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**BAE SYSTEMS** 

BAXI





### CATERPILLAR



















LAING O'ROURKE









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#### **WELCOME**

Handling Concepts is a leading provider of materials and industrial handling equipment. Founded in 1994, you can rely on over 25 years of experience providing manual handling solutions to businesses across the United Kingdom and the globe. You will benefit from pragmatic advice and innovative solutions from a team that is passionate about improving your productivity, efficiency, and safety.

Collaborating with a team of expert engineers, you will receive help in choosing the best handling equipment for your needs, allowing you to focus on the growth of your business. From industrial manipulators to vacuum lifters, you will benefit from an array of handling solutions tailored to suit your needs.

Handling Concepts' vision is to become the UK's leading company in materials handling equipment. With a goal of improving safety and efficiency, you can trust in a commitment to deliver impeccable customer service and outstanding engineering expertise.

A comprehensive selection of services is available to you to help you boost productivity, avoid downtime, and remain compliant with health and safety legislation. You can depend on a reputable supplier to help you solve your manual handling problems.



## WHY IS HANDLING EQUIPMENT USED?

Materials handling equipment can help you improve productivity, efficiency and safety. From the below, do any of these apply in your current workplace?

- Products are heavier than 10kg
- Product locations are not easily accessible by workers
- Workers are performing repetitive tasks every day
- Efficiency is not as high as it could be
- Products need to be moved regularly from one location to another
- Tasks are becoming more difficult for workers
- There is an increase in backaches, sore joints and other injuries

If you have any of these issues in your working environment, you will benefit from investing in a materials handling solution.

You will have access to expert engineers who are passionate about helping you improve the health and safety of your workers.

You can depend on outstanding and professional customer service from a team who will understand your requirements and recommend a solution that fits your needs and constraints.







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## EQUIPMENT TO SUIT YOUR BUSINESS NEEDS



With materials handling equipment, you can remove the burden of manual handling and improve the safety of your workers. Finding the right solution will not only ensure your workers are happier, safer, and more productive, but it will also reduce the likelihood of breakdowns and downtime.















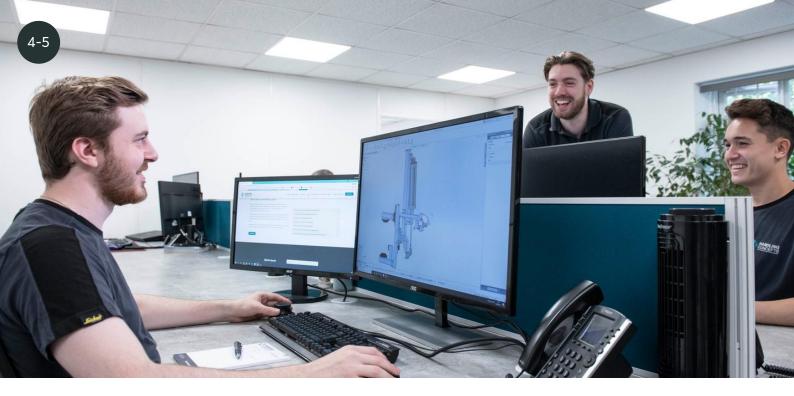








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Whether you are looking for industrial handling equipment, materials handling equipment, vacuum lifters, industrial manipulators, or a different bespoke product, you will find what you need with Handling Concepts. All products available can be modified to suit your requirements and can be customised for your specific application.

If you are looking for a product that will address your business concerns, work within your constraints, and provide the right solution for your manual handling needs, you can explore the wide selection of equipment available to you below.

All equipment can be purchased with critical spares packages and service plans, ensuring the maintenance and repair of your product is simple, effortless, and straightforward for your team.

For expert advice and recommendations for your business, scan the QR code to contact the Handling Concepts team today







#### LIFTING DEVICES

Below-the-hook lifting devices are important attachments that facilitate the efficient and safe transportation of various loads. They increase the versatility of traditional overhead cranes and manipulators by providing a wide range of options tailored to individual applications.



Hydraulic Grippers



Manual Clamp Grippers



**Pneumatic Grippers** 



Scissor Grab Grippers



**Turning Grippers** 

Below-the-hook lifting devices are low maintenance, and regular servicing further reduces downtime and disruption.

You can rely on over 25 years of experience with Handling Concepts to help you find the best material handling methods for your components, supplying you with quality products, top-notch support, and a committed team of experts. You can benefit from an extensive range of products that have been used in many industries, from aerospace to yellow goods.













#### **HYDRAULIC GRIPPERS**

Hydraulic grippers are used when a high amount of force is required to lift and manipulate a load. They are ideal for work environments with tight space restrictions that need a high-power solution.

#### Why Are They Used?

A hydraulic gripper's function is designed around the handling application, creating a unique piece of lifting equipment. They can simplify the task at hand, which improves production efficiency.

These below-the-hook lifting devices can have a variety of safe working loads. They can lift loads and rotate loads that are too heavy for a worker to handle, reducing the risk of musculoskeletal injuries.

They can also be supplied as part of a full turnkey solution. Hydraulic grippers integrate well with hoists, light crane systems, and industrial manipulators.





#### THE SOLUTION

This hydraulic gripper solution can lift loads up to 4600kg. It lifts titanium slabs, moving them onto a slightly offvertical machining bed.

The manufacturing process made it impossible for workers to handle the components without injury, so the hydraulic gripper was designed for this single application.

The hydraulic gripper provided a powerful solution for an exceptionally large load, removing manual handling from the application altogether, improving health and safety and production performance.



#### **MANUAL CLAMP GRIPPERS**

Traditional rigging slings and hardware do not offer the same security and longevity as manual clamp grippers. The solid design and single operator control provide a safe lifting experience.

#### THE SOLUTION

This manual clamp gripper can lift loads up to 65kg. This customer was looking for an easy way to lift and move various coil sizes using the overhead crane they already had.

Manual control was chosen so that operation remained simple and time efficient. The left leg mirrors the motion of the right leg via a rack and pinion arrangement.

The manual clamp gripper removed the need for workers to manually lift loads, reducing the risk of workplace injuries. It also provided a low-cost, reliable solution to the manual handling needs of the business.



#### Why Are They Used?

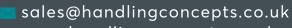
Manual clamp grippers increase the versatility of traditional overhead cranes. In low-speed cycle applications, they work for gripping and rotating various loads. They are a low-cost approach to achieving the required result.

For advice, design, manufacture, installation, training, and long-term service support, contact us today by scanning the QR code to find out if a Handling Concepts below-the-hook lifting device is the right material handling solution for you.











#### PNEUMATIC GRIPPERS

Pneumatic grippers are a cost-effective handling solution for many businesses. They provide a high gripping force that can be adjusted for the application, creating an adaptable piece of equipment. They integrate well with pneumatic rope balancers as there is already an air supply for them to use.

#### Why Are They Used?

One of the major benefits of pneumatic grippers is how lightweight they are. Workers are provided with an easy to use, low-effort solution which reduces fatigue and improves efficiency.

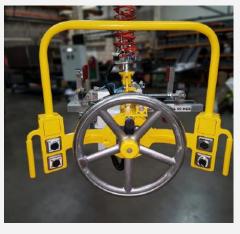
#### THE SOLUTION



This pneumatic gripper can lift loads of up to 50kg. simple and intuitive, It grips paper core tubes, then lifts and rotates them 90 degrees so they can be placed on a mandrel as part of the manufacturing process. A pneumatic rope balancer was supplied with rotation, creating a lowthe gripper to create a full turnkey solution.



The control features are allowing workers to grip and release the product with ease. A manual handwheel is used to turn the load as the centre of mass is in line with the centre of effort rotating system.



The pneumatic gripper enabled workers to rotate the load using minimal effort. Joint pneumatic and manual controls gave the operator oversight of the machine, providing a manual handling solution that reduced the risk of injuries and increased productivity.



#### **SCISSOR GRAB GRIPPERS**

Scissor grab grippers, also known as scissor clamps, scissor lifts or scissor lifting clamps, are below-the-hook lifting devices designed to grab and lift heavy components. They require no power or air supply and are manually activated.



#### Why Are They Used?

Scissor grab grippers increase the versatility of traditional overhead cranes. In low speed-cycle work for gripping and lifting various loads, they are a low-cost approach to achieving the required result.

A simple but effective lifting device, scissor grab grippers are low maintenance, which reduces the risk of breakdowns and downtime. This makes them a suitable replacement for traditional rigging slings and hardware, as they offer better security and longevity.

#### THE SOLUTION

This scissor grab gripper solution can lift loads of up to 25kg. This customer was looking for any easy way to lift and move electrical components using the overhead crane they already had.

A scissor grab gripper was chosen as the lifting application was relatively simple, but the customer still wanted to reduce the necessity for manual handling.

This gripper provided a low-cost investment that was easy to operate and reduced the risk of musculoskeletal injuries.



Scan the QR code to find out more about below-the-hook lifting devices





#### **TURNING GRIPPERS**

Turning grippers are robust lifting devices used to lift, grab, and rotate components during assembly. They have a unique design that allows them to grip components with ease. Turning grippers feature a simple control panel that can be used by a single operator.

#### Why Are They Used?

Turning grippers are used when a cumbersome load needs to be rotated. During the manufacturing process, the product may need to be flipped 180 degrees to mate with certain components. Turning grippers handle this laborious task for the workers, reducing the risk of workplace accidents and improving production efficiency.

#### THE SOLUTION

This turning gripper solution can lift loads of up to 820kg. It grips stainless steel canisters, then lifts and turns them 180 degrees so workers can complete the assembly of the product.

The turning gripper enabled operators to turn over an unusually large load. This allowed workers to be removed from the manual handling process, improving health and safety and production performance.









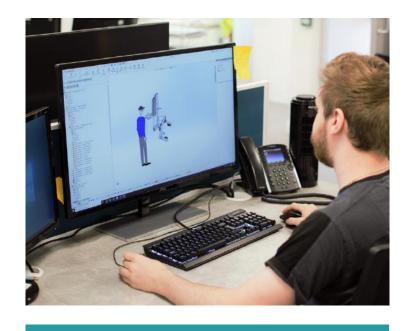
# HANDLING CONCEPTS' BELOW-THE-HOOK LIFTING DEVICE SOLUTIONS

You will benefit from a collaborative and innovative approach to find your below-the-hook lifting device solution. Enjoy a comprehensive and reliable service, focussed on safety, quality, and performance.

With access to a range of Handling Concepts' below-the-hook lifting devices, your exact specifications will provide you with a tailored solution, and a choice of extensive options.

You can rely on over 25 years of experience with Handling Concepts to help you find the best material handling methods for your components, ready to supply you with quality products, topnotch support, and a committed team of experts.





### FIND YOUR HANDLING SOLUTIONS

If you need a material handling solution and are interested in exploring how Handling Concepts' below-the-hook lifting devices will work for you, contact us today and remove your handling headache.

Scan the QR code to find more.







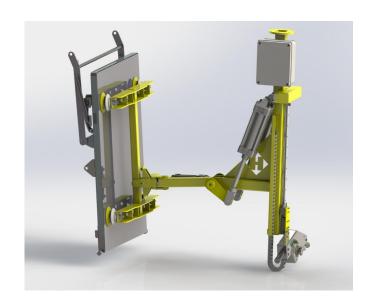
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#### **BESPOKE LIFTING EQUIPMENT**

For your tricky lifting and handling application, you need to ensure you find the right solution for your workers and business. If you have explored standard materials handling equipment like forklifts and stacker trucks but are still struggling to find the right product to meet all your requirements, bespoke lifting equipment may provide the solution you need.



You can rely on almost 30 years of experience with Handling Concepts, providing bespoke lifting equipment and modifications for businesses across the globe.

Your solution could be anything from a one-off machine to a complete turnkey solution, or a fully integrated production line.

## **Invest In Bespoke Lifting Equipment For Your Business Today**

Take confidence from the power of working closely with a dedicated team, founded on professionalism, collaboration, innovation, flexibility, and a prime focus on helping you find the right handling solution that addresses your specific requirements.

If you would like to discover how bespoke lifting equipment could benefit your business, contact Handling Concepts by scanning the QR code.







## MEET YOUR NEW GENERATION OF CO-WORKER

Meet your new generation of co-workers! You can increase flexibility, quality, speed of production and enhance your employees' efforts by deploying a Collaborative Robot. With over 25 years of experience in automating production operations, Handling Concepts can help you to integrate leading edge robotic arm solutions in your workplace.

#### **Consistent Results**

Robots never get tired.

A Cobot will

consistently and
accurately complete
your repetitive tasks.

#### **Faster Payback Period**

Easy programming and flexible automation enable Cobots to provide value quickly and effectively.

#### **Increased Productivity**

Speed and precision increases output consistently and reduces the risk of product defects.

#### **Handling Concepts' Cobot Solutions**

Handling Concepts is passionate about elevating British Engineering by enabling UK manufactures to increase productivity safely.



Affordable



Intuitive



Flexible

As your West Midlands and UK integrator, you can rely on Handling Concept's 25 years of materials handling problem solving to help you find the right Cobot solution for your business. You can unlock more value by investing in a machine assisted workforce. Contact us to learn more.











#### **CRANES**

Cranes offer many possibilities for handling loads quickly, safely, and efficiently. They can move extremely heavy loads using the overhead space in the workplace, instead of through aisles or on the floor.

Moving products through stages of production is an ideal application for cranes. They are very versatile, and a variety of safe working loads can be provided.



Jib Cranes



Light Crane Systems



**Overhead Cranes** 



Travelling Jib Cranes

As part of a full turnkey solution, cranes can be equipped with hoists, lifting equipment such as grippers, or bespoke manipulator systems, creating an adaptable solution for many industries.

Handling Concepts is a pioneer in lifting equipment, and you can rely on us to provide you with an extensive range of innovative products to help you improve the health and safety of your works. Expertise will be on hand to provide you the best recommendations, including full light crane systems and turnkey solutions.









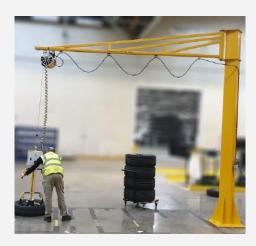
#### **JIB CRANES**

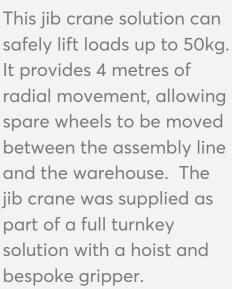
Jib cranes are a type of overhead lifting device often used for repetitive tasks. They are widely used in the automotive and construction industries because of their versatility and cost effectiveness.

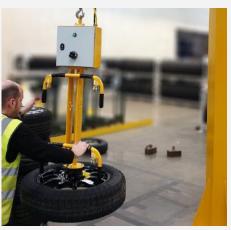
#### Why Are They Used?

Jib cranes are optimal for lifting loads in small, tight areas. They can lift loads by themselves or support a larger crane system. Highly durable, versatile, and powerful jib cranes are an ideal solution for a wide variety of applications.

#### THE SOLUTION







A new factory install, it was important for the customer to have a material handling solution that was good value for money. This jib crane provides a low cost and easy-to-maintain outcome that is ideal for the application.



Jib cranes provide a costeffective solution to
material handling
problems. They remove the
need for workers to
manually lift the load,
reducing the risk of
workplace injuries. They
also increase production
line efficiency, as the task
can be carried out swiftly.





#### LIGHT CRANE SYSTEMS

Light crane systems are a series of modular overhead cranes that move extremely heavy loads using the overhead space in the workplace, instead of through aisles or on the floor. They offer many possibilities for handling loads quickly, safely, and efficiently, and can lift up to 3,200kg.

#### Why Are They Used?

Light crane systems are chosen based on the manual handling application. If the component is extremely large and bulky, an overhead crane can support heavier loads and utilise the overhead space.

They lift, lower, and move loads horizontally, allowing them to function in a production line. This improves worker safety and optimises productivity.





#### THE SOLUTION

This light crane system solution helps with the assembly of components on a full production line. It is over 40 metres in length and can safely lift loads of up to 250kg.

Using the crane system means that the workplace utilises the overhead space, avoiding causing space restrictions at ground level.

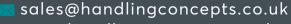
The light crane system removes the need for workers to manually lift loads, reducing the risk of workplace injuries. It increases efficiency, as it operates smoothly along the production line.



Scan the QR code to find out more about cranes







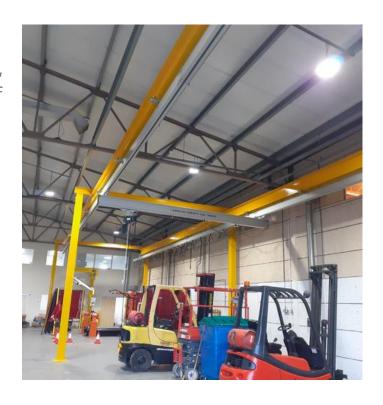


#### **OVERHEAD CRANES**

#### Why Are They Used?

Overhead cranes are useful for several tasks, including moving products through stages of production, transporting heavy loads, or loading and unloading. They are very versatile, and have a variety of safe working loads

Overhead cranes are a brilliant piece of equipment to have in any warehouse or production facility. They allow workers to move items efficiently and easily, as well as lower heavy products to the ground, improving safety for anyone using it.



They can also be supplied as part of a full turnkey solution. Overhead cranes can be equipped with a hoist, lifting equipment such as grippers, or bespoke manipulator systems. They are adaptable, which makes them a favoured choice for industrial and manufacturing applications.

#### THE SOLUTION

This overhead crane solution can lift loads up to 1000kg, creating a flexible handling solution for the automotive parts it transports. The system covers an area of 25 metres on one axis and 5 metres on a second axis, allowing horizontal travel across the workplace and covering an area of 125m<sup>2</sup>.

An electric hoist provides a foundation for additional lifting accessories and can be manually pushed as part of the trolley. Using the crane system means that the workplace utilises the overhead space and does not cause space restrictions at ground level. It also increases production line efficiency, as it provides greater horizontal travel than a traditional industrial manipulator.



#### TRAVELLING SLEWING JIB CRANES

A travelling slewing jib crane has a rotating arm that runs horizontally along a gantry rail. This provides horizontal travel, allowing the jib arm to move across the length of the assembly line.

#### THE SOLUTION

This travelling slewing jib crane solution can safely transport both low and high-capacity loads. It provides an impressive 24 metres of horizontal travel using a gantry rail system, allowing components to travel across the entire length of the factory without using scarce floor space.

The solution has two jib arms running one rail system, both with bespoke below-the-hook tooling devices to help manoeuvre metre-long components.

The travelling slewing jib cranes provide an innovative solution to material handling problems. They remove the need for workers to manually lift the load, reducing the risk of workplace injuries.



#### Why Are They Used?

Travelling slewing jib cranes are optimal for lifting loads in a space that other machines are not occupying.

Mounting onto the existing steelwork of an overhead crane allows them to keep floor space free. They can operate at the same time and in the same space as the overhead crane.

For advice, design, manufacture, installation, training, and long-term service support, contact us today by scanning the QR code to find out if a Handling Concepts crane is the right material handling solution for you.







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## HANDLING CONCEPTS' CRANE SOLUTIONS

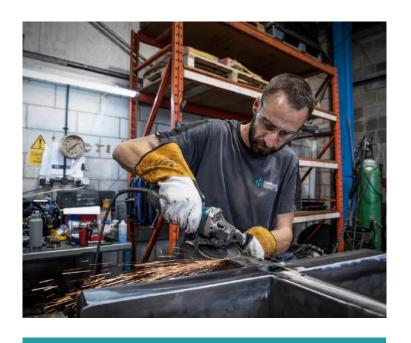


You will benefit from a collaborative and innovative approach to find your crane lifting device solution. Enjoy a comprehensive and reliable service, focussed on safety, quality, and performance.

With access to a range of Handling Concepts' cranes, your exact specifications will provide you with a tailored solution, and a choice of extensive options.

You can rely on over 25 years of experience with Handling Concepts to help you find the best material handling methods for your components, and we are ready to supply you with quality products, top-notch support, and a committed team of experts.





### FIND YOUR HANDLING SOLUTIONS

If you need a material handling solution and are interested in exploring how Handling Concepts' cranes will work for you, contact us today and remove your handling headache.

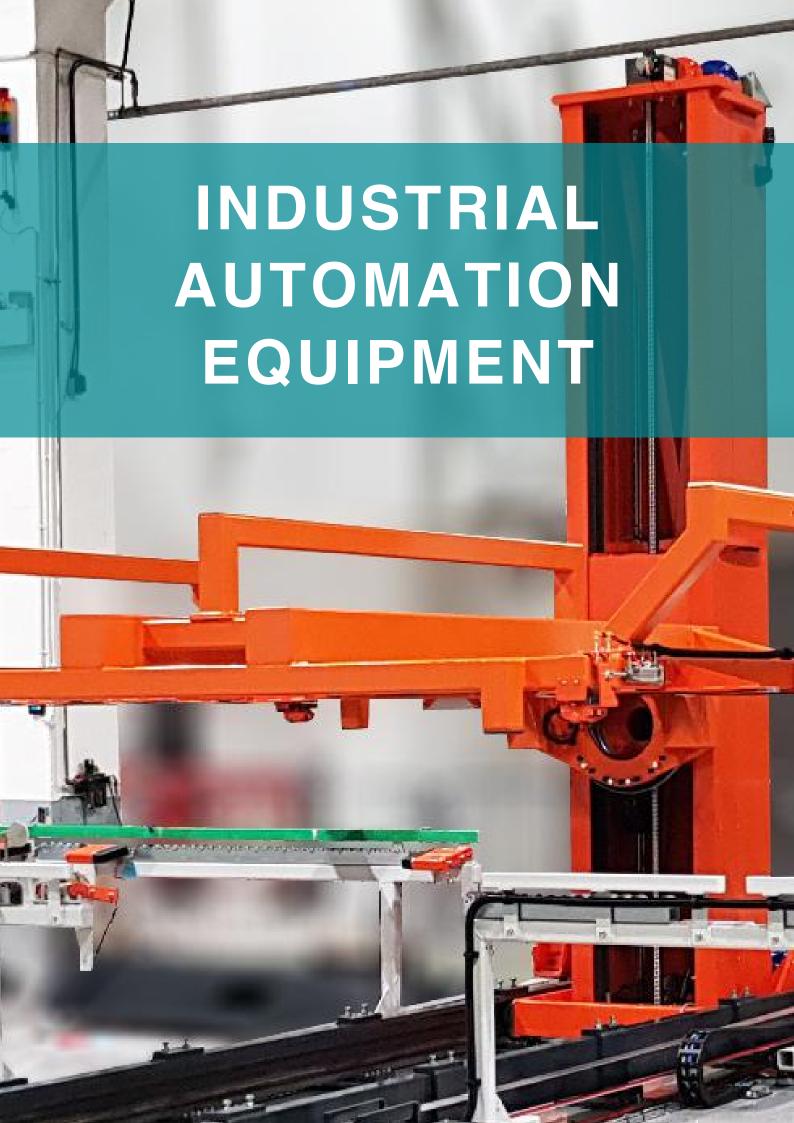
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## WHAT DOES INDUSTRIAL AUTOMATION EQUIPMENT DO?

Industrial automation equipment is any handling machine pre-programmed to perform a specific task with minimal user input. They can be anything from a robot designed to rotate components to help with complex welding patterns to a gripper that follows a straight path for a set distance. They provide precise, repeatable movement to lift, lower, and rotate your component.

Solving some of the most challenging and complex material handling problems requires advanced tools like special purpose machinery and autonomous construction equipment.

### Handling Concepts' Industrial Automation Equipment Solutions

If you need a material handling solution and are interested in exploring how Handling Concepts' industrial automation equipment will work for you, contact us today and remove your handling headache.







SPECIAL PURPOSE MACHINERY

This special purpose machinery lifts roofs and floors for portable buildings. As the components arrive at the workstation from elsewhere on the assembly line, a worker uses an industrial touchscreen (also known as a human-machine interface, or HMI) to begin a series of complex lifting and tilting manoeuvres to install the components onto the frame of the portable building. The worker can monitor the progress from the HMI, as well as view any warnings should the components not be seated properly on the gripper.

With components over 6m long and weighing up to 1.3 tons, this special purpose machinery provides a solution to the problem of workers being unable to physically handle the load and perform the required operations.

The control is simple to use and low effort for the worker, who simply has to start the sequence of operations. The workstation is also hold-to-operate, ensuring the worker stays with the controller at a safe distance from the large components being manipulated.

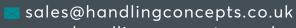
This equipment also uses several smart sensors which can be remote accessed by Handling Concepts' engineers, allowing them to diagnose any issues which may arise from a distance, as well as performing remote maintenance or software upgrades, saving the cost and time of service callouts.











## AUTONOMOUS CONSTRUCTION EQUIPMENT

This autonomous construction equipment grips and lifts hot components that exit a furnace, immerses them in a powder-coated tub, rotates them to ensure the powder is evenly distributed across all surfaces, then places the components onto a stillage.

With components still hot from a furnace and needing to be fully immersed in fine powder, which can be hazardous to health, this autonomous construction equipment provides a solution to the problem of workers being unable to physically handle the load and perform the required operations safely. A programmable logic controller allows the worker to operate the machine from a safe distance. The control is simple to use and low effort for the worker, who simply has to send a command at the start of the lift, dunk, and place operations.

This autonomous construction equipment solution removed the need for workers to perform lifting of bulk loads. This improved production efficiency and reduced the risk of musculoskeletal injuries.



### FIND YOUR HANDLING SOLUTIONS

For advice, design, manufacture, installation, training, and long-term service support, contact us today to find out if Handling Concepts' industrial automation equipment is the right material handling solution for you.

Scan the QR code to find more.













#### INDUSTRIAL MANIPULATORS

Industrial manipulators are machines with a rigid manipulator arm designed to pick up large and heavy loads. The manipulator arm can perform complex manoeuvres whilst it has an object outside of its centre of mass.

Industrial manipulators are like an extra set of hands that can provide precise movement to lift, lower, and rotate your component.



**Balanced Arm Manipulators** 



Overhead Telescopic Mast



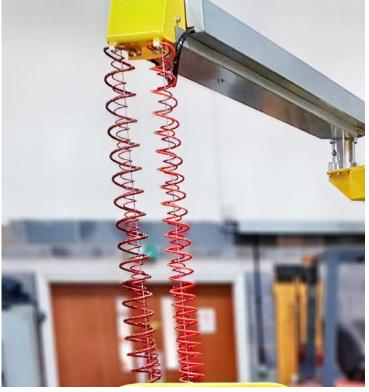
Lift and Rotate Columns



Pneumatic Rope Balancers

You can reply on an expert engineering team to deliver the best solution for your manual handling needs. Improve your worker health and safety with Handling Concepts' industrial manipulators: handling equipment at the forefront of safety and efficiency.







## BALANCED MANIPULATOR ARMS



Balanced manipulator arms are machines with a rigid manipulator arm designed to lift large and heavy loads. They are pneumatically powered and manually operated, allowing smooth, precise actions for manoeuvring components.

#### Why Are They Used?

The low effort operation of balanced manipulator arms makes them standout pieces of material handling equipment.

Their ability to provide effortless control and lifting is ideal for reducing worker fatigue and improving efficiency in the workplace.



#### THE SOLUTION

This balanced manipulator arm solution only needs to lift small loads of 20kg, but provides a foundation for further material handling applications. The machine is tasked with lifting and holding automotive parts as part of the assembly line.

This was achieved by providing a full turnkey solution, supplying the balanced manipulator arm with a bespoke gripper attachment for balancing, lifting, and rotating a specific part for the customer.

The balanced manipulator arm removes the need for workers to manually lift and balance bulk loads to complete assembly. This improves worker efficiency and reduces the risk of musculoskeletal injuries.



#### LIFT AND ROTATE COLUMNS

Lift and rotate columns compromise a fixed base column and a gripping system that can rotate loads 180 degrees. The gripping system can be raised and lowered, allowing the machine to function alongside an assembly line.

#### THE SOLUTION

This lift and rotate column solution lifts 2m wide components from the assembly line, rotates them 180 degrees, and lowers them again.

With components weighing up to 1000kg, the lift and rotate column provides a solution to the problem of workers being unable to physically handle the load.

Hydraulic grippers suit the different sized components and have sensors available to guide the operator with positioning the gripper around the object.

A programmable logic controller allows the worker to operate the machine from a safe distance. The control is simple to use and low effort for the worker.

This lift and rotate column solution removed the need for workers to perform lifting of bulk loads. This improved production efficiency and reduced the risk of musculoskeletal injuries.



#### Why Are They Used?

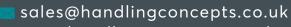
An advanced material handling solution, lift and rotate columns are especially useful in medical and construction industries. They remove the need for manual handling and provide a solution to challenging tasks that cannot be undertaken by a worker.

Scan the QR code to find out more about Handling Concepts' industrial manipulators.









#### **OVERHEAD TELESCOPIC MASTS**

**(** 

Overhead telescopic masts are columns that provide vertical lifting of products. They can be raised or lowered to any desired height within their range of vertical movement.

#### Why Are They Used?

Overhead telescopic masts are strong substitutes for pneumatic rope balancers or larger industrial manipulators when the work environment has overhead obstructions that prevent conventional material handling devices from being used.

#### THE SOLUTION

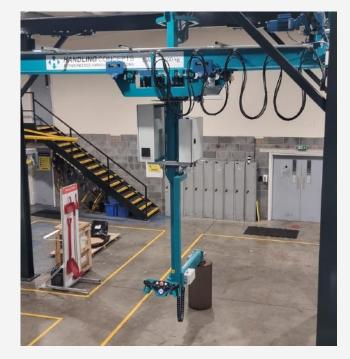
This overhead telescopic mast solution can lift loads of up to 800kg and is attached to an overhead crane system allowing north, east, south and west travel—an essential feature for this fast-moving production line.

This solution is powered by an electric chain hoist. The up and down operations of the industrial manipulator are performed using a left-hand joystick. To ensure the action is deliberate, a right-hand master button also has to be held to move the

manipulator.

Handling Concepts supplied this overhead telescopic mast as part of a complete turnkey solution. This included a bespoke hydraulic gripper for grabbing, lifting, moving, and rotating various product sizes for the customers.

The overhead telescopic mast reduced the risk of workplace injuries and improving the efficiency of the production line.

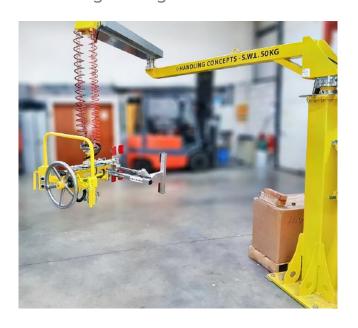




#### PNEUMATIC ROPE BALANCERS

#### Why Are They Used?

Pneumatic rope balancers are used to lift and transport loads in industrial environments. They are especially helpful when used in industrial manufacturing to move materials quickly and frequently on the production line for assembling mechanical parts and loading & unloading tooling.



#### THE SOLUTION

This pneumatic rope balancer solution can lift loads of up to 50kg. The machine lifted a range of circular tube products with the goal of unloading them vertically from a pallet and then manipulating them horizontally onto the production line.

This goal was achieved by providing a full turnkey solution, supplying the pneumatic rope balancer with a bespoke gripper attachment for gripping, lifting, moving and rotating various product sizes for the customer.

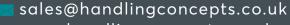
The pneumatic rope balancer removes the need for workers to both manually lift and manoeuvre objects on the production line, improving worker efficiency and reducing the risk of workplace injuries.

For advice, design, manufacture, installation, training, and long-term service support, contact us today by scanning the QR code to find out if a Handling Concepts industrial manipulator is the right material handling solution for you.









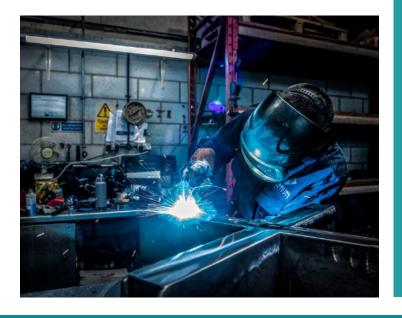
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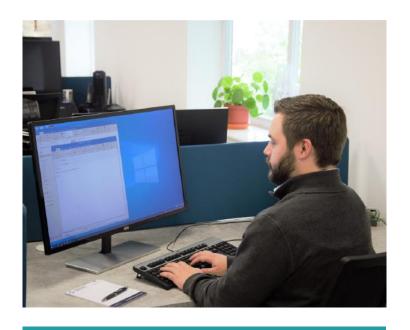
# HANDLING CONCEPTS' INDUSTRIAL MANIPULATOR SOLUTIONS

You can depend on almost 30 years of experience and trust skilled engineers to help you improve the productivity and health and safety of your workers.

With access to a range of Handling Concepts' industrial manipulators, your exact specifications will provide you with a tailored solution, and a choice of extensive options.

You can reply on an expert engineering team to deliver the best solution for your manual handling needs. Improve your worker health and safety with Handling Concepts' industrial manipulators: handling equipment at the forefront of safety and efficiency.





### FIND YOUR HANDLING SOLUTIONS

If you need a material handling solution and are interested in exploring how Handling Concepts' industrial manipulators will work for you, contact us today and remove your handling headache.

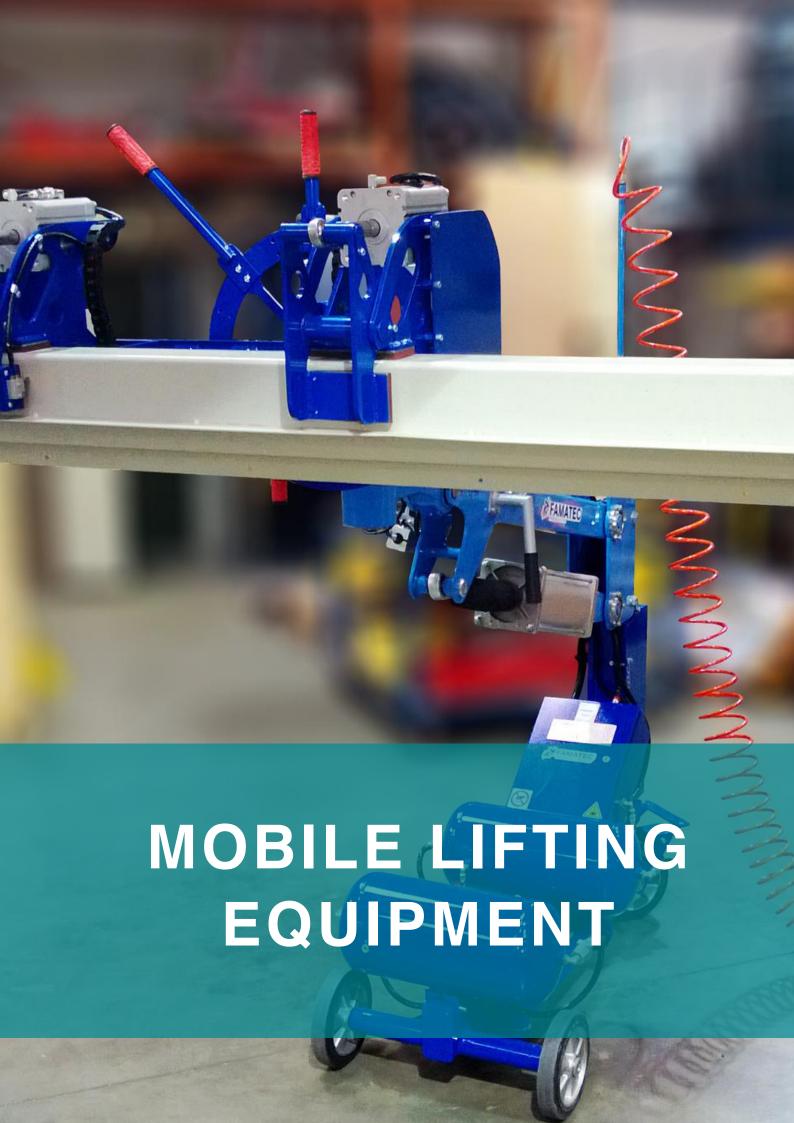
Scan the QR code to find more.







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# **MOBILE EQUIPMENT**

Equipment that can lift, manoeuvre, and hold bulk loads is referred to as lifting equipment. If that equipment can be moved around the workplace or moved to a desired location, it becomes a mobile solution.

There are many types of mobile lifting equipment, including mobile manipulators, stacker trucks, and scissor lift tables.



**Balance Trolleys** 



Mobile Manipulators



Scissor Lift Tables



Stacker Trucks



Trolley for an Electric Tug

With Handling Concepts, you will have access to an industry leader in materials handling solutions, with nearly 30 years of experience.

You will receive exceptional customer service and can rely on a team of experts who have developed mobile lifting equipment solution for businesses across the globe.









# **BALANCE TROLLEYS**

Balance trolleys are a platform that can support the load of a component. Castors mounted to the trolley allow them to move around the workplace. They have a bespoke head plate that can be raised or lowered. This creates a near effortless manual handling experience for the worker.

# THE SOLUTION

This balance trolley solution can lift loads up to 10kg and includes castor wheels to create a piece of mobile lifting equipment. It was tasked with balancing and lifting undercarriage automotive parts to allow workers to install different components.

There was an onboard 24L air tank to power the pneumatic cylinder. The air tank was rechargeable, allowing the equipment to be charged when needed.

Two different head plates were manufactured. One with a single support and one with three support arms. The supports were fitted with nylon blocks to reduce the risk of damage to the automotive parts.

The balance trolley removed the need for workers to lift and balance heavy parts. This reduced the risk of injuries caused by incorrect manual handling and improved the efficiency of the production line.



# Why Are They Used?

Balance trolleys are a versatile piece of mobile lifting equipment for any industry. Their ability to balance components requires minimal effort and eases the manual handling needs of your workers, also benefiting production lines.









# **MOBILE MANIPULATORS**

Mobile manipulators are like an industrial manipulator but are set on castors to allow them to become a portable material handling solution. They have the same rigid manipulator arm but are scaled down to make them transportable.



### THE SOLUTION

This mobile manipulator solution could lift loads up to 300kg. The machine gripped 3m long steel columns to rotate from the horizontal delivery position to vertical, ready for fitting in a different location.

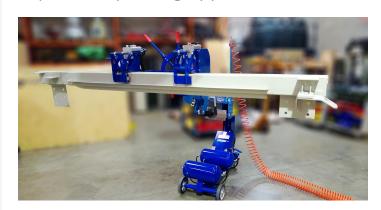
It included polyurethane-faced grippers to avoid surface damage whilst enhancing grip.

It removed the need for workers to lift cumbersome columns manually, reducing the risk of workplace injuries and improving efficiency.

# Why Are They Used?

Mobile manipulators are ideal for providing readily available lifting equipment for your workers. They provide a tool to remove the burden of laborious manoeuvres such as gripping, lifting, holding, and rotating loads.

They are portable and also provide a cost-effective solution for covering sizeable areas. They can keep up with fast-moving productions processes seen in pick and packing applications.





Scan the QR code to find out more about mobile lifting equipment solutions.





# **SCISSOR LIFT TABLES**

Scissor lift tables are platforms that can be raised or lowered to any height within their range of vertical movement. They have a strong, rigid, and stable base that can be fixed to the ground, or they can be supplied with castors to form a mobile lifting solution. You can customise the platform of a scissor lift table to include conveyors, rollers, rotating discs and bespoke grippers.

#### Why Are They Used?

Scissor lift tables are versatile pieces of mobile lifting equipment for any industry.

Their ability to raise and lower objects with little effort reduces the strain on your workers' backs from manual lifting.

#### THE SOLUTION



This scissor lift table solution can lift loads up to 150kg and was changed to include castor wheels, creating a piece of mobile lifting equipment. A foot pedal allows the worker to control the lift of the scissor lift table, allowing smooth operation.



This solution was customised with a roller top. This modification made the handling of goods even easier and more efficient as it removed the need to lift goods when removing them from the scissor lift table.



The scissor lift table with the roller top removed the need for workers to both lift and manoeuvre objects around their workplace, reducing the risk of worker fatigue and improving the efficiency of the pick and pack line.





# STACKER TRUCKS

#### Why Are They Used?

Stacker trucks are ideal for providing readily available lifting equipment for your workers. They provide a tool to remove the burdens of laborious manoeuvres such as lifting, loading, and moving bulk loads.

#### THE SOLUTION

This stacker truck solution could lift loads up to 75kg and was changed to include a bespoke gripper for moving circular moulds and their corresponding aluminium plates. The gripper is controlled with a hand-wheel leadscrew arrangement to allow the operator to clamp or release the jaws when needed.

To allow travel with no restrictions, the stacker truck has an onboard battery and hydraulic pump. This allows both the lifting equipment and gripper to function with no limitations.

The stacker truck with the bespoke gripper removed the need for workers to both lift and rotate the large moulds and aluminium plates on the production line, reducing the risk of workplace injuries and improving the efficiency of the production line.



# FIND YOUR HANDLING SOLUTIONS

For advice, design, manufacture, installation, training, and long-term service support, contact us today to find out if Handling Concepts' mobile lifting equipment is the right material handling solution for you.

Scan the QR code to find more.







sales@handlingconcepts.co.uk

# TROLLEY FOR AN ELECTRIC TUG

Electric tugs allow a single operator to push, pull, and steer wheeled loads. They are often brought into the workplace to complete a task that was previously performed either by a forklift or one that was handled manually.

# THE SOLUTION

This trolley for an electric tug solution moves, lifts, and positions canisters on an assembly line. The customer already used the electric tug for other manual handling applications but wanted to turn it into an all-purpose solution for their workers.

The trolley enabled large components to be moved along the assembly line with ease and efficiency and can lift loads up to 3000kg. A scissor lift table was the foundation structure of the trolley, allowing the platform to be raised or lowered.





# Why Are They Used?

Electric tugs provide weightless manoeuvring of loads across the assembly line, providing a lifting solution for many workers at multiple points. Their compact size facilitates work environments that are restricted in space.

The addition of a raising and lowering platform makes trolleys ideal for assembly lines. They remove the burden of lifting and moving bulk loads across the workplace. This benefits workers, as they can complete their tasks more efficiently and without injury.





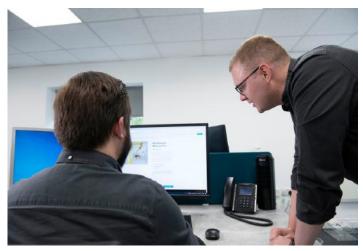
# HANDLING CONCEPTS' MOBILE LIFTING EQUIPMENT SOLUTIONS

Handling Concepts is a leading provider of materials and industrial handling equipment. Founded in 1994, you can rely on over 25 years of experience, providing manual handling solutions to businesses across the United Kingdom and the globe.

You will benefit from pragmatic advice and innovative solutions from a team that is passionate about improving your productivity and efficiency safely.

You will receive exceptional customer service and can rely on a team of experts who have developed mobile lifting equipment solutions for businesses across the globe.





#### FIND YOUR HANDLING SOLUTIONS

If you need a material handling solution and are interested in exploring how Handling Concepts' mobile lifting equipment will work for you, contact us today and remove your handling headache.

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# SPARES & SERVICES





# **SPARES & SERVICE**

You will be keen to ensure that your handling equipment is maintained correctly. Otherwise, like any fundamental part of your warehouse infrastructure, handling equipment can break down and cause serious, expensive issues for your business. You can protect your valuable assets with high-quality spares packages, tailored service plans and LOLER inspections provided by Handling Concepts.

# **Critical Spares**

You will benefit from easy access to critical spares to ensure that your materials handling equipment runs smoothly.

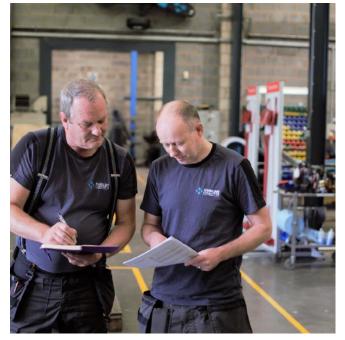
You will have at your fingertips vital spare components to replace those in your handling device if they break due to wear or damage. A critical spares package will be offered to you with your quote for your new asset.

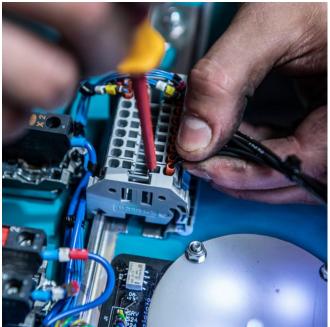


A critical spares package gives you the advantage of reducing delays caused by downtime if your handling equipment suffers a breakdown and requires urgent maintenance, because some parts are on long lead times. With a critical spares package, you can be confident that you will not have to wait because you will have the items to hand to ensure that you avoid delay.

A critical spares package can also help streamline a LOLER inspection. Your business is legally mandated to complete six-monthly inspections of your materials handling equipment. Should the inspection uncover a piece of machinery that requires repairs of any kind, you will already have the parts on-site and ready to be integrated into your workflow. You will be able to focus on the progress of your business and be confident that your workers are safe without worrying about disruption and downtime.







#### **Service Plans**

Whilst your materials handling equipment is well-made and high-quality, even the best pieces of workplace machinery will need regular inspection and sometimes replacement of parts and repair. You can benefit from a comprehensive service plan that puts your business at the centre of all processes.

Professional service plans include LOLER inspections of all of your equipment, even equipment not provided by Handling Concepts. You will be reminded a month before the inspection due date and can ensure every single part of your handling equipment is up to standard and working as optimally for your business as possible.

If any on-site repairs are required, you can rely on Handling Concepts to complete these for you, and if these are not possible on the day, you can depend on complete transparency on the scope and cost of the repair and benefit from an efficient, reliable service.

# **SUPPORTING YOU**

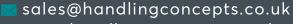
The maintenance of your equipment can be taken out of your hands so you can be confident your business is efficient, and your workers are safe.

Scan the QR code to find out more













# **VACUUM LIFTERS**

Vacuum lifters can lift materials and components that have a flat or smooth surface. The clue is in the name: vacuum lifters used a vacuum to handle various load types.

They grip, support, lift and lower a load with single operator control. This operation is fast and smooth, making them ideal for repetitive handling tasks.



Vacuum Grippers



Vacuum Lifting Beams



Vacuum Tube Lifters

The suction feet allow components to be lifted without damage to the surface or edges, a problem often caused by manual lifts or grippers.

This makes them ideal for manipulating product in the white goods and panel, board, and sheet industries.

Vacuum lifters are low maintenance and regular servicing further reduces downtime and disruption, which improves production line efficiency and provides a cost-effective handling solution.









# **VACUUM GRIPPERS**

Vacuum grippers use a vacuum to grip and lift various load types. They are a simple system comprising a vacuum pump connected by a hose to a suction head and suction foot (known as suction cups or vacuum pads). These are the contacts that hold the load.

# Why Are They Used?

Vacuum grippers provide fast and smooth operation, making them ideal for repetitive handling tasks. They are an ergonomic handling solution and increase workplace productivity.



### THE SOLUTION

This vacuum gripper solution can safely lift loads up to 40kg. It was brought in to lift a family of white goods cabinets of varying sizes. The task was to lift the cabinets off a conveyer and place them onto another, inside an awaiting cardboard tray.

The vacuum grippers have two fixed suction feet, and another two mounted onto a rail with a centre pivot so that they will always encounter the product no matter what size it is.

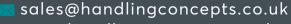
Material handling equipment removes the need for workers to manually lift the load, reducing the risk of workplace injuries.



Scan the QR code to find out more about vacuum lifters









# **VACUUM LIFTING BEAMS**

# Why Are They Used?

Vacuum lifting beams offer a safe and ergonomic solution to your material handling needs. With them, you can quickly and easily increase productivity in the workplace. Their operation is fast and smooth, making them ideal for repetitive handling tasks.

Panel, board, & sheet manufacturers often produce products that are very large and cumbersome to lift. It is easy for workers to become tired or over-stretch their bodies trying to move these loads. Vacuum lifting beams remove the burden of this task.



Some products are also prone to damage. To reduce the risk of this, vacuum lifting beams have padded suction feet. This is important for manufactures who do not want their products to be scratched during the production process.

#### THE SOLUTION

This vacuum lifting beam solution can safely lift loads of up to 150kg. The machine is designed for the handling of metal sheets and panels, which are too large and heavy for a worker to handle.

It is suspended from a balanced arm manipulator which enables further vertical and horizontal movement of the load. The vacuum lifting beam has adjustable suction feet to allow the lifting equipment to handle products of multiple sizes. These are padded to ensure they did not cause any damage.

The vacuum lifting beam removes the need for workers to manually lift the load, reducing the risk of workplace injuries and improving the efficiency of the production line.





# **VACUUM TUBE LIFTERS**

Vacuum tube lifters are an excellent system to use as material handling equipment, as they feel weightless and can be used by a single operator.

#### Why Are They Used?

Vacuum tube lifters can help increase productivity while offering an ergonomic solution for your material handling needs. The operation is fast and smooth, making them ideal for repetitive handling tasks.

Material handling equipment that can remove the burden of manual handling from the operator will improve the health and safety of workers and reduce workplace injuries.

They are also a cost-effective solution. Vacuum tube lifters are low maintenance and when serviced, downtime and disruption are reduced, which improves production line efficiency.





#### THE SOLUTION

This vacuum tube lifter solution can safely lift loads of up to 55kg. The machine is designed for the handling of boxes with coffee machines inside. The heavy load has to be lifted onto a conveyer as part of the production line, a task that was a manual handling headache for workers.

The vacuum tube lifter is suspended from a jib crane, which gives adjustable travel for the application.

The vacuum tube lifter allows the load to effectively 'float', and removes the need for workers to manually lift the load, improving safety and efficiency.



# HANDLING CONCEPTS' VACUUM LIFTER SOLUTIONS

You can rely on over 25 years of experience with Handling Concepts to help you find the best vacuum lifters and material handling solutions that will help your workers move bulk loads without concern for injury.

Your exact specifications will provide you with a tailored outcome and an extensive range of options to choose from. You are supported by a team founded on knowledge, experience, and dedication to help you improve the safety of your workers and supply you with high-quality material handling equipment. You can remove the burden of manual handling, knowing you have access to an invaluable asset of pragmatic advice, unrivalled customer experience and reliable service.





# FIND YOUR HANDLING SOLUTIONS

If you need a material handling solution and are interested in exploring how Handling Concepts' vacuum lifters will work for you, contact us today and remove your handling headache.

Scan the QR code to find more.







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# BENEFIT FROM A RANGE OF SERVICES



Handling Concepts' vision is to become the UK's leading company in materials handling equipment. With a goal of improving safety and efficiency, you can trust in a commitment to deliver impeccable customer service and outstanding engineering expertise. You can benefit from a range of services tailored to your needs, including:



Providing materials handling equipment



Bespoke manufacturing solution planning



Full installation services



Machine inspections and maintenance services



Continued post-project support



Sales of critical spares packages



Equipment training help

#### **Committed to You**

You can be confident that your satisfaction and worker safety will be at the forefront of every project. Take confidence from the power of working closely

with a dedicated team, founded on professionalism, collaboration, innovation, flexibility, and a prime focus on helping you find the right handling solution that addresses your pain points and remains within your constraints.

Reach out today to discover how you can solve your manual handling headache.





**Perkins** 













**SIEMENS** 

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- Autonomous Construction Equipment
- Balance Trolley
- Balanced Manipulator
   Arm
- Bespoke Lifting Equipment
- Collaborative Robots
- Critical SparesPackage
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- Jib Crane

- Lifting and Rotate
   Column
- Light Crane System
- Manual Clamp Gripper
- Mobile Manipulator
- Overhead Cranes
- Overhead Telescopic
   Mast
- Pneumatic Gripper
- Pneumatic Rope
   Balancer
- Scissor Grab Gripper
- Scissor Lift Table

- Service Plans
- Special Purpose
   Machinery
- Stacker Trucks
- Travelling Slewing
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- Trolley for an ElectricTug
- Turning Gripper
- Vacuum Gripper
- Vacuum Lifting Beams
- Vacuum Tube Lifter





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