview of all our glass transport wagons from p.353

For Optionals and Accessories, see page 264

	For Optionals and Accessories, see page 264
Model	HDL 600
Capacity	600 kg
Weight	52 kg
Material	Yellow chromate steel
Operation	Single operator
Max. pane dimensions in mm	L 4,000 x H 3,200
Min. pane dimensions in mm	L 500 x H 500
Dimensions in mm	L 2,000 x W 790 x H 1,980
Flange distance in mm	W 110 x L 500 up to 2,000
Wheel Diameter	200 mm
Ground clearance of pane	120 mm
Load securing	low centre of gravity, inclined support, anti-slip support
Deployment	Can be driven on terrain
Delivery format	Wooden crate

LIGAYYQITIVO.com

HDL 700 - Up to 700 kg capacity



A pane transporter which makes it possible for just one person to easily transport bulky 3-way insulating glass panes weighing up to 700 kg through doors and other bottlenecks. This glass pane transport frame can be adapted to any glass pane size up to 6 m long and 3.2 m tall.

This practical glass transport wagon can be dismantled in just a few steps and loaded in a customised aluminium box which can even be carried by car or pickup truck to any construction site.



Pane transport up to min. width of 500 mm and max. height of 3,200 mm



Find more images and videos of our devices in action at www.heavydrive.com

Find an overview of all our glass transport wagons from p.353



Model	HDL 700
Capacity	700 kg
Weight	52 kg
Material	Yellow chromate steel
Operation	Single operator
Max. pane dimensions in mm	L 4,000 x H 3,200
Min. pane dimensions in mm	L 500 x H 500
Dimensions in mm	L 2.000 x W 790 x H 1.980
Flange distance in mm	W 110 x L 500 up to 2.000
Wheel Diameter	200 mm
Ground clearance of pane	120 mm
Load securing	low centre of gravity, inclined support, anti-slip support
Operation	Can be driven on terrain
Delivery format	Wooden crate

LIERYYCHIVO.com

HD 700 - Extra Narrow – Up to 700 kg capacity

A superior glass transport wagon that is **only 350 mm wide**, but nevertheless makes it possible for **just one person** to **easily transport** huge **glass panes** weighing up to 700 kg through doors and other bottlenecks.

This glass pane transport frame can be adapted to any glass pane size up to 6 m long and 3.2 m tall.

This practical glass transport wagon can be **dismantled in just a few steps** and loaded in a **customised box** that can even be **carried by car or pickup truck** to any construction site.



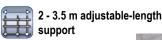
Top Selling Points:

- Shock-absorbing wheels for comfortable handling
- Light construction
- · Can be dismounted in a few minutes
- Adjustable length and height
- · Easy-to-steer by setting drive direction
- · Widening fixture for panes up to 65 mm thick
- Only 350 mm wide
- Secure hold via Powrgrip hand suction cup.

Developed and manufactured in Germany by HEAVYDRIVE®

Only 350 mm wide! Ideal for triple glazing! CAN BE OPERATED BEHIND SCAFFOLDING! 24 hour delivery!

The staggered suction cups make it possible to also move façade elements. The reveal depth of 1-2 cm is bridged.



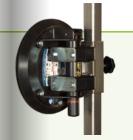
low centre of gravity firm pane support and grasp, very flexible, shock absorbing rollers



LASS TRANSPORT

Handles - perfect

for manoeuvring



Vacuum suction cups with red-line display at loss of vacuum

Find an overview of all our glass transport wagons from p.353

Model	HD 700	HD 700 B	
Capacity	700 kg		
Weight	52	! kg	
Material	Yellow chromate steel		
Operation	Single operator		
Max. pane dimensions/mm	L 5,000 x H 2,500		
Min. pane dimensions/mm	L 2,000 x H 500		
Dimensions in mm	L 2,000 x W 350 x H 1,980	L 2,000 x W 400 x H 1,980	
Flange distance in mm	W 65 x L 2,000 up to 3,500	W 110 x L 2,000 up to 3,500	
Wheel Diameter	200 mm		
Ground clearance of pane	120 mm		
Load securing	a pair of adjustable-height suction cups with non-slip pad		
Deployment	Can be driven on terrain		
Delivery format	Wooden crate		

Always in stock!



HDL 800 - Up to 800 kg capacity

A glass transport wagon that one person can use to easily transport huge panes weighing up to 800 kg through doors and other bottlenecks. This glass pane transport frame can be adapted to any glass pane size up to 6 m long and 3.2 m tall.

This practical glass transport wagon can be dismantled in just a few steps and loaded in a customised aluminium box that can even be carried by car or pickup truck to any construction site.



Applications:

Hard-to-access areas on construction sites for heavy glass panes, glass parts and fire doors.



Extra low centre of gravity

Adjustable from 500 to 2000 mm adjustable-length support

Double safety with full-stop wheels:

Brakes in direction and position with only one lever pressure!



Find more images and videos of our devices in action at www.heavydrive.com

Find an overview of all our glass transport wagons from p.353

<u>Model</u>	HDL 800	
Capacity	800 kg	
Weight	58 kg	
Material	Yellow chromate steel	
Operation	Single operator	
Max. pane dimensions in mm	L 6,000 x H 3,200	
Min. pane dimensions in mm	L 500 x H 500	
Dimensions in mm	L 2,000 x W 790 x H 1,980	
Flange distance in mm	W 110 x L 500 up to 2,000	
Wheel Diameter	200 mm	
Ground clearance of pane	120 mm	
Load securing	low centre of gravity, inclined support, anti-slip support	
Deployment	Can be partly driven on terrain	
Delivery format	Wooden crate	



up to 2 m

Very low centre of gravity for safe transport

HD 1000 - Extra Narrow - Up to 1,000 kg capacity

A superior glass transport wagon that is only 350 mm wide, but nevertheless makes it possible for just one person to transport huge glass panes weighing up to 1,000 kg through doors and other bottlenecks.

This glass pane transport frame can be adapted to any glass pane size up to 6 m long and 3.2 m tall.

This practical glass transport wagon can be dismantled in just a few steps and loaded in a customised box that can even be carried by car or pickup truck to any construction site.





Find an overview of all our glass transport wagons from p.353

For Optionals and Accessories, see page 264



low centre of gravity firm support and secure parking for the glass pane, very flexible, shock absorbing rollers

Extra low centre of gravity			
<u>Model</u>	<u>HD 1000</u>		
Capacity	1,000 kg		
Weight	52 kg		
Material	Yellow chromate steel		
Operation	Single operator		
Max. pane dimensions in mm	L 5,000 x H 2,500		
Min. pane dimensions in mm	L 500 x H 500		
Dimensions in mm	L 2,000 x W 790 x H 1,980		
Flange distance in mm	W 65 x L 2,000 up to 3,500		
Wheel Diameter	200 mm		
Ground clearance of pane	120 mm		
Load securing	4 adjustable height suction cups with non-slip pads		
Deployment	Can be partly driven on terrain		
Delivery format	Wooden crate		

Extra low centre of gravity





Vacuum suction cups with red-line display at loss of vacuum

Safe position

HDL 1000 - Up to 1,000 kg capacity



A glass transport wagon that makes it possible for just one person to easily transport huge panes weighing up to 1,000 kg through doors and other bottlenecks.

This practical glass transport wagon can be dismantled in just a few steps and loaded in a customised aluminium box that can even be carried by car or pickup truck to any construction site. This glass pane transport frame can be







Glass Centre Schweikert, Heilbronn, Germany



Easy to dismantle Optional in aluminium transport box

For Optionals and Accessories. see page 264

Find an overview of all our glass transport wagons from p.353			
<u>Model</u>	HDL 1000		
Capacity	1,000 kg		
Weight	60 kg		
Material	Yellow chromate steel		
Operation	Single operator		
Max. pane dimensions in mm	L 6,000 x H 3,200		
Min. pane dimensions in mm	L 500 x H 500		
Dimensions in mm	L 2,000 x W 790 x H 1,980		
Flange distance in mm	W 110 x L 500 up to 2,000		
Wheel Diameter	200 mm		
Ground clearance of pane	120 mm		
Load securing	low centre of gravity, inclined support, anti-slip support		
Deployment	Can be partly driven on terrain		
Delivery format	Wooden crate		



HDF 1000 + 1000/3 - for Wide Windows /

Façade Elements up to 1,000 kg



Find an overview of all our glass transport wagons from p.353

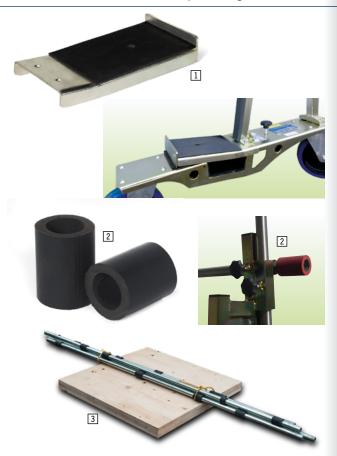
<u>Model</u>	HDF 1000	HDF 1000 /3
Capacity	1,000 kg	
Weight	60 kg 80 kg	
Material	Yellow chromate steel	
Operation	Single operator	
Max. pane dimensions in mm	L 6,000 x H 3,200	
Min. pane dimensions in mm	L 500 x H 500	
Dimensions in mm	L 2,000 x W 930 x H 1,950	
Flange distance in mm	W 0 to 300 x L 500 to 2,000	
Wheel Diameter	140 mm	
Ground clearance of pane	120 mm	
Load securing	low centre of gravity, Inclined support, anti-slip support	
	Locking device to keep panes from tipping	
	Slip protection to keep panes from slipping	
Deployment	Can be partly driven on terrain	
Delivery format	Wooden crate	

For Optionals and Accessories, see page 264

slide protection









Find an overview of all our glass transport wagons from p.224

Accessories	<u>Description</u>	<u>Use</u>
1 Support extension	1 pair of steel supports with anti-slip pads are pushed and fastened under the existing pedestal	For transporting glass façade elements thicker than 250 mm
2 Support buffer	moulded high-strength plastic buffers placed on the steel pipe	All glass transport wagons have horizontal support rods
3 Extension rod set	Extension pipes for wagon extension up to 3,500 mm support length	All glass transport wagons with support
4 Handlebar	screwed-on rod with handle for guiding and steering the glass transport wagon	All glass transport wagons without support
5 Grab pole with cup	Screwed-on grab pole with adjustable height hand-suction cups for load securing	All glass transport wagons without support
6 Wheels Ø 140 / Ø 160	Replace tyres with140 mm diameter wheels to reduce the glass support height	All glass transport wagons with support
Further information can be found at www.heavydrive.com		



ASSIBMIBIN CRAW

MRK Assembly Cranes

- Specifically for tight/confined assembly spaces
MRK 55: indoor and outdoor
Up to 0.995-tonne capacity



- The off-road power package MRK 167 up to 6-tonne capacity

- The world's largest mini crawler crane MRK 230 with a lifting height of 28 m and up to 10-tonne capacity



Meavy Crive.com

Non-Marking Tracks

for MRK assembly cranes





Are you using assembly cranes on floors that mark easily?

Indoor assembly is a real challenge and high-quality flooring is extremely easy to mark. Marks left by traditional black tracks or damage caused trying to remove these marks can be very expensive!

Did you know that shoes with black rubber soles are banned in sports halls? They can leave black marks that are very difficult to remove.

This is also a problem in indoor assembly projects where the floors have already been laid. But Heavydrive has the perfect solution.

Our MRK assembly cranes can be fitted with optional abrasion-free, non-marking tracks known as 'white tracks'.

This means that indoor assembly can take place safely without leaving any marks, even on easily-marked floors. This opens up new possibilities for creative planning and the organisation of modern projects.

It also makes indoor maintenance in existing buildings much more efficient.



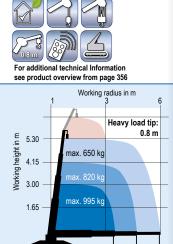


All our assembly cranes are available with optional non-marking tracks

MRK 55.0 with Electric / Gas / Petrol drive

This mini caterpillar crane with a maximum capacity of 0.995 tonnes and a hook height of 5.5 m is suitable for indoor and outdoor use. With caterpillar tracks, it can drive on any surface and thanks to its non-marking (non-colouring) tracks, steps in buildings are no problem either. Through various special Heavydrive® assembly tips, you can even reach under eaves, behind scaffolding and many other places. Alongside our vacuum suction systems, you can take almost every name and panel to its destination





max. support 1,650 mm

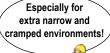
Rope length

39 m

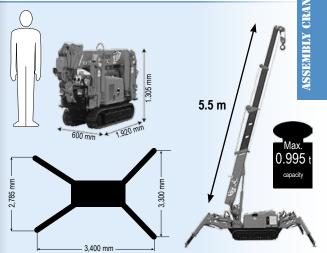












(m) < 1.1

1.3 980 980

1.5

1.65

< 1.8

2.0

2.5

2.8

3.0

3.5

3.95

4.0

4.5

5.1

995

890

620

550

650

620

550

500

380

300

250

200

MRK 56.0 Assembly crane with 1.7-tonne loading capacity and sensor monitoring

- · Maximum lift height of 5.5 m
- · Extremely thin bodywork (590 mm)
- · Low ground pressure
- · Manoeuvrability and stability
- · Programmable load torque limiter

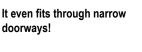
- · Petrol engine

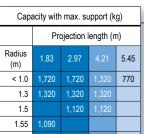


Compact and powerful:

Only 590 mm wide, yet it has a loading capacity of 1.7 tonnes!

doorways!



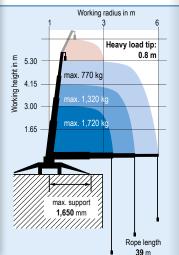


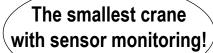
2 700 2.5 660 2.69 3 530 3.5 410 3.95 4 330 4.5 270 220 5.15

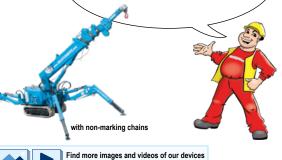
Options (more information on p. 363):



For additional technical Information see product overview from page 356





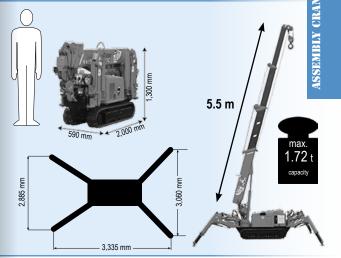


in action at www.heavydrive.com





MRK 56.0 even fits through narrow doorways!



Capacity with max. support (kg)

Radius (m)

< 1.4 1.5 2.0 2,165 2.5

3.0

3.5

3,705

40

4.5

5.0

5,205

5.5

6.0

6.5

6,705 7.0

7.5

8.0

8.205

Projection length (m)

8.58

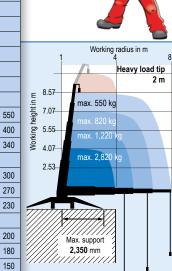


MRK 86.0 with Electric / Diesel drive



The extra long heavy load tip reaches up to 2 m under projections!

24 hour delivery



Rope length





Above: Glazing under protrusions

Left: Glazing behind scaffolding at Düsseldorf Airport, Germany

Options

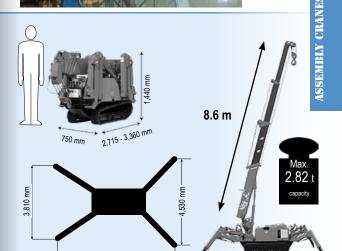
(more information on p. 363):











4,580 mm

150



MRK 88.0 with Electric / Gas / Petrol drive

The talent of the mini cranes is two-fold: high performance with little weight.



Glazing on buildings with sharp angles and / or low floor load

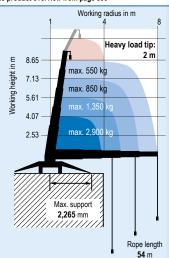
Capacity with max. support (t)				
	Projection length (m)			
Radius (m)	4.07	5.61	7.13	8.65
1.0	2.9			
1.4	2.9			
1.5	2.65	1.35		
1.8	2.25	1.35		
2.0	2.05	1.35		
2.2		1.25		
2.5	1.65			0.55
2.9		1.0		
3.0	1.3			0.55
3.3			0.85	
3.5		0.8		
3.8			0.85	0.55
3.84	0.9	0.65		
4.0		0.52	0.75	
4.1		0.43		0.55
4.5			0.6	0.45
5.0			0.5	0.37
5.37				
5.5			0.42	0.31
6.0			0.36	0.27
6.5			0.32	0.23
6.89			0.27	
7.0				0.2
8.0				0.15
8.41				0.13



Options (more information on p. 363):



For additional technical Information see product overview from page 356

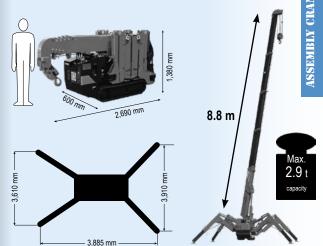






The MRK 88 shows off the full extent of its strengths in confined and tricky construction situations (Inside to outside) Bulletproof glazing at EZB gatehouse, Frankfurt am Main.







MRK 93.0 with Electric / Diesel drive

The newest assembly crane with a capacity of 2.93 tonnes is designed specifically for restricted city centre locations. The crane can lift up to 1,465 kg and can be driven under load with hardly any deviation from an extremely narrow track.

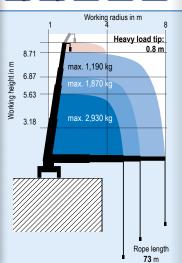


Art Museum Stuttgart, Germany

For additional technical Information see product overview from page 356

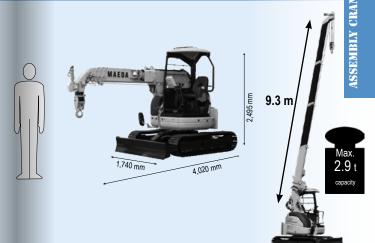
Capacity with max. support (kg)					
	Projection length (m)				
Radius (m)	3.18	5.0	6.78	8.71	
1.5	2,930	2,930	1,870	1,190	
2.0	1,730	1,730	1,730	1,190	
2.5	1,200	1,190	1,190	1,190	
2.85	980	900	980	980	
3.0		800	900	900	
3.5		720	720		
4.0		600	600	600	
4.5		500	500	500	
4.7		460	460		
5.0			430	430	
5.5			370	370	
6.0			330	290	
6.5			290		
8.0				215	
8.38				200	

Options (more information on p. 363):











MRK 126.0 with Electric/ Diesel drive

This extremely versatile assembly crane with a capacity of 2.93 tonnes and a hook height of 12.66 m is suitable for both indoor and outdoor use.

With its caterpillar tracks, it can drive on any ground and thanks to its non-marking (non-colouring) tracks, steps in buildings are no problem either. The low ground pressure of the caterpillar tracks is also advantageous.

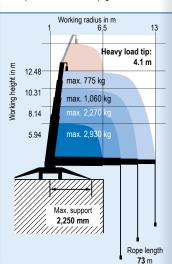
With various special Heavydrive® heavy-load tips with up to 4.1 m reach extension, it can go under tricky eaves, behind difficult to access scaffolding and in other unfavourable places. In combination with our vacuum suction systems, you can bring almost every pane and panel, even with a porous surface, to its destination.

This high-quality crane works with extreme precision and our experienced operating personnel manoeuvre this equipment jerk-free and exact to the millimeter.

Capacity with max. support (kg)					
	Projection length (m)				
Radius (m)	5.94	8.14	10.31	12.48	
2.5	2,930				
2.7		2,270			
3.0	2,350	2,090			
3.5	1,950	1,680			
4.0	1,670	1,415	1,060		
4.5	1,450	1,230	950	775	
4.9					
5.0	1,300	1,070	860	640	
5.5					
5.62	1,120				
6.0		855	750		
6.5					
7.0			645	410	
7.82		610			
8.0			540	360	
9.0			490	320	
9.99			415		
10.0					
11.0				260	
12.0					
12.16				250	



For additional technical Information see product overview from page 356











Options (more information on p. 363):



1,280 mm

4,396 mm

4,280 mm

4,888 mm











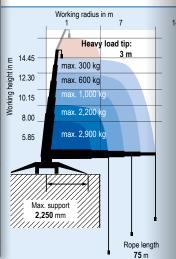
MRK 144.0 with Electric / Diesel drive



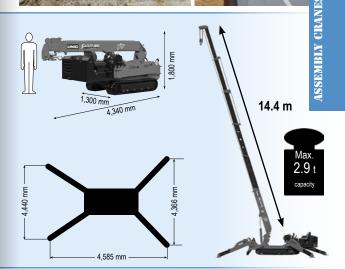
Capacity with max. support (t)						
	Projection length (m)					
Radius (m)	5.85	8.00	10.15	12.30	14.45	
2.0	2.9					
2.4	2.9					
2.5	2.75					
2.7	2.5	2.2				
3.0	2.25	2.0				
3.5	1.9	1.65	1.0			
4.0	1.6	1.35	1.0			
4.5	1.4	1.16	0.9	0.6		
4.9					0.3	
5.0	1.22	1.02	0.8	0.6		
5.5		0.9	0.75	0.52	0.27	
5.69	1.05					
6.0		0.8	0.7	0.45	0.25	
6.5		0.7				
7.0		0.65	0.6	0.37	0.22	
7.84		0.6				
8.0			0.5	0.32	0.2	
9.0			0.45	0.28	0.18	
9.99			0.4			
10.0				0.25	0.16	
11.0				0.22	0.14	
12.0					0.13	
12.14				0.2		
13.0					0.11	
14.29					0.1	











Meavy QMV @.com

MRK 158.0 with Electric / Diesel drive



0.85 0.5

0.7

0.6

0.55

0.5 0.35

0.45 0.3

0.4 0.25

0.35 0.25

0.5

0.5

0.4

0.2

0.2

0.15

0.15

4.5

5.5 6.0

6.5

7.0

7.5

8.0

10.0

10.8

11.0

12.0

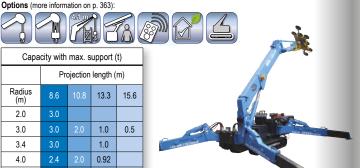
13.0

13.1

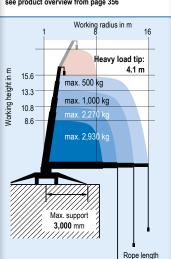
14.0

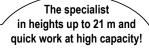
15.45

16.5



For additional technical Information see product overview from page 356





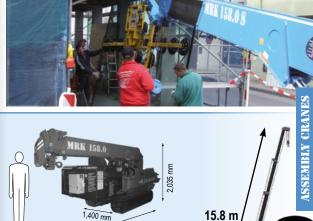
No purchase necessary rent at a low cost!

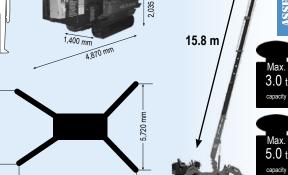


5,940 mm



Above: BfA, Heidenheim. Below: Shop, Biberach, both Germany



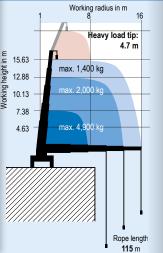


5,900 mm



	Ca	Capacity with max. support (t)								
		Projection length (m)								
Radius (m)	4.63	7.38	10.13	12.88	15.63					
2.00	4.9	4.9	2.0	2.0						
2.50	3.8	3.76	2.6	2.0	1.4					
3.00	2.9	2.98	2.31	2.0	1.4					
3.50		2.42	2.01	1.89	1.4					
4.00		2.0	1.75	1.65	1.4	Working height in m				
4.50		1.67	1.53	1.45	1.32	heigh				
5.00		1.40	1.34	1.28	1.2	king				
6.00		1.0	1.03	1.01	0.99	Ņ				
7.00			0.78	0.8	0.82					
8.00			0.58	0.53	0.68					
9.00			0.41	0.5	0.56					
10.00				0.39	0.45	,				
11.00				0.3	0.36					
12.00					0.28	7				
13.00					0.21					
14.00					0.2]				
14.52					0.2					











MRK 167.0 with Electric / Diesel drive

This powerful and innovative crane offers market leading features, including a 6-tonne capacity and a bulldozer blade for impassable terrain.



Heavy load tip up to 400 kg capacity, can be extended to 4.1 m



supports

Powerful and suited to

off-road!

Movable under a

2.0 tonne load without







Find more images and videos of our devices in action at www.heavydrive.com





Capacity with max. support (t) Projection length (m)



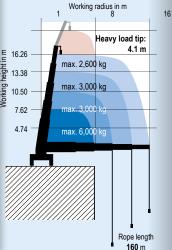


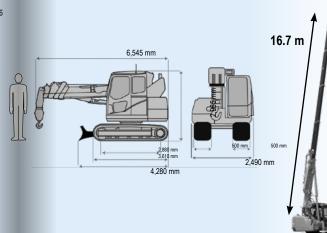
Options (more information on p. 363):





	Projection length (III)							
Radius (m)	4.74	7.63	10.50	13.38	16.26			
2.00	6.0	6.0	3.0					
2.50	6.0	6.0	3.0	3.0				
3.00	5.25	5.26	3.0	3.0	2.6			
3.50	4.45	4.46	3.0	3.0	2.6			
4.00	3.83	3.82	3.0	3.0	2.6	E		
4.50	3.32	3.31	3.0	3.0	2.6	Working height in m		
5.00		2.88	2.71	2.64	2.6	g hei		
6.00		2.21	2.14	2.1	2.08	orkin		
7.00		1.72	1.72	1.71	1.71	>		
8.00			1.4	1.43	1.43			
9.00			1.15	1.20	1.21			
10.00			0.94	1.02	1.04			
11.00				0.88	0.89	7		
12.00				0.75	0.77			
13.00				0.65	0.67			
14.00					0.58			
15.00					0.5			
16.01					0.43			





Мах. 6.0 t



MRK 168.0 with Electric / Diesel drive



Options (more information on p. 363):











Capacity with max, support (t)

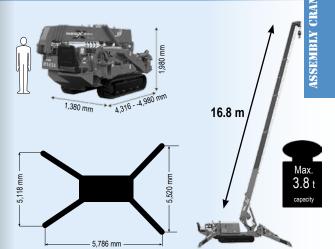
For additional technical Information see product overview from page 356

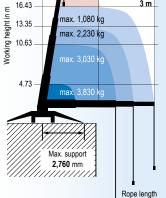
Cap	. auppui	ι (ι)						
	F	Projection length (m)						
Radius (m)	4.68	10.63	13.53	16.43				
< 2.7	3.83							
3.5	3.03							
3.0								
3.5		3.03						
4.0	2.58	2.58	2.23					
4.5			1.93					
5.0	2.03	2.03	1.73	0.108				
5.5				0.98				
6.0	1.63	1.63	1.4	0.91				
7.0	1.33	1.33	1.18	0.76				
7.25	1.33							
8.0		1.08	0.98	0.65				
9.0		0.88	0.85	0.55				
10.0		0.58	0.75	0.50				
11.0			0.65	0.45				
12.0			0.53	0.41				
13.0			0.43	0.36				
14.0				0.31				
15.0				0.26				
16.0				0.21				

This compact mobile caterpillar crane fits perfectly in industrial lifts, has a capacity of 3.8 tonnes and a hook height of 16.8 m. It can be electrically or diesel powered and is therefore suitable for both indoor and outdoor use. With caterpillar tracks, it can drive on any surface and thanks to its non-marking (non-colouring) tracks, can also be driven on indoor floors.

Using various special Heavydrive® assembly tips, you can even position loads of up to 500 kg up to 3 m under balconies, eaves and other projections that cannot be accessed by other cranes. Alongside our vacuum suction systems, you can take almost every pane and panel made of glass, concrete, stone, metal or plastic to its destination.







Working radius in m

Heavy load tip:

95 m



MRK 195.0 with Electric / Diesel drive

Compact small crane with an incredible reach of up to 22.7 m, including the patented Heavydrive® mounting tip. The standard is a maximum load capacity of 6.0 tonnes and a hook height of 19.5 m. The small crane can be operated electrically by heavy current or with diesel, and thus it can be used indoors or outdoors. Thanks to its caterpillar tracks, it can travel over any surface and can also drive inside buildings and over floors using non-marking chains. When operated with our window suction systems, you can place almost any pane / plate made of glass, concrete, stone, metal or plastic at the desired location.

At the same time, our Heavydrive® operator manoeuvres without jerks and with millimeter precision! Hire one of our operators!



or Matipulities	IN 1913 AND HEALT DRIVE COM
Capacity with max. support (t)	
Projection length (m)	Options (more information on p. 363):
	Options (more information on p. 303).

							Options (more information
Radius (m)	4.8	7.7	10.6	13.5	16.3	19.2	Options (more imamiator
2.7	6	6	4.6				
3.0	6	6					The state of the s
3.5	5.4	5.4					
4.0	4.8	4.8	4.6				

2.4

1.7

1.4

1.2

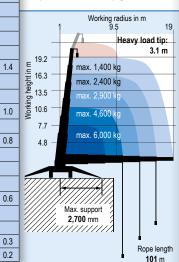
1.0

0.7

0.6

0.5

For additional technical Information see product overview from page 356

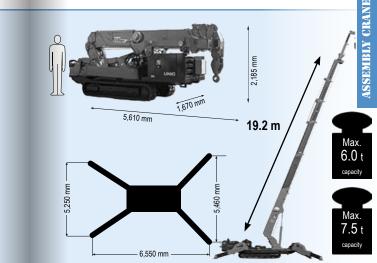












4.3

5.0

5.5

6.0

7.0

7.2

8.0

8.4

9.0

10.0

10.8

11.0

12.0

13.0

13.1

14.0

15.0

16.5 18.0

18.6

3.9

2.9

2.4

1.8

1.4

MRK 230.0 with Electric / Diesel drive

As the world's largest assembly crane with a lifting height of 22.9 metres and a 7.5 metre hydraulically movable assembly tip, it mounts panes up to a 10 tonne capacity.

Its compact design is perfect for working in restricted spaces. Alongside our vacuum suction systems, you can take almost every pane and panel made of glass, concrete, stone, metal or plastic to its destination. At the same time, our Heavydrive® operator manoeuvres without jerks and with millimeter precision! Hire one of our operators!



not overview from page 550							62m (2-rope)	
Ca	apacity	with r	max. s	suppo	rt (t)			30m (4-rope) Unwind hydraulically
Projection length (m)						Lifting height 22.80 to 30.7 r Movable with 1,500 kg load		
6.0	9.0	13		20	23	28	31	(Pick & Carry)
10.0	10.0							Options (more information on p. 3

1.0

0.9

0.7

2.8

1.0



Optional:

- · 3-axis-manipulator-adapter
- · Work basket up to 32 m height
- + 19 m radius, 200 kg capacity





Removable boom for transportation



Find more images and videos of our devices in action at www.heavvdrive.com

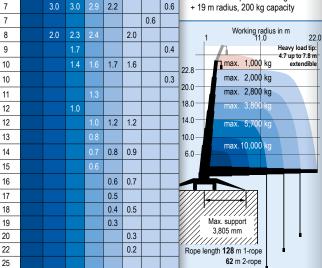
Hydraulic tip mounted on the side

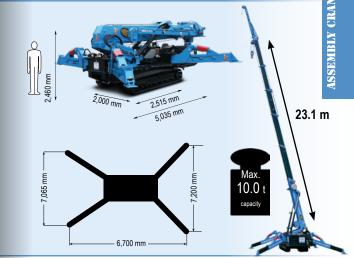


Hydraulic fold-out support



Clear control panel





Radius (m) 3

> 4 8.8

> 4 6.3

> 5 5.0

5

6

6

7





Pick & Carry Cranes / Industrial Mobile Cranes



Many more models available with a capacity of up to 100 tonnes!

Service and Rental from Tapfheim

- Movable under loads of up to 2000 kg

- Can lift and move loads
- Accurate positioning to the mm
- Very easy to operate
- Ideal for indoor or outdoor use





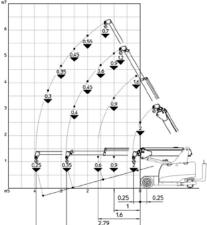
- Strong and compact MLK 85 with 8.5 tonne capacity

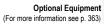
- For extremely heavy panes MLK 600 with 60 tonne capacity



MLK 20 Up to 2 tonne capacity











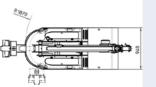


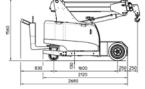


Compare our different Pick & Carry cranes on 360

Pick & Carry cranes on	•	
Model	MLK 20	
Capacity	2,000 kg	
Net Weight	2,000 kg	
L x W x H in mm	2,680 x 940 x 1,560	
Turning Radius	1,870 mm	
Boom Angle	-15° to 60°	
Frame	Torsion resistant design made with high-strength structural steel	
Power Type	Electric battery	
Transmission	Rear axle by reducer	
Boom	Hydraulic base unit and telescopic mast element as well as two manual extensions	
Motor Pump	1 Electric motor 2.6 kW 24 V AC. Insulation class H	
Battery	24 V 420 Ah battery charging indicator	
Wheels	Front: 2 Superelastic 18 x 7 - 8 " - Rear: Polyurethane 255/80	
Brakes	Automatic on rear wheels	
Steering	Rear wheel. Max. steering angle ± 90°	>
Standard Equipment	Working light Warning light, fire extinguisher, safety shutdown Declaration of conformity / CE label User manual, maintenance schedule Spare parts list Standard battery charger (external)	PICK & CARRY
Optional Equipment	Heavy load tip Assembly tip Pulley block 4-rope Remote control radio Hydraulic winch with max. 2,000 kg capacity Hydraulic High-Speed winch with max. 2,000 kg capacity Non-marking wheels Automatic filling system for batteries Standard battery charger (internal) Fully hydraulic boom (basic element + two telescopic mast elemen manual extension) Radio remote control only for boom movement Wired remote control only for boom handling Man basket 100 kg (one man) Only available with radio or wired remote control	

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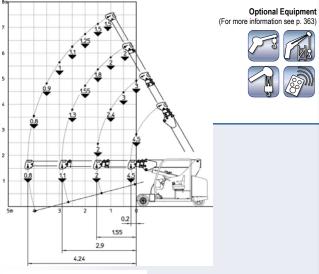




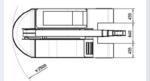
Paintwork at customer's request

MLK 45 Up to 4.5 tonne capacity









Compare our different Pick & Carry cranes on 360

Pick & Carry cranes on	300
<u>Model</u>	MLK 45
Capacity	4,500 kg
Net Weight	4,800 kg
L x W x H in mm	2,785 x 1,550 x 1,860
Turning Radius	2,500 mm
Boom Angle	-15° to 60°
Frame	box type, torsion resistant design made with high-strength structural steel
Power Type	Electric battery
Transmission	Rear-wheel drive
Boom	Hydraulic base and telescopic mast element
Traction Motor	Electric motor 5 kW 48 V AC. Insulation class H
Motor Pump	Electric motor 9 kW 48 V AC. Insulation class H
Battery	48 V – 560 Ah
Wheels	Front: 4 superelastic 18 x 7 - 8 " Rear: 1 superelastic 200/50-10"
Braking	Automatic on all wheels (front and rear)
Steering	Over the rear axle with max. steering of ± 90°;
Hydraulic System	2.5 kW 24 V DC-Motor
Standard Equipment	Remote control radio for boom and crane movement Operator's cab Working light Warning light, fire extinguisher, safety shutdown Declaration of conformity / CE label User manual, maintenance schedule Spare parts list Standard battery charger (external)
Optional Equipment	Heavy load tip Assembly tip Pulley block 4-rope Remote control radio Hydraulic winch with max. 2,000 kg capacity Hydraulic High-Speed winch with max. 2,000 kg capacity Non-marking wheels Automatic filling system for batteries Standard battery charger (internal) Manually adjustable boom on 3 positions (600 mm) - max. capacity 3,500 kg Manually adjustable boom on 3 positions (1200 mm) - max. capacity 500 kg Hydraulic boom Man basket 100 kg (one man); man basket 200 kg (two man) Paintwork on purchase at customer's request

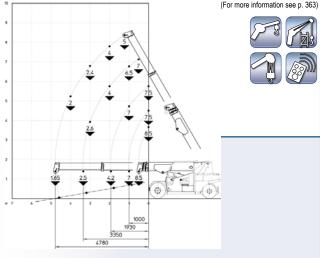
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Leavy@RIV@.com

MLK 85 Up to 8.5 tonne capacity



Compare our different Pick & Carry cranes on 360

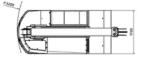




Optional Equipment



WhatsApp Service: +49 171 340 74 06



<u>Model</u>	MLK 85
Capacity	8,500 kg
Net Weight	9,070 kg
External Dimensions: L x W x H in mm incl. crane boom	3,655 x 1,700 x 1,900 4,155 x 1,700 x 1,900
Turning Radius	3,200 mm
Boom Angle	-10° to 60°
Frame	box type, torsion resistant design made with high-strength structural steel
Power Type	Electric battery
Transmission	Front-wheel drive with countershaft
Boom	Hydraulic base and two telescopic, proportionally extending mast elements
Traction Motor	Electric motor 2 x 7.5 kW 72 V AC. Insulation class H
Motor Pump	Electric motor 16 kW 72 V AC. Insulation class H
Battery	72 V – 620 Ah
Wheels	Front: 2 superelastic 355 x 65 – 15" Rear: 2 superelastic 7.50 – 15"
Brakes	Service brake: hydraulic pedal operated on all wheels. Parking and emergency brake: hydraulic with automatic control on front wheels
Steering	On the rear wheels by hydraulic motor controlled by hydrostatic power steering with load sensing priority valve.
Hydraulic system	Powered by a 16 kW silenced gear pump, actuators controlled by electro-proportional distributor with electronic joystick, filter and safety valve. 22 MPa max. working pressure
Standard Fourtment	Operator's cab Working light

Equipment

Optional

· Working light

· Warning light, fire extinguisher, safety shutdown

• Declaration of conformity / CE label · User manual, maintenance schedule

· Spare parts list

· Standard battery charger (external)

· Heavy load tip Equipment · Assembly tip • Pulley block 4-rope

· Remote control radio

• Hydraulic winch with max. 2,000 kg capacity

• Hydraulic High-Speed winch with max. 2,000 kg capacity

· Non-marking wheels

· Automatic filling system for batteries

Standard battery charger (internal)

• Manually adjustable boom on 3 positions (800 mm) max. capacity 5,500 kg

• Hydraulic boom - radio remote control only for boom movement • Man basket 100 kg (one man) - only available with radio or

wired remote control • Man basket 200 kg (two man) - only available with radio or

wired remote control • Fork attachment - max. capacity 3,000 kg

· Paintwork on purchase at customer's request

MLK 110 Up to 11 tonne capacity



Optional Equipment (For more information see p. 363)

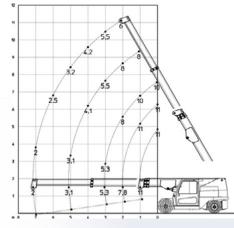




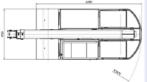




Compare our different Pick & Carry cranes on 360





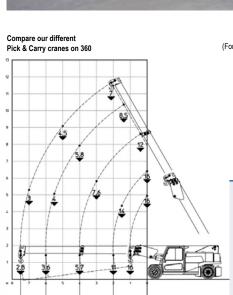


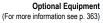
Model	MLK 110	
Capacity	11,000 kg	
Net Weight	13,450 kg	
External Dimensions: L x W x H in mm incl. crane boom	4,020 x 1,950 x 2,000 5,020 x 1,950 x 2,000	
Turning Radius	3,610 mm	
Boom Angle	-10° to 60°	
Frame	box type, torsion resistant design made with high-strength structu steel	ural
Power Type	Electric battery	
Transmission	Front-wheel drive with countershaft	
Boom	Base unit and two hydraulic extensions (proportional telescopic b	oom)
Traction Motor	2 electric motors n° 2 x 7.5 kW 80 V AC. Insulation class H	
Battery	80 V – 840 Ah	
Wheels	Front: 2 superelastic 315 x 70 – 15" Rear: 2 superelastic 250 x 70 - 15"	
Brakes	Service brake: hydraulic pedal operated on all wheels, parking an emergency brake: hydraulic with automatic control	nd
Steering	On the rear wheels by hydraulic motor controlled by hydrostatic p steering with load sensing priority valve	oower
Hydraulic System	Powered by a 16 kW silenced gear pump, actuators controlled by electro-proportional distributor with electronic joystick, filter and s valve. 22 MPa max. working pressure	
Standard Equipment	Operator's cab Working light Warning light, fire extinguisher, safety shutdown Declaration of conformity / CE label User manual, maintenance schedule Spare parts list Standard battery charger (external)	K & CARRY CRANES
Optional Equipment	Heavy load tip Assembly tip Pulley block 4-rope Remote control radio Hydraulic winch with a maximum capacity of 11,000 kg "Non-marking" tyres Automatic filling system for batteries Standard battery charger (internal) Manually adjustable boom Radio remote control only for boom movement Wired remote control only for boom handling Man basket 100 kg (one man) - only available with radio or wire remote control Man basket 200 kg (two man) - only available with radio or wire remote control Fork attachment - max. capacity 6,000 kg Closed operator's cab Paintwork on purchase at customer's request	

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MLK 160 Up to 16 tonne capacity















Model	MLK 160	
Capacity	16,000 kg	
Net Weight	27,150 kg	
External Dimensions: L x W x H in mm incl. crane boom	4,395 x 2,070 x 2,000 5,395 x 2,070 x 2,000	
Turning Radius	3,930 mm	
Boom Angle	-8° to 60°	
Frame	box type, torsion resistant design made with high-strength structural steel	
Power Type	Electric battery	
Transmission	Front-wheel drive with countershaft	
Boom	Base unit and two hydraulic extensions (proportional telescopic boom)	
Traction Motor	Electric motor 2 x 10 kW 96 V. Insulation class H	
Motor Pump	Electric motor 23 kW + 12 kW 96 V AC. Insulation class H	
Battery	96 V – 1035 Ah	
Wheels	Front axle: 4 superelastic 355 x 50 - 20" Rear axle: 2 superelastic 355 x 50 - 20"	
Brakes	Service brake: hydraulic, pedal operated, parking and emergency brake: hydraulic with automatic control	
Steering	On the rear wheels by hydraulic motor controlled by hydrostatic power steering with load sensing priority valve	
Hydraulic System	Powered by an electric gear pump, actuators controlled through electro-proportional distributor with electronic joystick, filter and safety valve 22 MPa max pressure	
Safety Devices	Electronic load limiting	;
Standard Equipment	Operator's cab, working light, warning light, fire extinguisher, safety shutdown, declaration of conformity, user manual, maintenance schedule,	

Optional • Hea • Assi

Heavy load tip
 Assembly tip

• Pulley block 4-rope • Remote control radio

Additional options:

Hydraulic winch with a maximum capacity of 16,000 kg, "non-marking" tyres, automatic filling system for batteries, standard battery charger (internal), manually adjustable boom, hydraulic adjustable boom from +8° to -45°, manually adjustable boom with 0° and -45°, radio remote control only for boom movement, wired remote control only for boom handling, man basket 200 kg (two man) - only available with radio or wired remote control, air cooling of the battery and the battery charger, closed operator's cab, paintwork on purchase at customer's request

spare parts list, standard battery charger (external)

2000

6000

MLK 300 Up to 30 tonne capacity



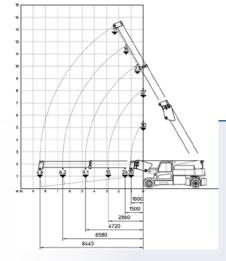
Optional Equipment (For more information see p. 363)











			ompare our different ick & Carry cranes on 360
			6300
ŀ	2303	Ī	
4		2250	
-		1	ROY

Model	MLK 300
Capacity	30,000 kg
Net Weight	27,150 kg
External Dimensions: L x W x H in mm incl. crane boom	5,170 x 2,250 x 2,300 6,300 x 2,250 x 2,300
Turning Radius	4,710 mm
Boom Angle	-7° to 60°
Frame	box type, torsion resistant design made with high-strength structura steel
Power Type	Electric battery
Transmission	Front-wheel drive with countershaft
Boom	Base unit and two hydraulic extensions (proportional telescopic boom)
Traction Motor	Electric motor 2 x 12 kW 96 V, insulation class H
Motor Pump	Electric motor 35 kW + 12 kW 96 V AC, insulation class H
Battery	96 V – 1,395 Ah
Wheels	Front axle: 4 superelastic 355 x 50 - 20" Rear axle: 2 superelastic 355 x 50 - 20"
Brakes	Service brake: hydraulic pedal operated, parking and emergency brake: hydraulic with automatic control
Steering	On the rear wheels by hydraulic motor controlled by hydrostatic power steering with load sensing priority valve
Hydraulic System	Powered by a 35 kW electric gear pump, actuators controlled through electro-proportional distributor with electronic joystick, filter and safety valve 23 MPa max pressure
Safety Devices	Electronic load limiting
Standard Equipment	Operator's cab Working light Warning light, fire extinguisher, safety shutdown Declaration of conformity / CE label User manual, maintenance schedule

Meavyon Ve.com

Optional · Heavy load tip Equipment

Assembly tip

· Spare parts list

• Pulley block 4-rope Remote control radio

Standard battery charger (external)

· Additional options:

• Hydraulic winch with a maximum capacity of 30,000 kg, "non-marking" tyres, automatic filling system for batteries, standard battery charger (internal), manually adjustable boom, hydraulic adjustable boom from +8° to -45°, manually adjustable boom with 0° and -45°, remote control radio only for boom movement, wired remote control only for boom handling, man basket 200 kg (two man) - only available with radio or wired remote control, air cooling of the battery and the battery charger, closed operator's cab, paintwork on purchase at customer's request

MLK 600 Up to 60 tonne capacity



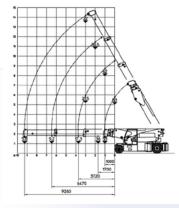
Optional Equipment (For more information see p. 363)



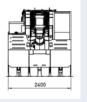








Compare our different Pick & Carry cranes on 360



Model	MLK 600		
Capacity	60,000 kg		
Net Weight	39,000 kg		
External Dimensions: L x W x H in mm incl. crane boom	Group closed 5,480 x 2,400 x 2,495 6,480 x 2,400 x 2,495	Group open 6,480 x 2,400 x 2,495	
Turning Radius	5,100 mm		
Boom Angle	-7° to 60°		
Frame	box type, torsion resistant design steel	made with high-strength structural	
Power Type	Electric battery		
Transmission	Rear axle through epicyclic reduction gears		
Boom	Base unit and three hydraulic extensions (proportional telescopic boom		
Traction Motor	Electric motor 2 x 24 kW 96 V. Insulation class K1H		
Battery	96 V – 1,395 Ah		
Wheels	Front axle: 6 superelastic 355 x 50 - 20" Rear axle: 4 superelastic 10.00 - 20"		
Brakes	Service brake: hydraulic pedal op brake: hydraulic with automatic ir		
Steering	On the rear wheels by hydraulic motor controlled by hydrostatic power steering with load sensing priority valve		
Hydraulic system	Powered by a 35 kW motor pump electro-proportional distributor wit and safety valve. 22 MPa max pr	th electronic joystick, filter	
Standard Equipment	Operator's cab, working light, wa safety shutdown, declaration of c user manual, maintenance sched battery charger (external)	onformity/CE label,	

Optional Equipment

- · Heavy load tip
- · Assembly tip
- Pulley block 4-rope
- · Remote control radio

· Additional options:

Hydraulic winch with a maximum capacity of 30,000 kg, hydraulic winch with a maximum capacity of 43,000 kg, "non-marking" tyres (rear wheels only), automatic filling system for batteries Manually adjustable boom with 0° / 25° 50° - max. capacity 18,000 kg, manually adjustable boom with 0° / 25° 50° - max. capacity 12,000 kg, manually adjustable boom with 0° / 45° - max. capacity 4,000 kg, assembly tip 0° / 20° - max. capacity 25,000 kg, fork attachment - max. capacity 20,000 kg, remote control radio only for boom movement, wired remote control only for boom handling Man basket 100 kg (one man) - only available with radio or wired remote control, man basket 200 kg (two man) - only available with radio or wired remote control, fork attachment - max. capacity 6,000 kg, air cooling of the battery and the battery charger, closed operator's cab, paintwork on purchase at customer's request





Auxiliary Equipment

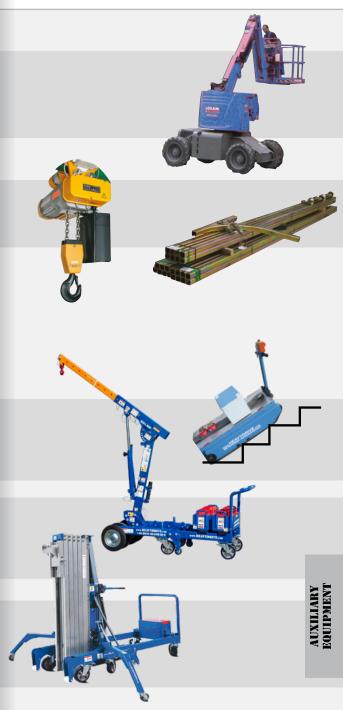
- Terrain Telescopic Forklift Trucks
Lifting Platforms

- Chain Hoists and Helm Rails
Essential Systems



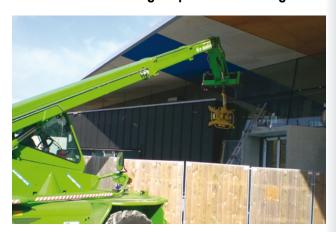
Find more information about working with helm rails and Chain Hoists from page 324

- Stair Climbers up to 1,000 kg capacity
- Counterweight cranes up to 900 kg capacity
- Manual Assembly Helpers
 Assembly lifts with a capacity of 800 kg
 and 7.9 m lift height



Meany Chive.com

GTS Rotatable / rigid up to 30 m lift height









No problem! With the telescopic forklift truck, you can easily lift these kinds of loads up to 30 m high. Various fixtures such as the forklift, shovel, booms, winch, etc. make the vehicle even more versatile.





Too expensive to buy?

Then rent at a low cost from Heavydrive!

The following fixtures are available with all telescope forklifts:

- Fork
- Shovel
- Gibbets
- Rope winch
-

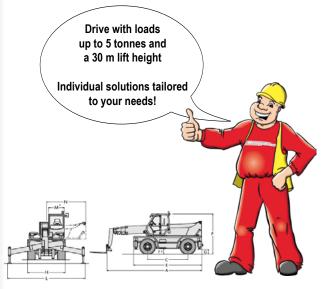
Available with or without an operator!

Contact us for

some no-obligation advice

Enquire today





Model	GTS 164.0	GTS 187.0	GTS 208.0	GTS 252.0	GTS	300.0
Max. Lift Load			6.0 t			
Max. Range	13.85 m	16.15 m	18.25 m	22.65 m	27.4	15 m
Max. Lift Height	16.40 m	18.70 m	20.80 m	25.20 m	30.0	00 m
Rotation Angle		360	° full rotation /	rigid		
Support			hydraulic			
Drivable			3 t load			
Chassis: Length E Ground Clearance F2 Wheel Distance C Support Width L			5.03 m 0.33 m 2.97 m 4.95 m			
Motor: Speed 1st gear 2nd gear Tank Volume	6 cylinder Turbo diesel 107 KW at 2300 RPM 11 km/h 20 km/h 155 I					
Dimensions: Length acc. to Model A Width H Height P		6	6.07 m - 6.98 n 2.40 m 2.95 m	1		RY
Safety System		Tou	ensor monitorir uchscreen syst anent all-whee	em		AUXILIA
Options / Attachments		ele	ectric rope wind lifting platform, ding assembly	ch,		

Lifting Platforms Up to 70 m lift height



Depending on the model, our platforms have a lift height of up to 70 m and basket capacity of up to 1,000 kg.



Scissor / Telescopic / Jointed Telescopic / HGV platforms and more Indoor and outdoor! Contact us today: +49 (0)9070 9689690 - 0



Find more images and videos of our devices in action at www.heavydrive.com







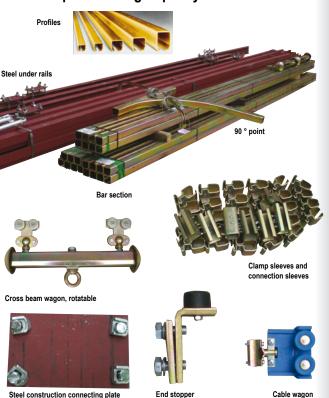
Conference Hall in Stuttgart, Germany

Model	SB / TB / GTB / LB
Basket Load	up to approx. 1,000 kg
Max. Range	22.70 m
Max. Lift Height	Varies acc. to model
Model / Max. Working Height: Scissor platform Telescopic platform Jointed telescopic platform HGV platform	SB 340.0 / up to 34 m Ah TB 700.0 / up to 70 m Ah GTB 380.0 / up to 38 m Ah LB 340.0 / up to 34 m Ah
Specifications with supports without supports	low unladen weight high unladen weight
Degree of Running Gear Lock	up to 85°
<u>Drivability:</u> Normal terrain Uneven terrain Rough terrain	4-wheel drive Rubber chains Steel chains
Support Width L	4.95 m
Motor: Electric Induction Fuel	Battery operated Battery operated (lasts about 1 week) Diesel
Transport Method: Model SB TB GTB Model LB	Transport vehicle / Low loader Self driver
Safety System	Sensor monitoring Touchscreen system Permanent 4-wheel drive

for suspended rail system

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₩SS - Running rail system for facade mounting up to 1.600 kg Capacity



Clamping system KS

For the ability to securely connect the HSS rail system to the ceiling or to the existing steel beam ceiling construction, Heavydrive offers a **special world-wide-approved KS clamping system**.



These clamps, supplied by Heavydrive, **connect the on-site steel beams with crossbeams**. Only then can the HSS rail system, with up to 1,400 kg of load capacity, be mounted.

A major advantage of the clamp holders is that they **prevent damage** to the onsite construction due to **drilling or welding**.



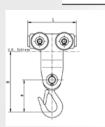
Façade assembly for overhang façades with scaffolding:

Please tell us about:

- the load to be lifted
- the façade length
- the overhang widthif mounting on
- scaffolding or façade the round facade
- the insertion opening

Consider inviting us for an on-site inspection!!

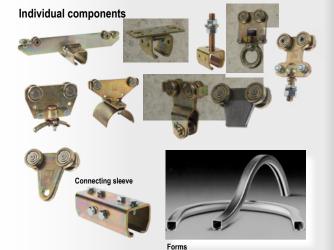




Wall mount



Transport wagon up to 1 t load capacity

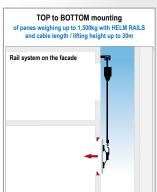


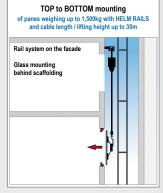
Plans for façade construction and industrial plant construction

We would be happy to prepare the plans for you, e.g. for 1,000 façade elements / car parts / industrial goods, each weighing 50 - 1,600 kg.

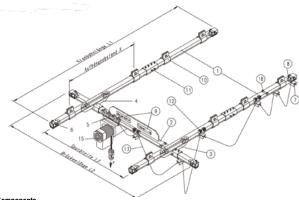








Example of a small crane system



Components

- 1 Crane rail two-stranded
- 2 Crane bridge reinforced
- 3 Sliding platform Rolling device Fixed bearing
- Sliding platform Rolling device Floating bearing
- 5 Bridge trolley travelling winch
- 6/8 End-stopper/Securing for end-stopper
- 7 End terminal
- 9 Capacity and built-shield

- 10 Attachment 11 Connection
- 12 Cable and hose carrier wagon
- 13 Trailing cable
- 14 Alternative safety conductor line
- 15 E-chain hoist with hanger switch
- 16 E-rail drive and crane runway
- 17 Mains switch
- 18 Driving limiter

Send us your drawings or your plans indicating which goods you wish to transport / ship. We will work with you to create a solution, including a detailed list of the parts you need.

You will benefit from **our international experience in planning rail transport systems, conveyor systems and small cranes** for renowned car makers and façade builders, as well as for many other operational purposes...



Let us advise you and do the planning for you

ROUTPMENT

There are as many different chain hoists as there are grains of sand in the desert, but a truly professional model is costly - and not necessarily worth the cost for a few jobs throughout the year.

So what about renting?

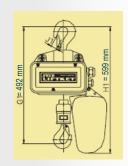
We'll guarantee the right model for you. An excellent example is the following model, with 2,000 kg capacity at a 15 m lift height.





Just rent if required -We are happy to offer professional advice!

Model	MKZ 500 - 4	MKZ 500 - 6	MKZ 500 - 15	MKZ 500 - 25	MKZ 500 - 30	MKZ 1000 - 30	MKZ 2000 - 15
Max. Lift Height	4 m	6 m	15 m	25 m	30 m	30 m	15 m
Max. Capacity	500 kg	500 kg	500 kg	500 kg	500 kg	1,000 kg	2,000 kg
Net Weight	30 kg	30 kg	55 kg	60 kg	70 kg	70 kg	70 kg
Chain Storage	4 m	6 m	15 m	25 m	30 m	30 m	15 m
Lift Speed		6/1,5 m/min. 1-Rope			(6/1,5 m/min. 1-Rope	e
Load Chain	7,2 mm x 21 mm				7.2 mm x 21 mm		
Operating voltage		380 V				380 V	
Duty Cycle		60/25				60/25	
Start ups/h		240				240	
Control Cable	4 m	6 m	15 m	25 m	30 m	30 m	15 m



= 232 mm

= 274mm



TT - Up to 300 kg capacity

For heavy household appliances, dryers, washing machines, radiators, slot machines, or similar equipment that must be transported up or down stairs.

Battery-powered stair climbers can go anywhere, with loads up to 300 kg. They are also called "sack trucks" or "stair climbing trolleys".

The ingenious design provides a transport aid for stairs which does not cause back problems. Easy to use by a single person and very durable.



Model	TT 300	TT 300 ST with support wheels	
Capacity	300 kg	300 kg	
Running Gear		Hydrostatic, infinitely variable	
Speed	6 - 12 m/min	12 m/min	
Climb Ability	Step h	neight up to 22 cm	
Max. Driving Distance	-	-	
Drive Cylinder Working Pressure	110 - 130 bar		
Motor Power	1.2 - 1.4 KW		
Motor	Battery operated		
Battery	Internal battery		
Charging Voltage	110 V / 220 V		
Operation	Si	ingle operator	
Staircase Approach	Inf	initely variable	
Control	-	-	
Length	Can be adj	usted via shovel fixture	
<u>Dimensions:</u> L x W x H (mm)	485	5 x 560 x 1,615	
Height (mm)			
Steering	Can be adjusted via shovel fixture		
Net Weight		38 kg	
Optional	Shovel fixture with Car charger for ba Quick change batti	•	



Quick change battery

Aluminium

transport box

Model

TT - Up to 1,000 kg capacity

These machines are suitable for transporting heavy loads of up to 1,000 kg, overcoming obstacles such as steps and ramps. Heavy loads (such as switch and server cabinets, safes, boilers, parts of machinery and systems, etc.) can therefore be delivered up and down stairs, even by a single person.



TT600 H

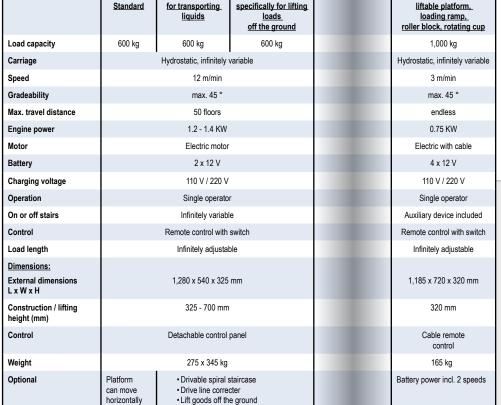
TT 600 S



The TT 1000 in action

- · Perfect for transporting liquid goods
- · Material always upright

TT 1000



TT600 V





Transport liquidsWide lashing belt

KGK 745 lifting capacity up to 745kg



The KGK 745 counterweight crane is a practical solution for transporting panes at ground level. The counterweight makes it possible to manoeuvre a load right up to its installation point.

It is powerful enough to move panes weighing up to 745kg. This device requires more than one operator. For devices that enable one-person operation, we recommend our ML assembly aids (from page 48) or GMG glass assembly devices (from page 58).

The device has six wheels, making it simple to manoeuvre. The wheels rotate freely, so you can move the device in all directions.

The crane arm is inserted manually. The device is fitted with a 1.3m extension that can be set to nine different positions. A 2.3m extension is available as an optional extra (see page 340)





KGK 745	
Lifting capacity	up to 745kg
Lifting capacity at a distance of 40cm	745kg
Dynamic load capacity	463kg
Lifting capacity when fully extended	160kg
Chassis	short
Crane arm	nine positions, 14cm per extension
Reach over chassis	1.40m
Min. lifting height	0.77m
Max. lifting height	2.90m
Weight	168kg excl. attachments
Total weight	644kg incl. counterweight
Counterweights	2 boxes each with 14 counterweights (28 x 16kg)
Chassis frame	L 1.06m x W 0.65m x H 1.8m
Working dimensions	L 1.06m x W 0.65m x H 1.98m
Width	incl. lateral arm max. 2.65m
Other	can be fully dismantled individual parts must be carried up and down stairways chassis equipped with 6 freely rotating wheels with brakes removable handles chassis compact for transportation

can be folded and dismantled

Meany Chive.com

KGK 900 lifting capacity up to 900kg



The long option KGK 900 counterweight crane has a lifting capacity of up to 900kg and is a practical solution for transporting panes at ground level.

The counterweight makes it possible to manoeuvre a load right up to its installation point. It is powerful enough to move panes weighing up to 900kg. This device requires more than one operator. For devices that enable one-person operation, we recommend our ML assembly aids (from p.48) or GMG glass assembly devices (from p.58).

The device has six wheels, making it simple to manoeuvre. The wheels rotate freely, so you can move the device in all directions.

The crane arm is inserted manually. The device is fitted with a 1.3m extension that can be set to nine different positions. A 2.3m extension is available as an optional extra (see page 340).



The KGK can be fully dismantled. It can be conveniently transported and easily carried up and down stairways by one or two people by hand, without the need for a crane.

This is especially useful if there is no crane available on the construction site.

The KGK is also ideal for buildings that are difficult to access from the outside.



A base plate has also been designed for the KGK 745 to make it suitable for outdoor use.

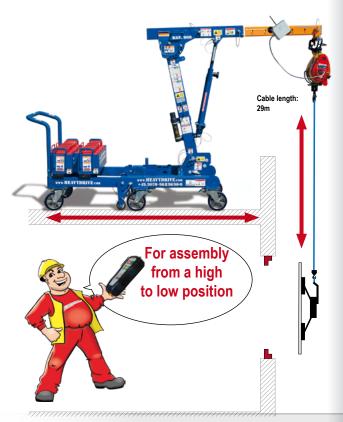
The front two pendulum wheels can be replaced by extra-large, solid rubber tyres with a diameter of 400mm to counterbalance uneven terrain. (This modification kit is available as an add-on on page 336.) The outdoor wheels are fixed and can move backwards or forwards. Locking brake not included.

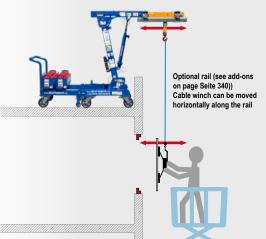
-	
KGK 900	
Lifting capacity	up to 900kg
Lifting capacity at a distance of 40cm	900kg
Dynamic load capacity	463kg
Lifting capacity when fully extended	160kg
Chassis	long
Crane arm	nine positions, 14cm per extension
Reach over chassis	1.40m
Min. lifting height	0.77m
Max. lifting height	2.90m
Weight	168kg excl. attachments
Total weight	644kg incl. counterweight
Counterweights	2 boxes each with 14 counterweights (28 x 16kg)
Chassis frame	L 1.78m x W 0.65m x H 1.8m
Working dimensions	L 1.78m x W 0.65m x H 1.98m
Width	incl. lateral arm max. 2.65m
Other	can be fully dismantled individual parts must be carried up and down stairways chassis equipped with 6 freely rotating wheels with brakes removable handles chassis compact for transportation

can be folded and dismantled

KGK 900 with cable winch

up to 500kg lifting capacity (with dynamic load)

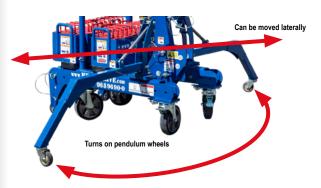




Can be rotated in any direction and braked in any position.

Can be manoeuvred while carrying a load and locked into any position, even on a slope. Directional locking, snapped into place every 90 degrees, or track locking can be used.

The device can be brought to a stop in a precise spot. It will not be able to rotate on the axis of a wheel because the directional locking brake brings it to a complete stop.



KGK 900 with cable winch	
Lifting capacity	up to 500kg
Lifting capacity at a distance of 40cm	500kg
Dynamic load capacity	463kg
Lifting capacity when fully extended	160kg
Chassis	long
Crane arm	nine positions, 14cm per extension
Reach over chassis	1.40m
Min. lifting height	0.77m
Max. lifting height	2.90m
Weight	168kg excl. attachments
Total weight	644kg incl. counterweight
Counterweights	2 boxes each with 14 counterweights (28 x 16kg)
Chassis frame	L 1.78m x W 0.65m x H 1.8m
Working dimensions	L 1.78m x W 0.65m x H 1.98m
Width	incl. lateral arm max. 2.65m
Other	can be fully dismantled individual parts must be carried up and down stairways chassis equipped with 6 freely rotating wheels with brakes removable handles chassis compact for transportation can be folded and dismantled

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KGK add-ons



Outdoor wheels

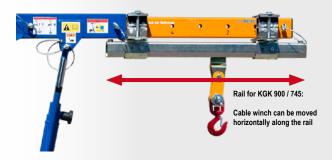
When in use outdoors, the front wheels are replaced by solid rubber tyres that can counterbalance uneven terrain.

The front wheels move forwards and backwards and cannot be braked.











KGK lateral support legs for uneven terrain

suitable on very uneven surfaces one set contains 2 support legs adjustable depending on width of working area

Length 935mm, Weight 38kg self-locking



AUXILIARY EQUIPMENT



ML 51.0 Assembly lift with a lift height of 5.15 m and a capacity of 360 kg. Only 1.76 m high!



For options and features see "ML Accessories" from page 348

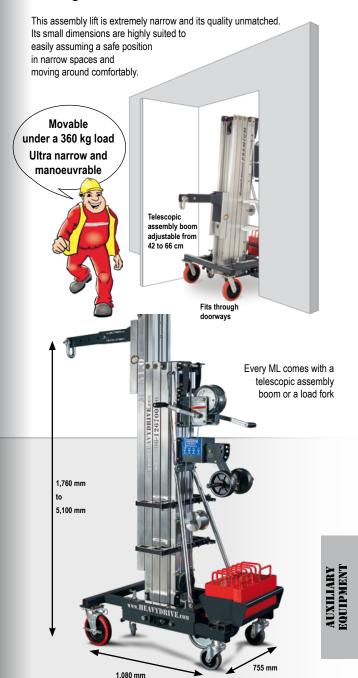






<u>Model</u>	ML 51.0		
Capacity	360 kg		
Lift Height	5.15 m		
Carriage	Castors for solid floors, limited off-road suitability		
Net Weight	144 kg		
Transport Dimensions (LxWxH) in mm	1,080 x 755 x 1,760		
Net Weight incl. 9 x 16 kg counterweights	288 kg		
Add-on device:			
Crane jib	Adjustable crane jib 420 - 660 mm		
Load fork	670 mm tooth length, 550 mm wide		
Options	Mast lift via translation unit with 3 speeds using hand crank or cordless screwdriver		
Accessories	See "ML Accessories" from p.44		
Transport	Fits in a van standing		
Heavydrive® delivers different models with lift heights of 1.7 m, 2.8 m, 4 m and 5.1 m on request.			
Find more in	formation at <u>www.heavydrive.com.</u>		

Lift large loads from a small base



Meavy CMV @.com

ML 79 Assembly lift with a lift height of 7.9 m



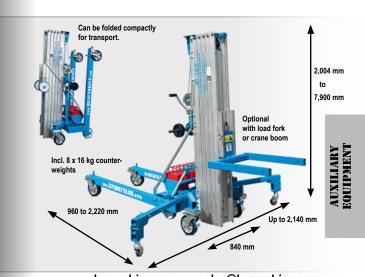
	ace ML Accessories from page 340		
<u>Model</u>	ML 79.0		
Max. load capacity	450 kg (up to 4 m), 300 kg		
Working height	7.90 m		
Carriage	Wheels for solid ground, partially suitable for all-terrains		
Weight	200 kg		
Working position	L 2,220 x W 2,140 mm		
Transport dimensions (LxWxH)	960 x 840 x 2,004 mm		
Total weight including 8 counterweights at 16 kg	332 kg		
Attachments: Load fork Fork Crane boom Overhead manipulator	420 - 660 mm 600 mm wide by 800 mm long fork 300 kg load capacity, lifting up to 30 m load capacity up to 450 kg		
Standard equipment	4 wheels for each standard fork 1 - speed manual winch		
Options	Mast lift via translation unit with 3 speeds using hand crank or cordless screwdriver		
Overhead Suction System	load capacity up to 450 kg		
Transport	in a pick-up truck		
With Heavydrive®, you can request different designs and models for lifting heights of 3.50 m, 5.0 m, 6.5 m and 7.9 m.			



This assembly lift is brilliant. With a fantastic lift height of 7.9 m, it helps to safely manoeuvre loads of up to 300 kg (from a height of 4 m).

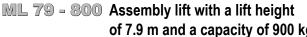
One of the undeniable advantages of this assembly lift is that during glass pane mounting, the vacuum suction cups can be moved to the façade problem-free since Heavydrive® uses counter weights. With conventional lifts, for exhibition stand construction or sound engineering, the lifting carriage is below the lifted object.

Last but not least, this practical all-rounder is folded by hand. It is hand-operated and therefore requires very little servicing.



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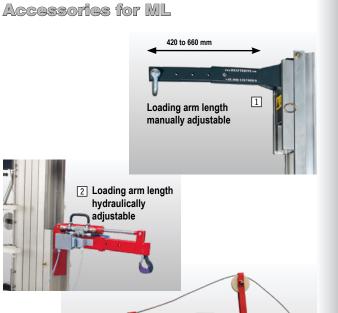


Model	ML 79.0-800	
Capacity	900 kg (up to 3.5 m), 850 kg (up to 6.5 m), 800 kg (up to 7	.9 m)
Lift Height	7.90 m	
Carriage	Castors for solid floors, limited off-road suitability Jib feet at front: Carriage L 2,350 mm x W 2,350 mm Jib feet at rear (90° to the side): Carriage L 1,940 mm x W 2,680 mm	
Working position with no jib feet	L 1,940 x W 810 x H 1,980 mm	
Transport Dimensions (LxWxH) in mm	1,100 x 810 x 1,980 mm	
Net Weight incl. 8 x 16 kg counterweights	543 kg (up to 595 kg depending on mast lift drive type)	EW
Options:	See "ML Accessories" from p.44	
Standard	each including 4 steering rollers standard load fork 1 - gear winch Lugs for transport via forklift bags forklift pockets	VILIARY
Overhead Suction System	Up to 600 kg capacity	
Transport	Fits in a van	~ =

Heavydrive® delivers different models with lift heights of 3.5 m, 5.0 m, 6.5 m and 7.9 m on request.

Find more information at www.heavydrive.com

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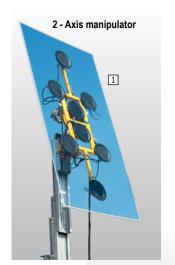
Meavychive.com

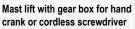




Attachments:	Description:	ML 51.0	ML 79.0	ML 79.0- 800
1 Loading Arm / Manual Load Arm	up to 2-3 steps 420 - 620 mm	х	х	х
2 Loading Arm / Electro-Hydraulic	electro-hydraulically retracta- ble 420 - 620 mm	х	х	х
3 Manual crane boom	300 kg of load capacity, up to 30 m hoist rope, 67 cm long boom	х	х	Х
4 Load fork above 5 Load fork below	600 mm wide by 800 mm long fork for overhead mounting	х	х	Х
Further infor	nation can be found at <u>www.he</u>	avydrive	.com	

Accessories for ML











LIGAYYQITIYA.com





Manual, with electric or battery drive

360°



Attachments:	<u>Description</u>	ML 51.0	ML 79.0	ML 79.0-800
1 2 - Axis manipulator automatic VSGU 600 K	elec. 90° tilt up/down, electr. full rotation			х
2 3 - Axis manipulator manual VSGU 450 K	90° tilt up/down infinitely variable lockable, full rotation, 45° lockable, swivels sideways at 45° to the left / right	х	х	х
3 Mast lift with gear box for hand crank or cordless screwdriver	3 speeds, slow / medium / fast	х	х	х
4 Mast lift with 110/220 V electric drive	Remote control on / off with 2 speeds			х
5 Mast lift with battery drive	Battery pack with detachable wagon			х
	Further information can be four	nd at wy	vw.heav	vdrive.com



GH 150 / GH 200 - Glass lifting device up to

200 kg capacity

The GH 200 glass lifting device is an innovative solution for loading and unloading, transporting and assembling glass.

Two persons can transport glass panels or window elements weighing up to 200 kg. The GH is available in 2 model versions:

GH 150 with up to 150 kg capacity (weight: 56 kg) GH 200 with up to 200 kg capacity (weight: 56 kg)

The device can be easily assembled and disassembled – it weighs only 56 kg. It has large 13-inch wheels which allow it to move on uneven surfaces. The wheelbase can be adjusted, which enables it to pass through doors and move along narrow pavements.





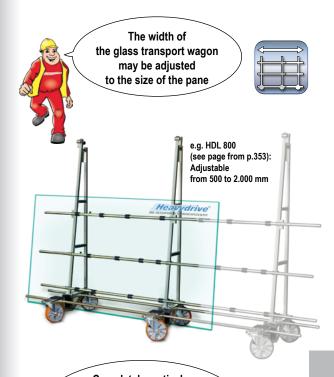


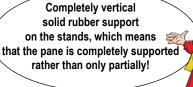




HDL Glass Transport Wagon Overview

Glass Transport Wagon:	HDL up to 500 kg capacity	HDL up to 700 kg capacity	HDL up to 1,000 kg capacity
HDL "Air" with pneumatic tyres	from p.228	from p.238	-
HDL for heavy panes	from p.246	from p.252	from p.353







Vacuum Suction Systems Overview

		VSG for light name in to	VCC for modium woight	VCG for bossing manage
	Vacuum Suction Systems:	900 / 1,000 kg	panes up to 1,500 kg	more than 2,000 kg
	VSG for flat glass	from p.96	from p.114	from p.122
	VSGKR for curved panes	from p.144	from p.146	from p.148
dovic	VSG KRSP for spherical curved panes	from p.154	from p.156	156
<i>c</i>	VSGW for glazing in winter up to -20°C	from p.160	from p.163	from p.164
	VSGP for wall and roof panels		from p.166	
	VSGH hall vacuum systems		from p.168	
	VSGB for coated panes	from p.170	from p.173	from p.174
	VSGS for stone slabs and rough surfaces	from p.176	from p.179	from p.180
www.h	SPECIAL SYSTEMS			
	VSGKL for glass fins	from p.186	from p.188	from p.190
drivo (VSGKRQ for diagonally-curved panes	from p.192	from p.195	195
om.	VSGKonter Counterweight systems	from p.198	from p.204	204
• cal	VSGU Overhead crane manipulator	from p.82	from p.84	from p.86
es@hea	VSGSTU 7-axles manipulator with forklift hook		from p.88	

You can find more information about the devices in the catalogue and by visiting our website at www.heavydrive.com Heavydrive device finder at www.devicefinder.com To quickly find the right device for your needs, use our

Model For more details see Capacity Max. Hook Height Incl. tip S1 Incl. tip S2 Max. Working Radius Cable Cable Boom Length	Model Model For more details see page 272 Capacity Max. Hook Height hict, it is S1 mich. it is S2 Max. Working Radius 5.10 m Cable Cable Max. Working Radius 6.8 m with 0.8 m it is S1 m Cable Max. Working Radius 6.10 m Cable Max. Working Radius 6.10 m Cable Max. Working Radius 1.85 - 6.30 m Max. Morking Radius 6.10 m Cable Max. Working Radius 1.85 - 6.30 m	MRK 56.0 page 274 1.7 to x 1.0 m 5.5 m 6.3 m with 0.8 m tip 5.10 m IWRC 6 mm x 39 m 1.55 - 5.50 m	MRK 86.0 page 276 2.8 to x 1.4 m 8.6 m 10.5 m with 1 m tip 11.5 m with 2 m tip 8.21 m WRC 7 mm x 48 m	MRK 88.0 page 278 2.9 to x 1.4 m 8.8 m 10.7 m with 1 m tip 11.7 m with 2 m tip 8.14 m WRC 8 mm x 59 m 2.53 - 8.65 m	MRK 93.0 Mider load MRK 93.0 Mider load Mider loa	e MRK 126.0 page 282 3.0 to x 2.5 m 15.2 m with 2 m tip 17.2 m with 4 m tip 17.2 m with 4 m tip 17.2 m with 4 m tip 12.16 m 13.70 - 12.49 m	MRK 144.0 page 284 2.9 to x 2.5 m 14.9 m 17.7 m with 2 m tip 19.8 m with 4 m tip 14.40 m IWCR 8 mm x 77 m 3.63 - 14.61 m
	3.45 m / 14 sec 3-stage, hydraulic telescopic boom 0° - 75° (12 sec) 360° continuous 1.8 RPM 4.0 m/min (4-fall) 16.0 m/min, (1-fall)	3.62 m / 15 sec 6.04 n 3-stage, hydraulic 4-stage telescopic boom 13° - 77° (12 sec) 10° - 80° 2.0 RPM 2.3 RV min (4-fall) 32.0 m/min (4-fall) 32.0 m/min (1-fall) 1-fall) 1-fall) 1-fall)	1/22 sec e, hydraulic pic boom 0° (14 sec) continuous M min	ec) om ous	on audic on on one oc.)	culic tele- ussec) us Fully hy	10.98 m / 23 sec 5-stage, hydraulic tele- scopic boom 0° - 78° (11 sec) 360° continuous 2.5 RPM 17.0 m/min (4-fall)
System Drive Speed Gradability Ground Pressure Ground Width Motor	0 - 2.4 km/h 20° 1.044 mm 0.20 kg/cm² 180 mm Yanmar air cooled	0 - 3.3 km/h 20° 1.044 mm 0.34 kg/cm² 200 mm Misubishi GM401LE	Hydrostatic, cor 0 - 2.2 km/h 45° 1,750 mm 0.44 kg/cm² 200 mm Yanmar air cooled	Hydrostatic, continuously variable forwards/backwards speed 10 - 2.3 km/h 20° 1,050 mm 1,650 mm 1,050 mm 1,650 mm 1,050 mm 1,650 mm 1,050 mm 1,650 mm 1,050 mm 1,050 mm 1,050 mm 1,050 mm 1,050 mm 1,050 mm 1,050 mm	s/backwards speed 0 - 5.0 km/h 20° 1,650 mm 0.44 kg/cm² 180 mm Yanmar	0 - 2.8 km/h 45° 1.750 mm 0.36 kg/cm² 300 mm Yanmar	0 - 3 km/h 23° 1.750 mm 0.34 kg/cm² 300 mm Mitsubishi Diesel 24.5 PS
	5.7 KW / 1,800 RPM Petrol and electric 380 V 61 1,980 mm 600 mm x 1,305 mm 1,050 kg	6.6 KW / 1,800 RPM Petrol and electric 38.0 V 12.1 2,000 mm x 590 mm 1,300 mm 1,290 kg	6.6 KW / 2,600 RPM Diesel and electric 380 V 121 2,715 mm x 750 mm x 1,400 mm hydraulia procesure of 6	9.6 KW / 2,500 RPM Petrol and electric 380 V 121 2,690 mm x 600 mm x 1,380 mm 1,850 kg	21.5 KW / 2,400 RPM Diesel 421 4,020 mm x 1,740 mm x 2,495 mm 4,500 kg	/ 1,800 RPM 6.6 KW / 2,600 RPM 6.6 KW / 2,600 RPM 9.6 KW / 2,500 RPM 15.2 KW / 2,400 RPM 15.2 KW / 2,500 RPM 140 KW / 2,100 RPM 140 KW / 2,1	Diesel and electric Diesel and electric 401 4,340 mm x 1,300 mm x 1,800 mm donologe gauge
	Non-mark	king rubber track, 1 fall/2 fall.	/4 fall hook block, assemb	ly tips, overhead assembly	cap, remote control radio	Non-marking rubber track, 1 fall/2 fall/4 fall hook block, assembly tips, overhead assembly cap, remote control radio, additional 380/400 V electric drive (-E). heavy load tip, heavy load underlay plates	drive (-E),

Assembly cranes	10	overview /	<u>.</u>	<u> </u>	-	The largest mini crane in the world: 10-tonne capacity
		2 tonnes movable under load	2 tonnes movable under load	500 kg movable under load	500 kg movable under load	1.5 tonnes movable under load
Model	MRK 158.0	MRK 163.0	<u>MRK 167.0</u>	MRK 168.0	MRK 195.0	MRK 230.0
For more details see	page 286	page 288	page 288	page 292	page 294	page 296
Capacity	3.0 / 5.0 to × 3.4 m	4.9 to x 2.1 m	6.0 to x 2.6 m	3.8 to x 2.7 m	6,0 to / 7,5 to x 3.0 m	10.0 to x 3.0 m
Max. Hook Height	15.8 m	16.4 m	16.7 m	16.8 m (+ Searcher Hook	19.5 m	22.9 m
Incl. tip S1	19.0 m with 2.1 m Tip	20.0 m with 2.1 m Tip	20.4 m with 2.1 m Tip	16.5 m. 650 kg) 19.5 m with 2.1 m Tip 20.7 m with 4.5 m Tip	22.7 m with 3.1 m Tip	24.3 m with 4.9 m Tip
Max. Working Radius	15.50 m	14.52 m	16.10 m	16.00 m	18.60 m	30.70 m
Cable	IWCR 8 mm x 86 m	IWRC 10 mm x 115 m	IWRC 10 mm x 160 m	IWRC 8 mm x 95 m	IWRC 10 mm x 101 m	IWRC 10 mm x 128 m
Telescopic System: Boom Length Telescoping Speed Boom Type	3.93 - 15.71 m 11.78 m / 35 sec 5-stage, hydraulic telescopic boom	4.60 - 15.63 m 11 m / 25 sec 5-stage, hydraulic telescopic boom	4.75 m - 16.27 m 11.52 m / 25 sec 5-stage, hydraulic tele- scopic boom	4.74 - 16.48 m 11.7 m / 54 sec 4-stage, hydraulic telescopic boom	4.80 - 19.20 m 14.4 m / 52 sec 5-stage, hydraulic telescopic boom	5.75 - 23.10 m 17.35 m / 88 sec 6-stage, hydraulic telescopic boom
Boom Angle Turning Angle Turning Speed	0 - 80° (18 sec) 360° continuous 2.5 RPM	-2° - 80° 360° continuous 2.4 RPM	-4° - 80° (19 sec) 360° continuous 3.4 RPM	0 - 80° (1 7 sec) 360° continuous 2.5 RPM	0 - 80° (16 sec) 360° continuous 2.5 RPM	0 - 80° (16 sec) 360° continuous 1.3 RPM
Cable Speed	17 m/min (4-fall)	27 m/min (4-fall)	28 m/min (4-fall)	10 m/min (4-fall)	11 m/min (4-fall)	10 m/min, (4-fall)
	ı	ı	ı	ı	ı	l
Supporting Feet	Fully hydraulic	- none -	- none -	Fully hydraulic	Fully hydraulic	Fully hydraulic
Running Gear System Drive			Hydrostatic, continuo	Hydrostatic, continuous Forward/ backwards speed		
Speed Gradability Running Gear Length Ground Pressure Chain Width	0 - 3 km/h 23° 1,750 mm 0.44 kg/cm² 300 mm	0 - 3 km/h 23° 1,750 mm 0.44 kg/cm² 450 mm	0 - 5 km/h 34° 2,880 mm 0.55 kg/cm² 500 mm	0 - 3 km/h 20° 2,100 mm 0.50 kg/cm² 320 mm	0 - 3 km/h 23 ° 2,240 mm 0.89 kg/cm² 400 mm	0 - 3 km/h 23° 2,515 mm 0.70 kg/cm² 400 mm
Motor Type	Mitsubishi Diesel	Komatsu 4 cylinder, water-cooled, direct injection	Komatsu 4 cylinder, water-cooled, direct injection	Yanmar 3 cylinder, water-cooled, direct injection 29.1 PS	Mitsubishi 32 PS	Yanmar 40.5 PS
Performance	18.0 KW / 2,100 RPM	40.5 KW / 1,850 RPM	68.4 kW / 2,200 RPM	21.8 KW / 2,400 RPM	23.5 KW / 2,500 RPM	29.8 KW / 2,500 RPM
Fuel Tank Capacity	Diesel or electric 380 V 40 I	Diesel 141 l	Diesel 195 I	Diesel and electric 380 V 60 I	Diesel or electric 380 V 74 I	Diesel and electric 380 V 83 l
г × х W	4,800 mm x 1,400 mm x 2,050 mm	5,005 mm x 2,350 mm x 2,685 mm	6,545 mm x 2,490 mm x 2,965 mm	4,980 mm x 1,380 mm x 1,980 mm	5,610 mm x 1,670 mm x 2,185 mm	6,060 mm x 2,000 mm x 2,460 mm
Net Weight	4,835 kg	9,700 kg	15,640 kg	5,750 kg	8,070 kg	14,000 kg
Safety Systems	Load torque limiter, boo	m angle and load gauge, hydr	aulic pressure safety valve, h	Load torque lirniter, boom angle and load gauge, hydraulic pressure safety valve, hook securer. self locking brake for the motor, winch cut out by over-revving, levelness gauge	for the motor, winch cut out by	over-revving, levelness gauge
Options	Non-marking ru	bber tracks, 1-fall/2-fall/4-fall h	nook block, assembly tips, oven heavy load tip, h	Non-marking rubber tracks, 1-fall/2-fall/4-fall hook block, assembly tips, overhead assembly caps, remote control radio, additional 380/400 V electric drive (-E) heavy load tip, heavy load underlay plates	control radio, additional 380/40	10 V electric drive (-E),

Maxi-load Cranes / Industrial Cranes / Pick & Carry (movable under load)

Model	MLK 20	MLK 45	MLK 85	<u>MLK 110</u>	MLK 160	MLK 300	<u>MLK 600</u>
	page 302	page 304	page 306	page 308	page 310	page 312	page 314
Capacity	2,000 kg	4,800 kg	9,070 kg	13,450 kg	18,000 kg	27,150 kg	39,000 kg
Net Weight	2,000 kg	4,800 kg	9,070 kg	13,450 kg	18,000 kg	27,150 kg	39,000 kg
Dimensions: L x W x H in mm incl. crane boom	2,680 × 940 × 1,560	2,785 × 1,550 × 1,860	3,655 x 1,700 x 1,900 4,155 x 1,700 x 1,900	4,020 × 1,950 × 2,000 5,020 × 1,950 × 2,000	4,395 × 2,070 × 2,000 5,395 × 2,070 × 2,000	5,170 x 2,250 x 2,300 6,300 x 2,250 x 2,300	5,480 × 2,400 × 2,495 6,480 × 2,400 × 2,495
Turning Radius	1,870 mm	2,500 mm	3,200 mm	3,610 mm	3,930 mm	4,710 mm	5,100 mm
Boom Angle	-15° - 60°	.09	-10°-60°	- 60°	-8° - 60°	-7-	-7° - 60°
Frame	Torsion-stiff housing made of high-strength steel		box type, 1	torsion resistant design madı	box type, torsion resistant design made with high-strength structural steel	ıl steel.	
Power Type				Electric battery			
Transmission	Rear-wheel drive	eel drive		Front axle drive with counter shaft	vith counter shaft		Rear axle drive with planetary gear
Воош	Hydraulic base and telescopic mast element and two manual extensions	Hydraulic base and telescopic mast element	Hydraulic I	base and three telescopic pr	Hydraulic base and three telescopic proportionally extending mast elements	elements	Hydraulic base and three telescopic proportionally extending mast elements
	۱		ı	ı	ı	ı	ı
Traction Motor	Electric motor 2.6 kW – 24 V AC. Insulation class H	Electric motor 5 kW 48 V AC. Insulation class H	Electric motor 2 x 7.5 kW 72 V AC. Insulation class H	2 Electric motors 2 x 7.5 kW 80 V. Insulation class H	Electric motor 2 x 10 kW 96 V. Insulation class H	Electric motor 2 x 12 kW 96 V. Insulation class K1H	Electric motor 2 x 24 kW 96 V. Insulation class H
Battery	24 V – 420 Ah with charging indicator	48 V – 560 Ah	72 V – 620 Ah	80 V – 840 Ah	96 V – 1,035 Ah	96 V – 1,395 Ah	96 V – 1,395 Ah
Braking	Automatic on rear wheels	Automatic on all wheels (front and rear)	Operating br	ake: operated by hydraulic p	Operating brake: operated by hydraulic pedal Parking and emergency brake: hydraulic with automatic control	brake: hydraulic with autor	natic control
Steering	over the rear axle with max	rear axle with max, steering angle of $\pm90^\circ$.	over th	e rear wheel with engine pov	over the rear wheel with engine powered by crane hydraulics with power steering and load sensor	th power steering and load	sensor
Hydraulic System		Crane hydraulics: 2.5 kW 24 V DC-Motor	Hydraulic operation via elebar	ctro-proportional distributor e	Hydraulic operation via electro-proportional distributor activated by a joystick-filter and safety valves - Maximum operating pressure 220 bar	nd safety valves - Maximun	operating pressure 220
Safety Devices		k, A,			Electronic load limiting		k, A,
Standard Equipment	Working light. Warning light. Fire extinguishers. Safety switch. Declaration of Conformity / CE mark. Operator's manual. Maintenance plan. Spare parts list Standard charger (external)	ire extinguishers. Safety nity / CE mark. Operator's pare parts list Standard	Operator's cab Working lig Operator's manual. Mainte	ht. Warning light. Fire exting nance plan. Spare parts list.	Operator's cab Working light. Warning light. Fire extinguishers. Safety switch. Declaration of Conformity / CE mark. Operator's manual. Maintenance plan. Spare parts list. Standard charger (external)	ration of Conformity / CE m	ark.
Options	Heavy load tip Assembly tip Cable bottle 4-cases Remote control radio For further options, see the corresponding page	orresponding page					

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Product Symbols

Polish out scratches

an alternative to replacing panes

Damage to a glass surface doesn't have to mean expensive pane replacement. Heavydrive has an economical alternative.

Our skilled specialists analyse the glass damage and - depending on the condition of the pane - can remove scratches by means of a special polishing process.

The pane must first be carefully assessed to decide whether repair is possible. Scratches have a tiny ridge, which is removed in the first stage of the assessment. The Heavydrive expert can then decide whether it is possible to polish out the scratch completely.

Heavydrive uses its specially developed polish to clean glass surfaces with precision. To prevent stress cracks, the temperature of the pane is controlled with a laser.

It is also important to choose the right polishing wheel and pastes and use suitable rinsing liquid, as the slightest mistake can have severe consequences.



This is why only specially trained staff carry out this kind of glass repair.

If it is possible to repair the pane, the customer saves a lot of time and money.

It saves them the cost of a new glass element. as well as renting assembly devices, personnel expenses and other costs like ceiling suspension.









Depending on the equipment features, you will find one or more of the following icons on the product pages. A detailed explanation of the individual symbols can be found here:



Single-fall bottom hook block for increased rope length and faster telescoping



Four-fall bottom hook block for maximum loading capacity and safety



Overhead systems with a patented quick-change system developed by Heavydrive®





Crane boom tips with a patented quick-change





system developed by Heavydrive®



Special shallow vacuum suction systems



Emission free Suitable for indoor use



Battery powered



Non-marking tracks



Special cups for coated panes



Special cups for porous surfaces such as stone



Special cups for sub-zero temperatures



Suction cups can be individually deactivated, e.g. for replacing glazing on ruptured panes



Remote control



Delivery in a specially-made aluminium transportation box



Vacuum suction system rotating



Vacuum suction system rotating



Vacuum suction system swivelling



Adaptable to the size of the pane

Extreme, large scale glass assembly projects worldwice

extra-large glass panes up to 24 m long



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12 to 24 hour delivery service