



**Life Sciences**  
**Materials Handling**  
**Solutions**



Part of the  SCHMALZ Group

## Palamatic Vacuum Lifters for Hygienic Applications

PalPharma is an established force in the pharmaceutical, BioPharma, healthcare, medical, fine chemicals, cosmetics and nuclear industries. We design and manufacture handling equipment to solve materials handling problems for companies all over the world.

As leaders in material handling solutions, we here at Palamatic take immense pride in our series of professional quality Hygienic Vacuum Lifters which we design, manufacture, and supply to over 50 countries worldwide. Having worked with a plethora of industries and sectors internationally, Palamatic is your trusted partner for hygienic lifting solutions

## Why Trust Palamatic For Quality Material Handling Equipment?

Rely on Palamatic for top-tier material handling equipment and an unwavering commitment to quality and innovation. With a track record of delivering exceptional solutions, we stand out as a trusted provider in the industry.

 **Est. in 1985**  
Over 35 Years in Business

 **10,000+**  
Projects Completed

 **50+ Countries**  
Operating Worldwide

## A Tried and Tested Hygienic Health and Safety Solution

With more than 3 decades of expertise and experience in developing bespoke material handling solutions and over 10,000 completed projects, we recognise the importance of correct, efficient, and compliant material handling processes, particularly in sensitive or volatile environments. Our Hygienic Vacuum Lifters help to take the strain off operators, promote the efficient flow of materials, and ensure that hazardous or sensitive materials aren't contaminated or exposed to your workforce.



**Inline Vacuum Lifters**



**Fully GMP Vacuum Lifters**

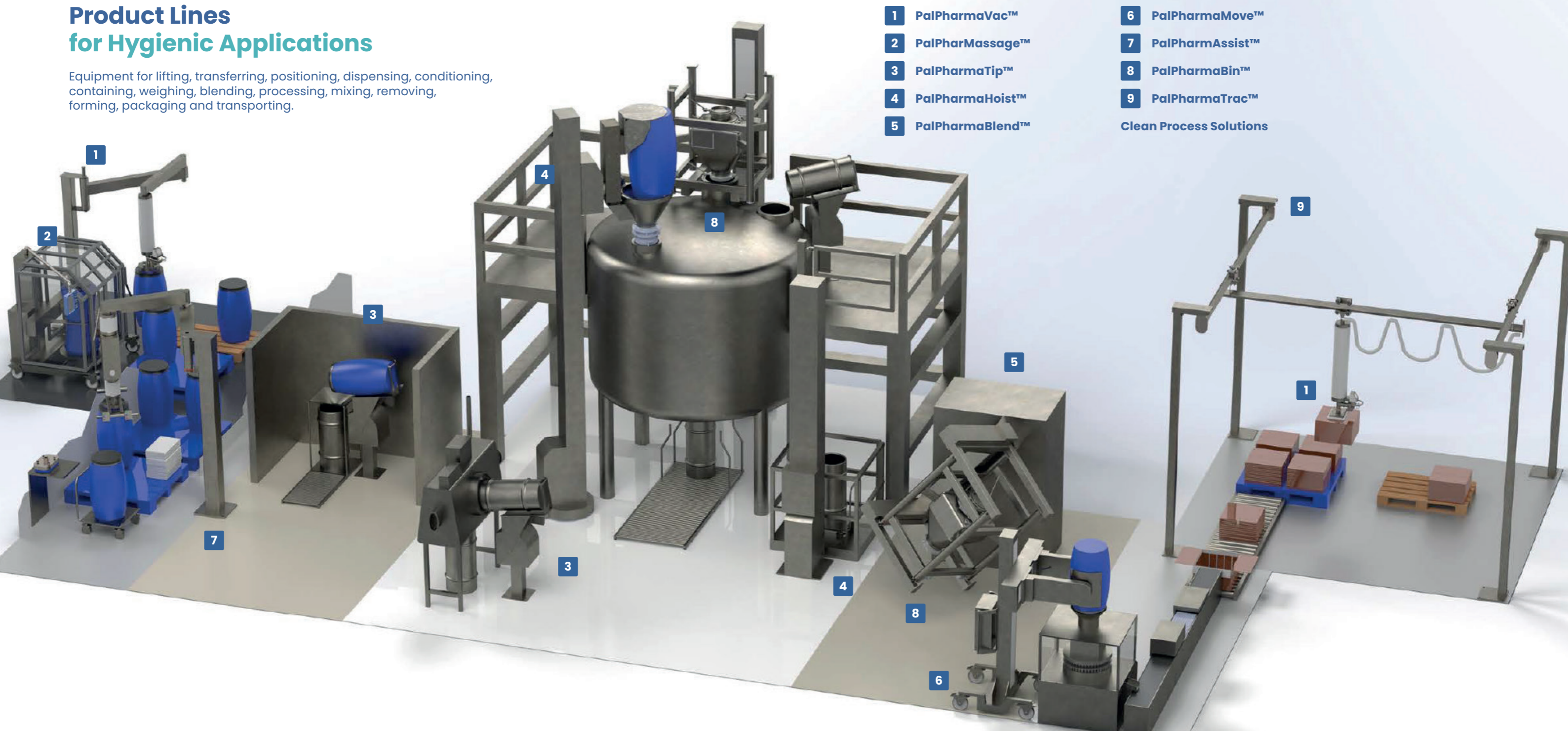


**Food Grade Vacuum Lifters**



## Product Lines for Hygienic Applications

Equipment for lifting, transferring, positioning, dispensing, conditioning, containing, weighing, blending, processing, mixing, removing, forming, packaging and transporting.



- 1 PalPharmaVac™
- 2 PalPharMassage™
- 3 PalPharmaTip™
- 4 PalPharmaHoist™
- 5 PalPharmaBlend™

- 6 PalPharmaMove™
  - 7 PalPharmAssist™
  - 8 PalPharmaBin™
  - 9 PalPharmaTrac™
- Clean Process Solutions

### Goods In

Materials are depalletised with a PalPharma tube lifter and loaded into the PalPharMassage for conditioning before onward processing

### Transfer

Clean Room materials transfer using a PalPharmaVac or PalPharmAssist. Operators transfer containers to a process skid pallet or dolly

### Dispense

Powder and liquid can be transferred on to a PalPharmaTip using a PalPharmaVac or PalPharmAssist for dispensing, sub-division, weighing, batching, sampling, sterility testing and isolation

### Process

Transfer and removal of powder and liquid using PalPharmaHoist and PalPharmaTip from mixers, reactors, dryers, granulators, blenders and centrifuge

### Packaging

PalPharmaBlend and PalPharmaMove to fluff and feed tablet presses, encapsulation machines, tablet coaters

### Dispatch

PalPharma tube lifters and other devices for palletising, moving, loading containers and trucks

# PalPharmaVac™ for Cleanroom and Process Environments

## Product information

### Typical applications:

- ✓ Pallet to pallet transfer and batch assembly
- ✓ Elevate containers to allow cleaning of them
- ✓ Discharging product from drum to receiving vessel or reactor
- ✓ Feeding product into a blender, mixer or dryer
- ✓ End of line palletising

### Products handled:

- ✓ Sacks/bags
- ✓ Boxes/cartons
- ✓ Drums
- ✓ Kegs
- ✓ Reels

**Weights:** up to 125kg (275lb)

**Coverage:** To suit requirement

**Finish:** 304 to 316L cGMP

### Features and benefits:

- Lightweight hand demountable design for ease of cleaning and low maintenance
- Wipe down lift tube cover
- FDA approved elastomer's on suction feet
- Incorporates a HEPA filtration system which means no downstream contamination of components or maintenance areas
- Safe change



## Gantry Options 1

### Swing Jib



Ideal for close proximity lifting up to 350kg (772lb)

### Articulated



Provide access in confined restrictive spaces

### Mobile



Portable systems for operational convenience

### H-Style



Provides large area coverage

## Control Handle 2

### Standard



Ergonomic handle for ease of use

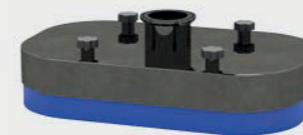
### Extended



Extended handle for longer reach when lifting large products

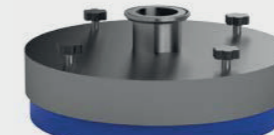
## End Effectors 3

### Sacks & Bags



Suitable for plastic and paper sacks up to 50kg

### Drums & Kegs



For drums and kegs, multiple options available

### Boxes & Cartons



Available in multiple sizes to suit application

### Side Lift & Pour



Ideal for the loading and unloading of metal, plastic and fibre drums

# PalPharMassage™ Drum and Container Conditioning Systems

## Product information

### Products handled:

- ✓ Fibre & Plastic Drums
- ✓ Kegs
- ✓ Sacks
- ✓ Flexible containers

**Finish:** 304 to 316L cGMP

### Features and benefits:

- PLC Control
- Simple to use by colour HMI
- Infinitely variable control for:
  - Height of massage arms
  - Distance into container
  - Torque
  - Speed
  - Recipe programmes
  - Time
  - Repeatability
- Mobile or Fixed Options
- Can be used with PharmaVac /
- PharmaTip or conveyors to offer turnkey automated handling and tipping solution
- Heavy duty construction
- Safety Guarding to suit requirement
- Ex/ATEX options
- FAT and IQ/OQ documentation



## Infeed Options 1

Vacuum Lifter



Roller Conveyor



Dolly



## Options



# PalPharmaTip™ Mobile or Static Container Tipping and Positioning

For dispensing powders and liquids into process vessels and machines. Tip your containers safely and effectively to discharge their contents.

## Product information

### Typical applications:

- ✓ Discharging product from drum into receiving vessel
- ✓ Discharging product from drum into reactor
- ✓ Feeding product into blender or mixer
- ✓ Feeding tablets into a sugar coater
- ✓ Feeding product into filter dryer
- ✓ Docking a drum onto an isolator
- ✓ Presenting the drum at an ergonomic height to sample product
- ✓ Presenting the drum at an ergonomic height to help protect the operator and product
- ✓ Tipping product with a laminar flow air hood to prevent dust contamination to the surrounding area
- ✓ Easy material transfer

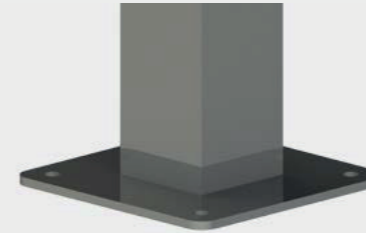
Finish: 304 to 316L cGMP



## Base Options

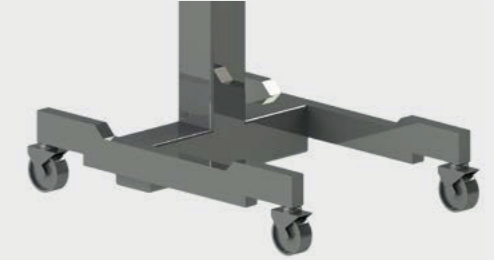
1

### Fixed



Fixed in place by resin anchor bolts

### Mobile



Portable systems for operational convenience

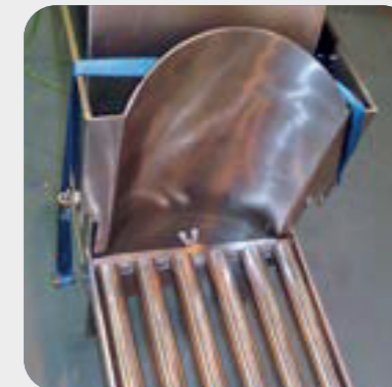
## Cradle Options

2

### Full Cradle



### Roller Cradle



### Advance Cradle



# PalPharmaHoist™ Systems for Discharging, Docking, Feeding, Tipping, Pouring and Blending of products in IBC's, Drums and Supersacks

## Product information

### Typical applications:

- ✓ Discharging product from drum, IBC or FIBC into receiving vessel at high or low level
- ✓ Docking drum, IBC, sack or bag onto Isolator or Tipping Station
- ✓ Feeding packaging lines
- ✓ Docking split butterfly valves together with minimal downward force on the receiving half of the valve or the supporting structure
- ✓ Can be used in conjunction with a discharge squeeze funnel for high containment product transfer and sterile applications
- ✓ Platform lifts for pallets and trolleys to mezzanine levels or additional floor levels

**Finish:** Available in mild steel through to 316L stainless steel / Hastelloy C22

### Features and benefits:

- No hydraulics
- Suitable for up to 16000mm vertical stroke and 2000m reach
- UK design and manufacture with CE/LOLLER approval
- Ball screw motor gearbox with failsafe
- Centrifugal over speed mechanical safety lock
- Designed to be free standing with no top support
- PLC or pneumatic controls
- Speeds up to 8m per minute



## End Effectors

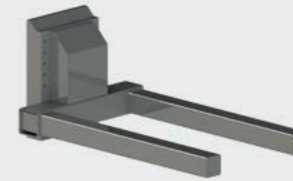
1

### Platform Lift



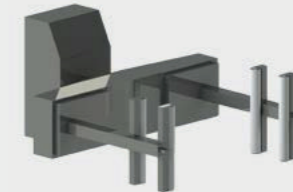
Product transportation platform for pallets & IBCs

### Forks



For lifting IBCs, features weighing system

### Drum Grip or Clamp



For side gripping drums, features 180° inversion

### Squeeze Cone



For dust-tight powder handling and transfer, 180° inversion

## Mast Options

2

### Fixed Base



Fixed in place by resin anchor bolts

### Manual Slewing Base



With manual lock/unlock

### Powered Slewing base



Pneumatic or electrically powered



# PalPharmaBlend™ Container Blending Solutions

## Product information

### Features and benefits:

- Variable speed rotation between 1-25rpm dependant up on size and weight of container
- Suitable for any type of container from 5l to 2500l
- Intergration with PalPharmaHoist for vertical elevation and docking to process vessels and machinery
- Range of safety barrier or scanner options to protect the operator from rotating equipment
- NIR and PAT options available
- Automatic vertical or dock return
- Fixed and mobile options
- No hydraulics
- Suitable for containers up to 2000kg (4400lb)
- Suitable for up to 16000mm vertical stroke and 2000m reach
- UK design and manufacture with CE/LOLLER approval
- Ball screw or chain motor gearbox with failsafe
- Centrifugal over speed mechanical safety lock
- Designed to be free standing with no top support if application allows
- PLC GAMP or pneumatic controls
- Vertical raise or lower speeds up to 8m per minute

**Finish:** Available in mild steel through to 316L stainless steel / Hastelloy C22



## Options

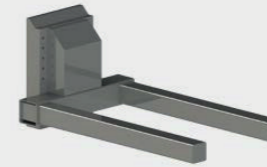
1

### IBC Clamp



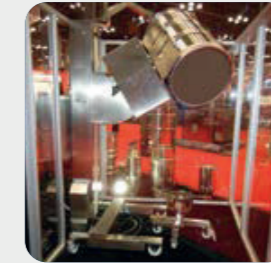
IBC cradles that accommodate all sizes

### Fork



For lifting IBC's and Supersacks

### Safety Enclosure



Provides protection

### Drum Clamp



For clamping plastic, metal or flexible drums





# PalPharmaMove™ CGMP Fixed and Mobile Lifting and Handling Systems

## Product information

### Features and benefits:

- Manual push/pull M3/M5/M7 or powered drive K9 versions available
- Can be battery, electric or pneumatic – No hydraulics are used ever
- PLC control system – K9
- Suitable for ATEX environment to zone 1/2T4 with documentation (pneumatic)
- Optional telescopic mast to achieve 3.2m lift height but can still fit through a 2.1m doorway height
- Stacker/Straddle Base M7 5kg (11lb) – 1 tonne ( 2200lb)capacity
- Counterbalanced K9 version – 1500kg (3300lb) capacity. Higher capacity on application
- Compact footprint which is designed to fit through standard doorways
- Fully clad stainless steel 304 or 316 construction which is easy to clean and validate
- Effortless to move
- Various and effectors available to handle drums, boxes, sacks, reels, pallets and trays
- Range of discharge cone options to aid product flow or discharge
- Optional 180° drum manipulation for pouring and blending (360°)
- High containment options available
- Anti static wheels, non marking wheels available and optional washable wheel bay

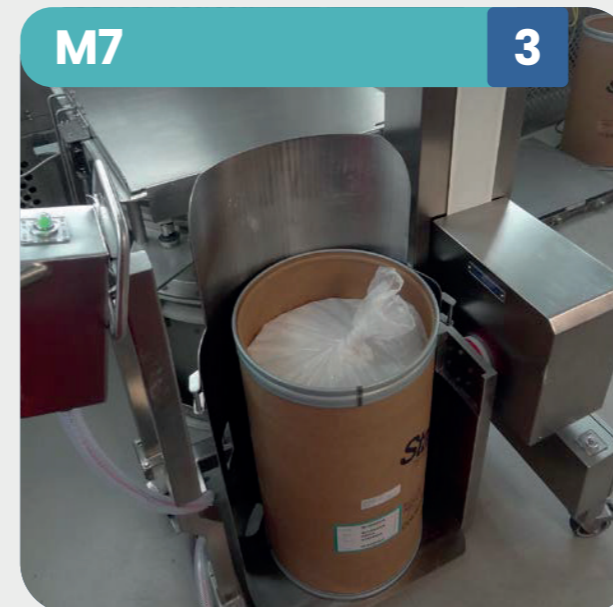
**Finish:** 304 to 316L cGMP



Mobile trolley with manual handwheel raise and lower for simple transport, docking and lifting tasks



Fixed mast manually propelled mobile truck with manually actuated drum raise, lower and forward pour



Fixed mast manually propelled mobile truck with pneumatically actuated drum raise, lower and forward pour



Electrically propelled mobile truck for gripping lifting and inverting drums and IBC's, Bins and Totes up to 250kg

# PalPharmAssist™ Pneumatic Engineered Static Lifting Systems for Bespoke Process, Maintenance and Electronically Classified lifting Applications

## Product information

### Typical applications:

- ✓ Removing process components for cleaning and re-validation between batches
- ✓ Feeding product into a process vessel
- ✓ Docking split butterfly valves together with minimal downward force on the receiving half of the valve or the supporting structure
- ✓ Excellent for low headroom applications such as clean rooms, containment booths, removing components from process vessels
- ✓ Handling requiring a reach or a cantilever into a recess
- ✓ Handling a large range of drum sizes and weights for a pallet to pallet transfer application with a vacuum end effector
- ✓ Long stroke applications such as charging a bottle to a process vessel via split butterfly valve
- ✓ The unit can be floor ceiling or wall mounted with the articulated arms folding neatly together maximising production space for the operator

**Load Capacities:** Up to 10,000kg  
(22,050lb)

**Finish Options:** Mild steel to 316L cGMP

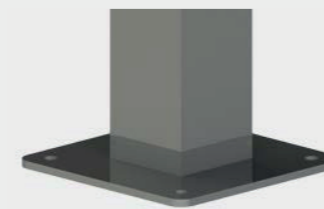
### Features and benefits:

- Require only a clean, dry, oil free compressed air supply
- Vertical or horizontal pneumatic cylinder
- Cable winch mounted internal of SS316 cabinet
- Rigid manipulator arm up to 4m
- FDA approved gasket on all suction feet
- Low noise levels and easy maintenance complete with a two year warranty and validation documentation ensures a quality handling solution.
- Suitable for ATEX environment to Zone 1/21 T4 with documentation.



## Gantry Options 1

### Floor Mounted



Fixed in place by resin anchor bolts

### Ceiling Mounted



Ideal where operational space is limited

### Wall Mounted



Ideal where operational space is limited

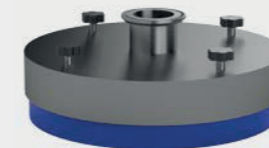
### Mobile



Portable systems for operational convenience

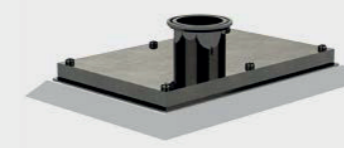
## End Effector 2

### Drums



For drums and kegs, multiple option available

### Boxes & Cartons



Available in multiple sizes to suit application

### Side Lift



Ideal for the loading and unloading of metal, plastic and cardboard drums

### Hook



Suitable for removing components from vessels



# PalPharmaBin™

## Drum and IBC Range of Stainless Steel, In-process, Bulk Storage, Transfer and Final Packaging Containers

### Product information

#### Typical applications:

✓ The PalPharmaBin becomes a blending vessel when used with a PalPharmaBlend, offering batch integrity and traceability. Once loaded into the blender frame, the PalPharmaBin is tumbled on an asymmetric axis to provide a quick and efficient blend

**Volume:** From 200 to 2500 litres

**Finish:** The PalPharmaBins are manufactured in 304/316L stainless steel as standard.

- Interior polished to 0.2 microns
- External finish is 0.4 microns

Large upper lid in stainless steel 304 or 316L with lock clamp connection



#### Features and benefits:

- Hopper angle is 60 degree on the wide side, 50 degree on the narrow side
- Increased process efficiency and reduction in labour
- The PalPharmaBin can be partially or completely discharged and then sorted, re-used or cleaned
- Dust Tight
- Stacking feature
- Four way fork channels
- Pallet jack guides
- Silicone gaskets
- Mass flow design
- Special hopper angle
- Sight glass
- Optional venting
- Optional Castors
- Any type of valve



## PalPharmaTrac™ Overhead Support Systems for PalPharmaVac™ Units

For a high specification Pharmaceutical or clean food environments Palamatic's PalPharmaTrac overhead gantry offers an idea alternative to conventional open track designs.



**Swing Jib**

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

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

### Features:

- Can be hung from existing steelwork, wall mounted, ceiling mounted or as a mobile base option.
- 180° or full 360° coverage.
- Lifting products up to 350kg (772lb)



**Articulated Jib**

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.

### Ideal for:

- Process operations that require a greater working area reach
- Facilities where either space or headroom is at a premium
- Movement of bags, boxes, drums, and sacks in process and dispatch areas.
- Lifting products up to 250kg (551lb)
- Easier to clean with no convoluted vacuum hose



## H-Style

1

2

### The Manual Handling Disadvantage

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

### The PalPharma Advantage

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

PalPharmaTrac™ 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.

PalPharmaTrac™ 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





**UK**  
Palamatic Ltd  
Unit 20, Broombank Park  
Chesterfield  
United Kingdom  
S41 9RT  
**T:** +44 (0)1246 452 054  
**E:** sales@palamatic.com

**USA**  
Schmalz Inc.  
5850 Oak Forest Drive  
Raleigh  
NC 27616  
USA  
**T:** +1 919 779 0988  
**E:** schmalz.us@schmalz.com

**INDIA**  
Schmalz India Pvt. Ltd.  
EL - 38 J Block MIDC  
411 026 Bhosari  
Pune  
India  
**T:** +91 20 691155-00  
**E:** schmalz@schmalz.co.in

[www.palamatic.com](http://www.palamatic.com)  
[www.schmalz.com](http://www.schmalz.com)