

# Expert Solutions in Lifting & Handling

Palamatic Materials Handling

(Palamatic)

www.palamatic.com

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"Listening intently to the operator, understanding their process and then providing them a safe, simple solution to help them do their job is the essence of our business and who we are.

Success is an operator energised with a smile on their face and a Palamatic Lifter in their hand!"

MELANIE TAYLOR MANAGING DIRECTOR

# We are Palamatic

## At the heart of Palamatic are our people, every single one of our customers and employees help make the difference

It is our people that make us who we are.

Stewart Bennison formulated Palamatic's guiding principles back in 1985. Respect, courage, long-lasting relationships and talent. These simple words are a measure of how we do business, they encourage us to constantly improve and help us contribute to the wellbeing of all customers, our employees and our families. As a business we strive to provide the best opportunities for our employees to grow, we nurture their talent and in return they work harmoniously to design, develop and build products that we are proud of.



Based in Chesterfield we are well situated for distribution of product to all parts of the UK and Overseas. The premises include a warehouse, assembly workshops, stores, two fabrication facilities, new test plant, meeting room and offices.

We also have an office and warehouse facility in North Carolina to help with enquiries and distribute lifters parts and systems to our customers in the USA, Canada and South America.

Over the years Palamatic has built up strong relationships with a team of distributors all over the world who have worked with us to represent our products to their customers. Palamatic has evolved to form four separate divisions that focus on our customers' needs in all industries.

#### Palamatic Materials Handling

Manufactures lifting and handling solutions for all general industries including Woodworking, Chemicals, Food, Packaging, Refractory, White Goods, Printing and Logistics.

www.palamatic.com



A well established Manufacturer and leading force in handling and process solutions for the Pharmaceutical, Healthcare, Medical, Fine Chemicals, Cosmetics and Nuclear industries.

www.palpharma.com



Manufactures a full range of automatic and manual powder handling in-feed and sack opening machines for Food, Chemical, Paints, Pharmaceutical, Oil and Plastic industries.

www.palamaticpowderhandling.com

## **PalFab**

Our dedicated fabrication department running on Lean Principles provides us with the facility to produce both mild steel & stainless steel assemblies in separated workshops to the highest quality for all our product divisions. The excellence of the finished product for our customers is assured with manufacturer under our control.

www.palfab.co.uk

Respect Courage Long-lasting relationships Talent



# How we can help

Our aim is to: Reduce operator injury Increase productivity Protect your valuable product Save you money



Since introducing Vacuum Tube Lifting technology to the UK in 1985 Palamatic has supplied thousands of lifting solutions to most industries world-wide. Palamatic is now an established and leading force in the global market for vacuum handling systems.

We are experts in providing the right solution in a variety of sectors including:

- Automotive
- Beverage and Brewing
- Chemical
- Electronics & White Goods
- Food
- Logistics Distribution
- Oil & GasPackaging
- Pharmaceutical
- Printing
- Rubber
- Steel
- Woodworking

Palamatic's philosophy has always been to push the boundaries of technology – this is how we learn and this is how we grow.

The manufacture and design of vacuum handling equipment is only the beginning of Palamatics full circle service. Our expert installation and commissioning team can ensure that your equipment is installed to suit your environment and your budget.

Our after sales team are always on hand to assist with parts, servicing, annual certification requirements or any questions you may have after installation to ensure your new equipment provides many years of active service.

### **90° GLASS TURNER**

MILLO SOOKE SAVE

BUUU

Dantening

A'AAAMIN'S

INSPECTION AREA

Palamatic

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A vacuum and pneumatic system designed for the movement of glass panels from a vertical to a horizontal process area. Suitable for up to 350kg (772lb)

# Vacuum Tube Lifter Range

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AIR SHOWER

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# Vacuum Tube Lifter Range

# Palamatic's philosophy has always been to push the boundaries of technology - This is how we learn and grow

Materials such as foodstuffs, chemicals, wooden panels, building products, rolls, drums and barrels present safety problems when they need to be moved rapidly during production processes.

The Palamatic vacuum lifter range can lift loads from 10kg (22lb) up to 350kg (772lb) and can be customised to suit your application.

Vacuum tube lifters effectively neutralise the weight of the object load for the operator, resulting in a significant reduction in the risk of personal injury associated with poor manual handling techniques. The use of a vacuum lifter also reduces the risk of damage to the product.

With a Palamatic vacuum tube lifter, the operator does not suffer fatigue at the same rate as during a manual handling process and will allow the operator to maintain performance for their whole shift.

### WHY CHOOSE A PALAMATIC VACUUM TUBE LIFTER?

- Established in 1985, with UK based engineering, manufacturing, service and spare parts
- Proven Health and Safety solution
- Efficient use of labour
- Eliminate costly claims
- Effortless repetitive lifting
- Minimal running costs
- Range of finishes available
- Increased operator safety & performance
- Increased productivity and quality
- Low maintenance
- Available with ATEX/IEC Certification
- Systems specifically for use in clean process areas

### WHAT CAN I LIFT?

Palamatic vacuum tube lifters can lift almost anything from boxes, bags, sacks and drums to boards, reels, crates, pallets and sheets. The most common applications are:



PAGE07



### CRANE System

Options are Swing Jib, H-Style or Articulated Jib supporting up to 350kg (772lb) in weight. Further details on Pages 17-24



### VACUUM PUMP

With electric or compressed air powered options the vacuum pump provides the suction to lift and hold the product

### FILTER

Filters are used to stop dust particles entering the pump & atmosphere. ATEX and clean room options are available



### LIFT TUBE

Carries the vacuum to the control head and comes in a variety of diameters dependant upon application



### CONTROL HEAD

Allows the operator to regulate the vacuum flow to lift or lower the product safely

Multiple options available

5

### END EFFECTOR

2

3

Provides an air tight seal or clamp on to the product to hold it safely without damage

Multiple options available

6



# Versatile options that satisfy the widest range of industrial handling solutions but based on a minimum number of components

The S-LINE is our streamlined, simple to configure system that can effortlessly lift boards, boxes, drums, pallets, sacks and many more items.

A vacuum control assembly with side handle is generally the most popular design for many handling processes. Suitable for loads from 20kg (44lb) to 350kg (772lb) the design mimics the operators natural action and can be specified as either left or right handed operation.

### LIFT TUBE

The choice of standard, extended and high compaction tubes in 7 different diameters from 140mm up to 300mm

### HANDLE OPTIONS

Control handle with or without counter-balance weight and optional assisted release control are available

### CONTROL BODY

ONE standard control head rated for all capacities. Options for low headroom available

### CONTROL VALVE

Choice of 4 standard control valves

### SUCTION FOOT

Large range of interchangeable suction feet & end effectors available to enable the lifting of almost anything



PAGE09

The S-LINE features a full range of Control Valves, Control Handles and Suction Feet options designed to handle a wide variety of applications. All valves, handles and feet are interchangeable in minutes, extended and flexible handles are available with counterbalance weights for increased operator control and comfort. Low headroom compact handles where height is limited can also be specified.

Manufactured in mild steel or stainless steel, the S-LINE can be supplied to hygienic grade for use in clean room, food and pharmaceutical environments.

### **HANDLE OPTIONS**

**SLINE-CH-STD** Single side handle

Left or right handed options



### **CONTROL VALVE OPTIONS**

### SLINE-CV1

#### Stay put lever quadrant valve

Benefit to the operator:

- Ability to balance the load.
- Suitable for varying product weights



### SLINE-OVAL-STD **Oval shaped control** handle

Full 360° rotation for ease of use



SLINE-EX550-STD **Extended reach handle** 

550mm & 850mm options



### SLINE-FLEX550-STD

**Extended & flexible** reach handle

550mm or 850mm. Shown with optional counter balance



### SLINE-CV2

### Spring loaded lever cone valve

Benefit to the operator:

Release of valve returns the lift tube to the default position



### SLINE-CV3

Hygienic Stay put lever quadrant valve

Benefit to the operator:

- Ability to balance the load.
- Suitable for varying product weights



### SLINE-CV4

#### **Hygienic Spring loaded** lever cone valve

Benefit to the operator:

Release of valve returns the lift tube to the default position

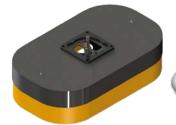


### SUCTION FEET OPTIONS - Large range of options available

### SLINE-400X240DV-STD

### Single sack foot

Available in multiple sizes and with spiked gripper options for hessian, jute and polywoven sacks



### **Fixed twin foot**

Available in multiple sizes with options for mild steel or hygienic stainless steel

### SLINE-320X200F-MS

### **Rectangle foot**

Available in multiple sizes as singles, doubles or quadruples to suit application

### SLINE-4X150BI-MS

### Inline bellows foot

Available in multiple sizes as in-line or H-Frame to suit application



SLINE-2x320x120F



# Lightweight single handed solutions that make repetitive heavy tasks easier for your operatives

The new Palamatic LITE uses a one handed operation and is ideal for fast, speedy operations utilising a trigger control valve design and control head adaptors that fit like a glove.

The spring loaded easy to operate trigger provides effortless control of the vacuum with one hand leaving the other hand free to perform other actions. Suitable for loads from 5kg (11lbs) to 30kg (66lbs) the ergonomic design can be specified with several configurable options including a variety of suction cups to lift and till products with maximum control and safety.

Manufactured in stainless steel the LITE can be supplied to a hygienic grade for use in clean room, food and pharmaceutical environments. The LITE system is also suitable for use with a number of Palamatic crane systems including Swing Jib, H-Style & Articulated Jib.

### LIFT TUBE

The choice of standard or extended tubes in either 100 or 120mm tube diameter

### CONTROL HANDLE

One handed operation trigger control with sensitivity adjustment. Can be used either left or right handed

### CONTROL ARM

Fixed or pivoting control arm for all capacities with optional 360° rotation below the trigger valve. Options for extended flexible control handles

### SUCTION FOOT

Wide variety of quick release feet available to enable the lifting of almost anything



The LITE features a range of Control Handle and Suction Feet options designed to handle a wide variety of applications. All feet are interchangeable in under a minute.

### **VACUUM PUMP OPTIONS**

### EVG840-3-50

Standard Vacuum Pump





Increased flow Vacuum

EVG888-3-50

VPDD52050

Vacuum Pump for Wide **Bodied Trigger assembly** 



### **CONTROL HANDLE OPTIONS**

### **LITE - TRIGGER**

### Wide bodied spring loaded trigger

Benefit to operator:

- Ability to balance the load
- Singlé handed operation

### LITE-FLEX700CBH

### Extended control handle with trigger operation

Benefit to operator:

- Ability to balance the load Extra height & reach
- Pivoting design ensures
- operator comfort



### SUCTION FEET OPTIONS - Large range of options available

Available in multiple sizes

### LITE-220X160V-STD

Single sack foot

### LITE-140x70DBA-STD

### Twin foot

Available in multiple sizes with options for mild steel or hygienic stainless steel

### LITE-320X80-STD

### **Rectangle foot**

Available in multiple sizes as singles, doubles or quadruples to suit application

### LITE-150B-STD

### **Bellows** foot

Available in multiple sizes and with single, double or quadruple feet styles







# Choosing the Right System

### We can help you find the right solution for your operational needs from off

the shelf systems to fully customised applications

Choosing the right system could not be any easier. For a free tailored budget quote simply give us a call or **click to complete our assessment form online**. We can then help determine whether we have a stock system available that suits your requirements or if you require a bespoke solution.



### **OR CONTACT US BY PHONE/EMAIL:**

- +44 (0)1246 452 054
- 🗙 sales@palamatic.com

# Design & Solution Service

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Creative and intelligent design solutions for your lifting & handling problems are what we excel at

For 30 years Palamatic has been at the leading edge of innovation and design in the lifting and handling industry. Our design philosophy is born out of the desire to continually improve, innovate and invent. The success of our products means they are often imitated but never bettered.

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The secret to our success starts in our state of the art design studio where our talented design engineers have access to all the latest 3D hardware and software. The design philosophy is the same whether they are working on our own core products or your bespoke lifting and handling solution.

Whether you require a unique or off the shelf solution our engineers and designers work with you and your project teams. Ensuring that your operational requirements, project deadlines and financial budgets are met. As experts in health & safety legislation and ATEX regulations you can also rest assured that our solutions are fully compliant, your legal obligations are met and your product and workforce will be protected.

With our own on site fabrication and manufacturing teams we can effectively control the full process from initial design conception right through to final manufacture and delivery. With a dedicated installation team we can ensure your project runs smoothly right up to the point of handover and even further with our exceptional skilled Service Technicians

Over the years we have assisted many organisations in achieving their project goals in an efficient, organised and innovative way to help them deliver world class products and services. Some of the organisations we have collaborated with are:

- Arla Foods
- Aston Martin
- B&W Bowers & Wilkins
- Costa Coffee
- Cotswold
- GEC General Electric GSK GlaxoSmithKlien
- Merck









Next

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- Pfizer
- Premdor
- Premier Foods
- Rolls Royce Shell Oil
- Statoil

ROLLS



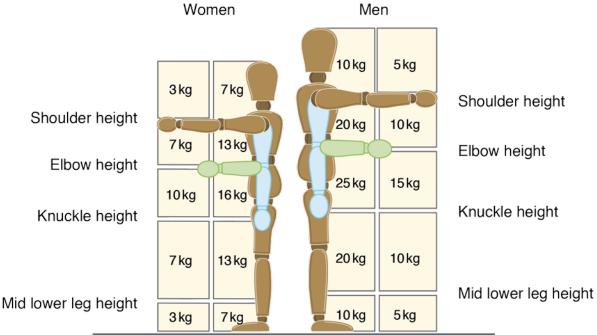
# Health & Safety Comes First

## Protecting your workforce from injury and helping you comply with Health & Safety legislation is our priority

The Manual Handling Operations Regulations 1992, as amended in 2002 apply to a wide range of manual handling activities, including lifting and moving of objects.

The Health & Safety Executive (HSE) estimated 909,000 working days were lost in 2013/14 due to handling injuries just in the UK alone;

- 6.6 days were lost for each handling injury
- 24% of all reported injuries are handling related
- 8% of major/specified and 25% of over-7-day injuries to employees involved handling
- Over-7-day injuries accounted for more than nine in ten of the total (18,354)
- An estimated 54,000 reportable handling injuries resulted in more than three days' absence from work this was a rate of 190 per 100,000 workers (Labour Force Survey 2014)



### LIFTING AND LOWERING GUIDELINES AS PUBLISHED BY THE HSE ARE:

### **TWISTING**

Reduce the guideline weights if the handler twists to the side during the operation. As a rough guide, reduce them by 10% if the handler twists beyond 45°, and by 20% if the handler twists beyond 90°.

### FREQUENT LIFTING AND LOWERING

The guideline weights are for infrequent operations – up to about 30 operations per hour – where the pace of work is not forced, adequate pauses to rest or use different muscles are possible, and the load is not supported by the handler for any length of time. Reduce the weights if the operation is repeated more often. As a rough guide, reduce the weights by 30% if the operation is repeated once or twice a minute, by 50% if it is repeated 5–8 times a minute, and by 80% where it is repeated more than 12 times a minute.

### THE PALAMATIC SOLUTION

All our vacuum tube lifters are designed to exceed the HSE guidelines and reduce operator effort and fatigue which reduces the chance of manual handling injuries and repetitive strain injuries of the arms, hands and wrists.

\*Contains public sector information licensed under the Open Government Licence v3.0.

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# Hazardous Environments

# Palamatic can configure applications for hazardous environments that require ATEX certification

Explosive atmospheres can be caused by flammable gases, mists or vapours or by combustible dusts. If there is enough of the substance mixed with air, then all it needs is a source of ignition to cause an explosion.

Explosions can cause loss of life and serious injuries as well as significant damage. Preventing releases of dangerous substances, which can create explosive atmospheres, and preventing sources of ignition are two widely used ways of reducing the risk. Using the correct equipment can help greatly in this.

Palamatic understand the specific process requirements when working in hazardous environments. We can build and install a full turn-key system or work with your system integrators to ensure compliance in ATEX zones 1/21 and 2/22 is met. Not only are we fully experienced in Directive 99/92/ EC (ATEX 137) and Directive 94/9/EC (ATEX 95) but we are also able to supply equipment to meet the requirements of ICEX standards with National Deviations so can provide a solution wherever you are worldwide.

We can configure Vacuum tube lifters to operate in specialised environments where ATEX and International standard recommendations must be considered. Fully compliant, safe and robust components are used to meet regulations, such as;

- Air operated vacuum generators
- Earth bonding
- Non-sparking crane trolleys

For further information on how we can help with your ATEX installation please contact one of our Technical Consultants, Worldwide Distributors or **click here to complete an online ATEX questionnaire**.



## SWING JIB

Our standard installation and ideal for close proximity lifting up to 350kg (772lbs). Can be post, wall or ceiling mounted

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# CRANE SYSTEMS

CRANE OPERATIONS
 SWING JIB
 H-STYLE
 ARTICULATED JIB

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Materials Handling

# Crane Operations

## Palamatic supply a complete range of overhead support systems individually rated for use with vacuum lifting units

Optimised positioning of the supporting gantry or crane can be a crucial factor in the successful implementation of a new, suspended load handling system. Transportation of the load must be ergonomically managed to prevent unnecessary strains or physical stress on the operator.

Palamatic designs the lifting aid to the task and the crane system to the process environment, with the occupational health of the operator always at the forefront of considerations. Ergonomically, the lifting aid is only as good as the gantry from which it is suspended.

Palamatic gantries are manufactured in mild steel as standard and are available in optional hygienic stainless steel. This design minimises internal cavities and flat surfaces to prevent product build-up and facilitate clean down.

### SITE SURVEY

We can carry out a thorough site survey and inspection to advise on which crane system is best for your lifting and handling requirements or which system is most suitable for the environment in which it is being installed.



### SWING JIB

Ideal for close proximity lifting, palletising, de-palletising and machine loading up to 350kg (772lb)



### H-STYLE

Suitable where products need moving over a greater distance. Multiple lifters can be installed on one H-Style system



Provide access in confined or restrictive spaces

# Swing Jib

### Swing Jib Gantry systems are ideal for coverage of a production area

### where one process is taking place

The lifting system runs up and down the swing arm which moves side to side giving 270° coverage and up to 350kg working load.

The swing jib is most commonly supported from a centre post support pillar, but can also be hung from existing steelwork, wall mounted, ceiling mounted or as a mobile base option.

Where headroom is an issue, an inverted or articulated jib can be offered which can also offer 180°/360° coverage.

The Palamatic Swing Jib is available in heavy duty mild steel, hygienic stainless steel or lightweight carbon fibre and the vacuum pump tray can be positioned to suit your requirements.

### **MILD STEEL**

Our standard mild steel jibs and posts are finished with a durable maintenance free powder coat and can be specified to support up to 350kg

### **STAINLESS STEEL**

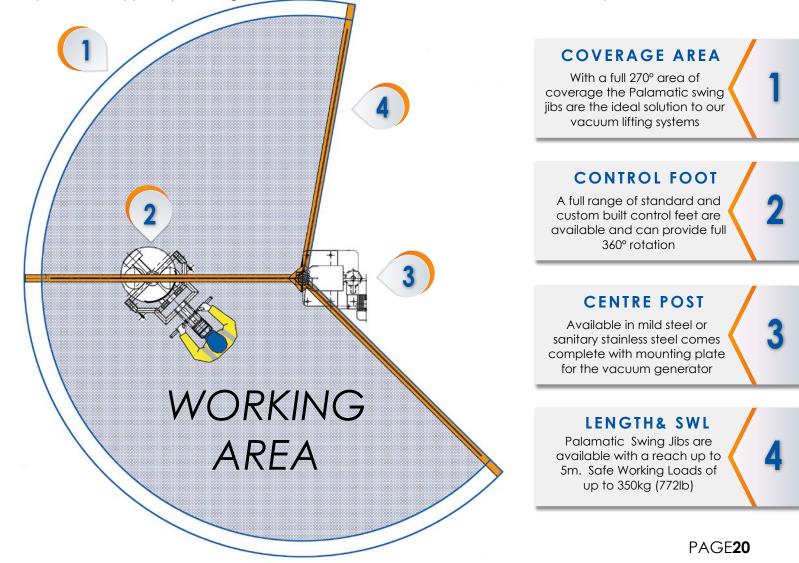
For hygienic, pharmaceutical and ATEX applications the swing jibs and posts are available in stainless steel.

Materials of construction are generally \$\$304 with an overall external finish - \$\$304 180 grit (0.8Ra).

### **CARBON FIBRE**

The Carbon Fibre Jib arm is extremely lightweight and provides a weight reduction of over 50% when compared to mild steel systems with a net weight of just 1.7kg per meter.

The complete swing jib weighs less than 10kg (22lb) and can handle loads up to 100kg (220lb), with drastically reduced weight the handling and positioning of loads becomes easier, faster and more ergonomic for the operator. This versatile Carbon Fibre Jib arm can be mounted on existing posts, wall mounted, ceiling mounted or as a mobile base option.



# H-Style

### H-Style gantry systems can be used to cover large working areas

Supported from either floor mounted support pillars or existing structural steel work.

Light weight aluminium overhead rail gantry can be offered for easier movement of the lifting system around the area.

### **MILD STEEL HEAVY DUTY**

The standard material of construction for a Palamatic H-Style frame is mild steel. Suitable for light to heavy operations the mild steel systems are hard wearing and require very little maintenance.

### LOAD CAPACITIES

50 to 350 kg (110 to 772lb) Reach or span is dependent on payload weight and the distance(s) between your structural supports.

#### **FINISH OPTIONS FOR SUPPORT POSTS & HANGERS**

Mild steel with durable Palamatic Orange powder coated finish. Other colours and finishes or stainless steel available on request.





### 1: The Palamatic Advantage

- Single operator usage
- Increased throughput
- Workforce and product protection
- Operational cost reduction
- Increased productivity and profitability

#### 2: The Manual Handling Disadvantage

- Workforce fatigue and injuries
- Reduced throughput
- Risk of damage to product

### 1: Process Flow Improvement

- Effortless transfer of product
- Mulitple systems on one gantry
- Designed, manufactured and installed by Palamatic to your requirements

### 2: Pallet Inspection Example

- Pallets can be picked up, transported and inpected, safely and quickly reducing line downtime
- Reduction in pallet damage

# PalTrac™

Palamatic PalTrac<sup>™</sup> stainless steel jib, bridge and monorail cranes are designed specifically with hygienic and clean room environments in mind. The unique 'diamond' profile reduces hang-up points for airborne dust particles and makes wipe down and wash down easier than flanged or tunnel track rail systems.

PalTrac<sup>™</sup> has a closed track design of stainless steel square tubing with externally running trolleys. There is no risk of paint chipping associated with conventional mild steel, open flange, I-beam or tunnel track systems. Trolleys and end truck wheels are manufactured of FDA approved material. White acetyl co-polymer is standard for all trolley wheels, with all stainless steel structural and fastening components.

### LOAD CAPACITIES

50 to 160 kg (110 to 350lb) Reach or span is dependent on payload weight and the distance(s) between your structural supports.

#### **FINISH OPTIONS**

304 to 316L stainless steel available with a range of polish finishes.

# Articulated Jib

## The articulated jib or knuckle type is used where the space and height is at a premium

All articulated arm jibs can be suspended from vertical steel columns or from existing stanchions. In some cases these can also be fitted to a building wall and offered as a mobile version.

The advantage over the standard swing jib is that they provide a greater reach and movement and have the ability to operate within areas where either space or headroom is restricted. The smaller installation and operational footprint along with its ease of use make it the ideal choice.

All Palamatic Articulated Jibs are manufactured in house to suit the requirements of your facility. The standard heavy duty mild steel jib arms are finished in a durable powder coat and can be specified to NORSOK standards if required. Safe working loads of up to 250kg (551lb) and a reach of up to 4m are achievable.

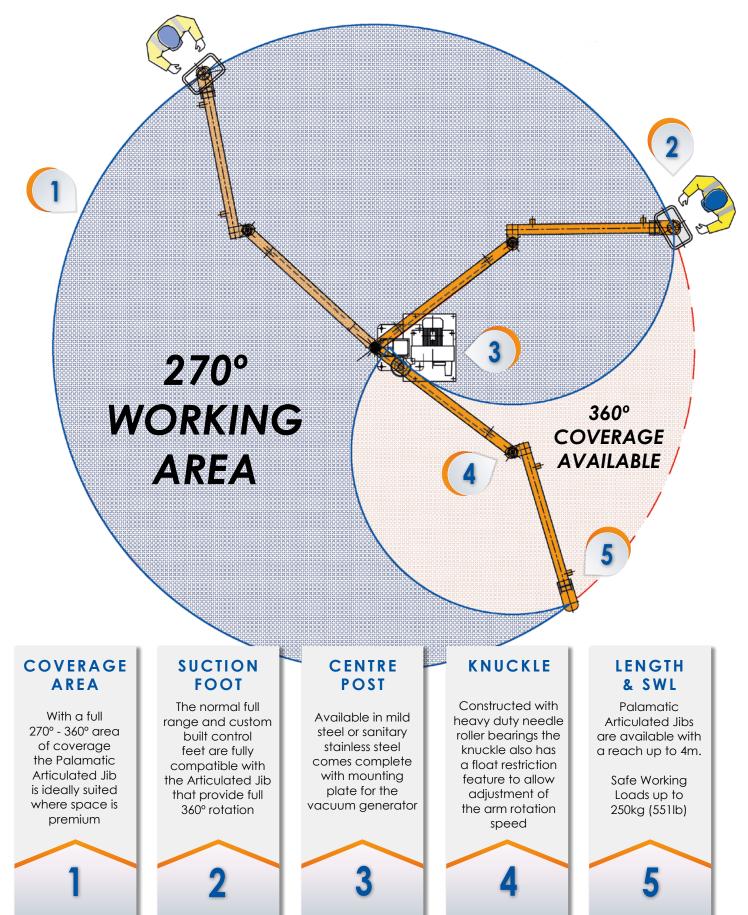
Sanitary systems in stainless steel can be offered for use in environments where food, dairy or pharmaceutical product are being handled including containment booths or for ATEX controlled areas such as in the oil and gas industry.

Materials of construction for the stainless steel jibs are generally SS304 with an overall external finish - ss304 180 grit (0.8Ra)



### **IDEAL FOR**

- Process operations that require a greater working area reach
- Facilities where either space or headroom is at a premium
- Movement of bags, boards, boxes, drums, and sacks in process and dispatch areas.
- Lifting products up to 250kg (551lb)



### **BOARD LIFTER**

Malla

272.5

A vacuum and manually adjustable clamp system designed for the loading and unloading of doors onto a CNC bed by a single operator.

# INDUSTRY SOLUTIONS

- 27 CHEMICAL, OIL & GAS
- 29 CGMP, CLEAN PROCESS & NUCLEAR
- 31 FOOD & DRINK
- 32 LOGISTICS
- 33 PRINT & PACKAGING
- 34 WOODWORKING
- 35 OTHER INDUSTRIES
- 37 PNEUMATIC LIFTING SOLUTIONS
- 38 MANIPULATORS
- 39 HIGH CAPACITY SOLUTIONS
- 40 MECHANICAL GRIPPERS / LAYER PICKERS

# Chemical, Oil & Gas

### High quality solutions for the most demanding environments



Vacuum lifters, Drum Tip & Pour machines and Automatic Sack Openers are the perfect solution when sacks, boxes and drums have to be handled for processing and production within the nuclear, chemical and offshore industry.

Most commonly Palamatic can install vacuum lifters in restricted areas on rigs with low headroom. Sacks are generally plastic or paper and being loaded in to a sack opening station either manual or automatic for Mud mix operations.

In the chemical industry 2001 oil drums are also handled with ease. Class 1 Div.1/Ex/ATEX compliant systems are also available with a wide range of gantry crane options.

By taking away the stresses and strains of everyday lifting and transporting of loads in the workplace, Palamatic's engineered handling solutions have been able to help thousands of companies solve their manual handling problems worldwide.

- Making work safer, physically easier & more efficient
- Lifting, lowering, swivelling, transporting loads faster, more ergonomically and more safely
- Lift, move and manipulate heavy, awkward loads
- Invest in the good health of your operators
- Relieves stress on spine and joints
- Protect your valuable product



PalPharmaVac<sup>™</sup> - cGMP LIFTING SYSTEMS Ideal for: Transfer of material into and out of application specific containment machines. Handling of active or highly potent compounds where operator protection is an important consideration.

Lifting limit: Up to 120kg (265lb)

#### Features: Single operator Hygenic for clean process areas



PalPharmaBlend<sup>™</sup> - FIXED/MOBILE BLENDING SYSTEMS Ideal for: Recipe management and GAMP requirements all available if the process requires

### Capacity limit:

5L up to 2500L (1.3 up to 660gal)

#### Features:

1-25rpm Pneumatic counter or full PLC controlled with inbuilt NIR spectroscopy



Drum Tip & Pour<sup>™</sup> - DRUM LIFTING/ROTATING SYSTEMS Ideal for: Handling of metal or plastic drums, the Drum Tip and Pour can be configured to ATEX standards and/or confined spaces.

Lifting limit: Up to 300kg (661lb)

### Features:

Single operator Fail safe system in event or air or power failure



RotaSlit<sup>™</sup> - HIGH EFFICIENCY SACK OPENING Ideal for: Offshore mud mix rooms and hazardous environments and where material is of an explosive nature

#### Throughput:

Up to 15 sacks per minute (25-80kg/55-176lb sacks)

#### Features:

Compactor outlet for sack waste ATEX, IECEx or compliant, Class/DIV system can be fitted with explosion relief panels, flameless vent or explosion suppression equipment



# cGMP, Clean Process & Nuclear

### Creative and intelligent design solutions for your cGMP process

### are what we excel at



Our pharmaceutical division, PalPharma Handling Solutions, are experts in GMP PMaterials Handling Problem Solving for cGMP, Food, Pharmaceutical, Infant food formula processing, Nutraceutical and Bio-pharmaceutical Process Areas.

Our design philosophy is born out of the desire to continually improve, innovate and invent. The success of our products means they are often imitated but never bettered.

Manufacturing expertise extends from primary process chemical environments through secondary formulation and tabletting, packaging and warehousing of chemical and pharmaceutical products.

When you require a unique solution our engineers and designers work with you and your project teams to ensure that your operational requirements, project deadlines and financial budgets are met.

As experts in all levels of containment you can also rest assured that our solutions are fully compliant for very high potent & dangerous compounds (APIs), your legal obligations are met and your product and workforce will be protected.

#### PalPharmaTip<sup>™</sup> - FIXED/MOBILE DRUM TIPPERS

Ideal for: Containment areas, feeding powders and liquids from one part of the process to the next

Lifting limit: Up to 150kg (330lb)

#### Features:

180° Rotation Manual or automated control



Please contact us for further information about our unique solutions for:

- Process Vessels
- Containment Booths and Isolators
- Blending and Mixing
- Formulation and Tabletting Areas
- Lifting and Handling
- Palletising and Transporting
- Storage and Transfer
- Warehousing and Despatch Areas

#### PalPharmaMove<sup>™</sup> - FIXED/MOBILE LIFTING SYSTEMS

Ideal for: Discharging, docking, feeding, tipping and blending of product in drums/ IBC's

Lifting limit: Up to 2000kg (4400lb)

Materials of construction: High specification stainless steel 304 or 316

#### Features:

Strokes up to 12000m Lateral reach up to: 2000mm



### PalPharmaAssist<sup>™</sup> - STAINLESS STEEL MANIPULATORS

Ideal for: Handling and rotating, drums, bottles, and reels from pallets to and from process

Lifting limit: Up to 350kg (772lb)

### Materials of construction:

High specification stainless steel 304 or 316

### Features:

Floor or Ceiling mounted Suitable for use within classified or zoned areas



PalPharmaBlend<sup>™</sup> - FIXED/MOBILE BLENDING SYSTEMS Ideal for: Rotating and blending containers, drums and bins

### Lifting limit:

5L up to 2500L (1.3 up to 528gal)

#### Features:

360° Rotation 1rpm - 25rpm Pneumatic counter or full PLC controlled Recipe management and GAMP if required



PalPharmaMassage<sup>™</sup> - DRUM CONDITIONING SYSTEMS Ideal for: Process infeed or tipping of powdered or granular product in drums which has hardened or settled in storage and transit

Capacity limit: Up to 300kg (660lb)

### Features:

Suitable for fibre and plastic drums Mobile product conditioning solution or a turn key fully contained drum discharge solution with PLC control



### PalPharmaBin<sup>™</sup>- IN-PROCESS STORAGE & TRANSPORT CONTAINER

Ideal for: Storage and transportation in process

Lifting limit: Up to 2500kg (5510lb)

Materials of construction: SS304 up to Hastelloy C22 containers

#### Features:

Standard and bespoke designs in all shapes and sizes Inlet and outlet valves as per process requirement



# Food & Drink

### Engineered solutions for food, drink and clean process environments

Sacks play a central role in the distribution of materials worldwide in the food and drink industry.

As a packaging system sacks meet most basic logistic requirements. They portion, protect, transport, store and sell the product they hold. To keep the product and the sack undamaged and ready for processing careful handling is required. The Palamatic range of vacuum lifters and sack openers can be configured for all sack lifting requirements including areas where sanitary hygiene is a priority.

Other foodstuffs including cheese and frozen meat packs can be safely handled using a Palamatic vacuum tube lifter. For other vessels including boxes, kegs and drums Palamatic has off-the-shelf solutions that are tailored to bakeries, dairy companies, breweries, distilleries and soft drink manufacturers.

### **SACK & BAG VACUUM TUBE LIFTERS**

Suitable for plastic & paper sacks. Spiked Gripper foot options available for hessian, polywoven and burlap sacks. Extended handles are also for longer reach along with full cGMP sanitary options.



### **AUTOMATIC SACK OPENING MACHINES**

A full range of machines to provide fully automated or semi automated sack opening, discharging and waste sack disposal at rates of between 2-12 sacks per minute. Designed with quickly removable and easy clean internal parts the issue of cross contamination of product is fully controlled between batches.



### **KEG LIFTERS**

Fast process flow for the brewery industry can be achieved with vacuum lifters. Hook lift options available.

### CHEESE HANDLING SYSTEMS

Hygienic and simple to operate for shrink wrapped chilled cheese blocks up to 25kg (55lb).



Bespoke solutions for packing and distribution areas where multiple products need to be lifted with ease.





# Logistics

From warehouse operations to distribution channels, Palamatic has a solution that saves time and protects your product



One of the biggest costs to manufacturers, retailers and suppliers is distribution, Palamatic engineer solutions to manual handling problems within the logistics and warehouse distribution sector.

Our range of vacuum lifters can handle most products that are arriving or due to be dispatched from your facility. From simple de palletising and product stacking to the fast and safe loading and unloading of commercial vehicles, Palamatic has or can tailor a solution for that meets your logistics requirements.

Palamatic vacuum lifters can cut down the time taken to load and off load commercial vehicles. Our simple to use lifters can be used by just one operator with speed and efficiency, operators are less likely to suffer fatigue, injury or repetitive strain as a result of moving heavy objects.

With a full range of pallet lifters and inspectors we have a warehouse/logistics solution for you.

### **APPLICATIONS INCLUDE**

- Loading and unloading of palletised products
- Materials handled include boxes, boards, tyres, reels, TV's, & white goods
- Low headroom systems
- High stacking capability
- Vehicle loading and unloading
- Pallet stacking/inspecting

### OUR EQUIPMENT RANGE INCLUDES

- Vacuum Lifters for box lifting
- Vacuum Lifters for rotating product horizontally & vertically
- Vacuum Lifters for shrink wrapped products
- Vacuum Lifters for high stacking
- Range of Gantry systems to cover your production
  area
- Telescopic container loading/unloading systems
- Pallet Inspectors



# Printing & Packaging

## Palamatic's range of print & packaging solutions offer weightless operation and increased process speed

Palamatic design and manufacture various solutions for the printing & packaging sector.

Print bundles and reels have their own unique handling requirements. The Palamatic range of solutions make it easy for a single operator to perform precise and heavy tasks with ease and safety.

For reels, specially designed pneumatic grippers secure the reel in its inner core. Once raised, the reel is rotated pneumatically through 90° to allow machine loading to take place. Operator friendly controls are conveniently mounted in one location for ease of use. Reels of packaging material can be picked, lifted and rotated using a Palamatic vacuum tube lifter.

Print bundles can be picked from the machine, where they may stand on a slight angle, moved over to an adjacent pallet and stacked in any orientation.

### **APPLICATIONS INCLUDE**

- Loading and unloading print machines, laminators, cutters and pallets
- Materials handled include print blocks, reels, boxes and shrink wrapped products,

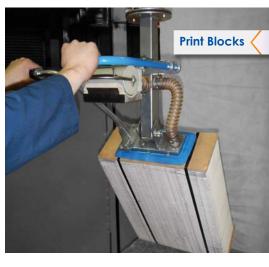
### OUR EQUIPMENT RANGE INCLUDES SOLUTIONS FOR

- Print blocks
- Rotating blocks and reels
- Lifting boxes and shrink wrapped packaging
- High stacking
- Range of Gantry systems to cover your production
  area











# Woodworking

## Palamatic are the leading supplier of Vacuum Tube Lifting Systems to the Woodworking industry



Palamatic has provided many solutions to manual handling problems within the woodworking industry. The Palamatic vacuum tube lifting systems are safe, durable and effective tools to take the weight up to 350kg and stress out of manual handling tasks. Vacuum lifter can be used as a lift assist for workers performing repetitive tasks such as re-stacking and machine loading. These manual handling tasks can include board lifting, 180° board turning and 90° manual panel turning (ideal for vertical panel saw loading).

Common panel handling problems relate to the awkward nature of the payload - particularly so for CNC, Router, Edge Bander and Beam Saw loading operations. Palamatic's board, panel, door and furniture lifting systems take the strain away from the operator, replace it with a user friendly vacuum powered lift assister and protect your product from accidental damage.



### **APPLICATIONS INCLUDE**

- Loading and unloading vertical panel saws, beam saws, dimension saws, flat bed CNC stations edgebanders and laminators
- Materials handled include MDF, MFC, chipboard, wood, plywood, sterling board, plaster board and polycarbonate
- Handling boards, doors, furniture, staircases, planks, timber sections, laminate surfaces and cabinets

### **OUR EQUIPMENT RANGE INCLUDES SOLUTIONS FOR**

- Top board lifting
- Rotating boards horizontally & vertically
- Lifting boards with cut outs
- High stacking
- Range of Gantry systems to cover your production
  area



# Other Industries

## Palamatic Materials Handling Solutions can be found in over 200 industries from Automotive to White goods

The pace of technology and development of materials means our customers are often faced with having to handle recently developed products or components.

To help ensure our customers have the right lifting or handling equipment we continually test our products and design the most suitable end effectors, gripper or entire system to suit your application.

### AUTOMOTIVE

Having 30 years experience in the Automotive Industry with Tier 1, 2 and 3 suppliers, Palamatic is in the driving seat to solve lifting applications of all types.

We have solved the lifting requirements of Automotive Companies to lift products, line side and sequencing, such as:-

- Instrument Panels
- Fuel Tanks
- Body Panels
- Wheels and Tyres
- Sub-frames
- Seats (front and rear)
- Engine Parts and Turbo Chargers

### ELECTRICAL

Cable rolls can be handled with a pneumatic lifter.





### GLASS

The lifting and handling of glass takes great care, Palamatics's range of glass solutions ensures your products is protected from accidental damage.



#### MANUFACTURING

The lifting and handling of heavy tote bins can be strenuous and tiring. Palamatic's Tote Bin solution ensures your product is looked after with the care it deserves.

#### REFRACTORY

Heavy and awkward refractory products can be lifted and moved by just one operator with safety and ease.



#### PALLETS

Vacuum lifters make light work when loading and unloading pallets.



WHITE GOODS Palamatic Vacuum Lifting systems have handled everything from boilers to washing machines.



# **Pneumatic Lifting Solutions**

#### Materials handling solutions designed around you and your unique products

Palamatic offers a wide variety of pneumatic lifting and industrial manipulators to solve handling problems in any industrial business sector. We focus on ergonomic design and manufacture, combined with tailor made tooling heads, built to handle our client's product with the care it demands.

Palamatic Pneulift<sup>™</sup> units enable the safe, ergonomic and efficient handling of many varied products up to a maximum weight of 650Kg (1320lbs). Palamatic industrial Pneulift<sup>™</sup> is custom-built to integrate into our clients working environments, improving productivity and at the same time allowing customers to meet the standards required most handling legislation or guidelines regarding manual movement of loads.







### Manipulators

# From assembly operations to production lines, Palamatic has a solution that saves time, offers precision positioning and protects your product

Palamatic industrial manipulators are custom-built to integrate into our clients working environments. In many case the Manipulators also interact with other machinery, improving productivity and at the same time allowing customers to meet the standards required by most handling legislation or guidelines regarding manual movement of loads.

Palamatic manipulators are also suitable for handling off-set or cantilevered loads.



**Automotive Production Line** 



# **High Capacity Solutions**

#### For larger handling requirements up to 50,000kg (110,000lb)

Handling tasks involving large scale, heavy, moving, pivoting and turning product can be realised with cable lifting units. This applies for the most varied work-pieces, smooth or rough surfaces and different transportation tasks.

The Heavy-Lift range of lifting units all meet the latest safety requirements as specified in EN13155 and are suitable for all heavy industries including:

- Aerospace
- Automotive
- **Building & Construction**
- Glass
- Heavy Industry
- Sheet Metal
- Solar
- Wind
- Wood

#### 200/4R-90°

Used here to handle and swivel wall frames and roof elements for the assembling of caravans.



#### 12000/12L-SK1

Transportation of rotor blades for wind energy plants.



#### 350/6R

50000/55L

Loading of up to 350kg (772lb) metal sheets in to a laser cutting machine only takes one operator.



4000/4L

4000kg (8818lb)



Load bearing capacity up to

#### Indoor and outdoor systems up to 50,000kg (110,230lb) for heavy industry.



# Mechanical Grippers

#### Materials Handling Problem Solving

Mechanical grippers are used in many industries and are designed to provide easy single operator handling of heavy and awkward items from boards, boxes and panels to drum, reels and white goods.





### Layer Pickers

#### Single and multi layer picking solutions



Layer Pickers are a simple cost-effective solution to handle single or multiple layers. Distribution and warehouse facilities can benefit from an increase in throughput speed and a reduction in labour costs.

Palamatic Layer Pickers reduce product damage associated with manual handling accidents and can be configured to pick up virtually any packaged or unpackaged items.



# LOOKING AFTER YOU

CUSTOMER SUPPORT 42 WORLDWIDE DISTRIBUTORS 45

INSTALLATION

customer

TROUBLESHOOTING

### **Customer Support**

#### We pride ourselves on our unrivalled customer support

#### and after-sales care

#### **ON-SITE CONSULTATION**

If you have a particular requirement or are new to materials handling equipment then our time served engineers can perform site surveys.

We can make recommendations on the best type of equipment for your process requirements, positioning of equipment, mounting options, power and health & safety requirements of the site.

#### **TEST & DEMO**

The purchase of a new materials handling system is an important investment decision! It requires a comprehensive evaluation.

Your investment risk can be minimised through demonstrations of our equipment or trial installations and FAT approval of your projects using Palamatic's test facilities worldwide.

#### SITE SURVEY

To ascertain the best possible materials handling solution, we can carry out a site survey of your operation, after which we put forward an unbiased recommendation in the form of a detailed specification.

We are also happy to receive any drawings of the existing floor plan that can aid the process of assessing your requirements.







#### **INSTALLATION**

Correct installation is just as important as the specifications and capabilities of the equipment itself. Get it wrong and the machine provided might not be as user friendly, equipment could be damaged or health & safety may be compromised.

Our installation engineers and our system integrator partners have training and experience specifically on installing and maintaining Palamatic Materials Handling products.



#### COMMISSIONING

We know that some customers already sub-contract the installation and maintenance of their new equipment but by hiring us to commission your installation means you can be certain of the highest levels of experience in materials handling systems.

Our engineers can ensure your equipment is set up correctly, fully operational, compliant with legislation and completed within your project time scales.



#### **TRAINING**

Having the correct operational knowledge of our equipment is essential for your employees. We offer training for both your operatives and your maintenance team.

Designed for those who either have no experience of our materials handling equipment, or for those wanting to have refresher training we use a "Handson" approach supported with course handouts which are used to reinforce the concepts covered by the instructors.

Training sessions are tailored to your own specific requirements and can be held on your site or at our factory based training centre.



#### **SAFETY INSPECTIONS**

We perform post-installation inspections on new projects or can perform annual inspections on all existing Palamatic equipment.

Our team of safety engineers can inspect your installation to ensure compliance with current legislation including SWL tests that are required for insurance and LOLER certification to give you the reassurance that your equipment is safe to use in today's demanding environments.



#### **FULL PREVENTATIVE MAINTENANCE**

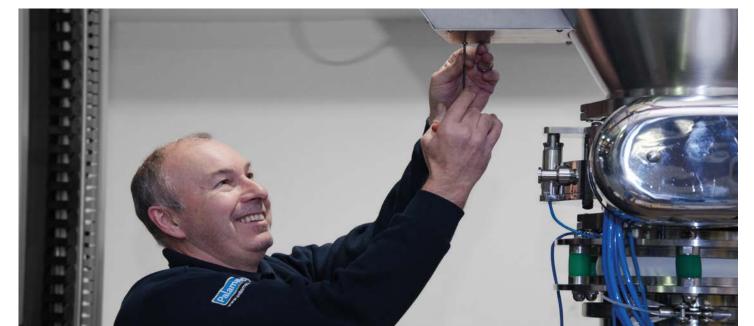
The regular maintenance of equipment is essential to ensuring the continuous high performance of your facility, and to achieving continuous production without expensive downtime.

Palamatic Service Engineers offer a full preventative maintenance service which can be performed on your site. The service covers a wide range of equipment and comprises:

- A Preventative Maintenance Service undertaken at regular intervals (as agreed necessary on your equipment).
- A full check of the equipment to review its operation.
- Re-Calibration of the equipment (where necessary) to record its current performance.

- Certificate of conformity checks.
- Adjustments and Repairs to ensure the equipment is in good working order, and performing to the correct tolerances, or within the customers' specifications.

Palamatic will be happy to quote you for a Preventative Maintenance or for a full Annual Service Contract on any items of your new or existing equipment.



#### **UPGRADES & REFURBISHMENTS**

Existing systems can often be upgraded to improve performance at a fraction of the cost of a new system, taking advantage of new technological advances in areas such as control handles, vacuum pumps and suction feet.

Palamatic Materials Handling offers a range of Upgrade options to help you get the best from your system, from simple upgrades to complete refurbishment of your vacuum lifting system.

Full mechanical refurbishment can either be carried out on-site or by returning your equipment to the Palamatic factory. When the unit returns to service, enhanced performance is guaranteed and backed up by an extended warranty.

Refurbishment and upgrades can be carried out on most Palamatic Materials Handling equipment.

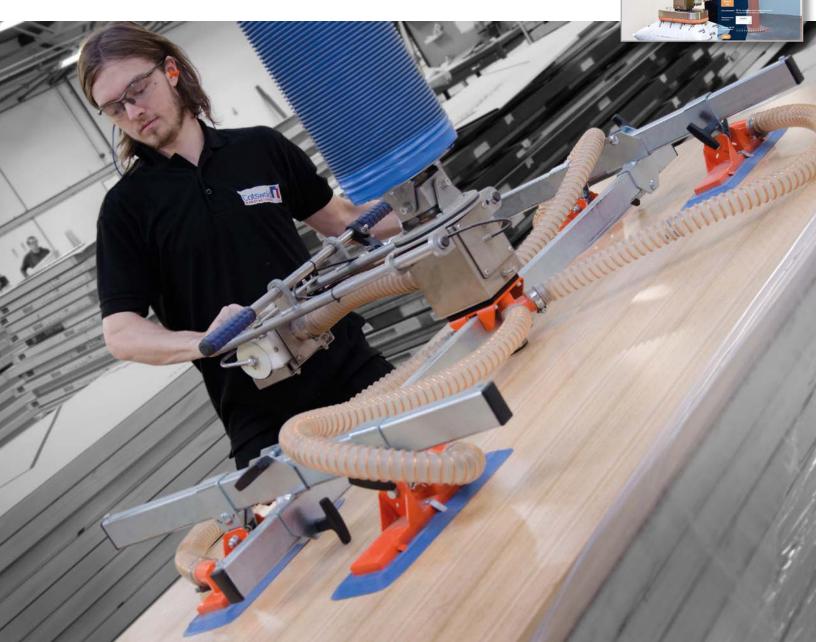
Many of the units we refurbish are 10 or more years old so customers often take this opportunity to have them all upgraded at the same time. By updating to today's standards you gain:

- Improved process performance
- Operating expenditure savings
- Extended asset life
- Minimised operation downtime due to maintenance

To find out more about how we can upgrade or refurbish your existing equipment to meet today's faster production requirements simply give one of our friendly Technical Customer Support staff a call, drop them an email or fill in an enquiry form online.

ENQUIRE ONLINE: Click here >

- +44 (0)1246 452 054
- 🔀 sales@palamatic.com



# WORLDWDE DISTRIBUTORS NETWORK

### Rapid response, local support

Wherever you are located we have a sales and distributor team located near you. Our authorised distributors can help with consultation on any of our manual handling systems.

Product inventory is stored in strategic places around the world to maintain quick deliveries for our international customers.

Test plants are also available in most locations for product testing and evaluation. Local support is a key factor for companies who choose Palamatic Materials Handling.

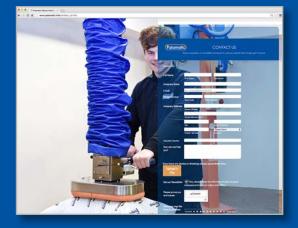
With on-site consultation, site surveys and worldwide servicing you can be assured that your investment in our manual handling solutions is looked after.

Please contact us for your nearest authorised distributor or service centre:

+44 (0)1246 452 054

➤ sales@palamatic.com

Click to enquire online >



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# Asia, Australia & the Middle East

Please contact sales@palamatic.com for your nearest authorised distributor



Palamatic manufactures lifting and handling solutions for all general industries including Woodworking, Chemicals, Food, Packaging, Refractory, White Goods, Printing and Logistics.

Our tailored and off the shelf solutions save you time, increase your productivity, protect your product and help prevent injury to your workforce.

### Contact Us

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Formers

Far

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