Palamatic LITE Vacuum Tube Lifting Range

The Palamatic LITE Vacuum Tube Lifter design manufactured from stainless steel 304 as standard incorporates a single handed operation with a 100mm or 120mm diameter lift tube giving it a range of capacity to lift between 5 kg - 40 kg (dependent on the type of vacuum generator used and the porosity of the load to be lifted).

The control head and suction foot assembly is light and easy to operate and has the benefit of all the standard Palamatic lifter safety features. When a load is gripped it cannot be released until it has landed and in case of a power failure will allow the load to be lowered carefully to the ground.

The LITE is ideal for handling Cardboard Boxes, Wooden Boards, Sheet Metal, Plastic Sacks, Paint Tins and Drums

Key Features

A VACUUM GENERATOR that gives the speed of operation required at low noise levels and with just the right controlled flow

A LIFT TUBE that works in synchrony with the pump to produce the optimum performance

A TRIGGER CONTROL VALVE design and control head adaptors that fits like a glove with instant response. FLEXIBLE EXTENDED handle available

FORK LIFT TRUCK compatible versions available

Palamatic LITE Control Head Adaptors

Palamatic provide 2 types of LITE control, a standard LITE-HAND trigger valve assembly for general lifting purposes and for those high lift and/or long reach applications, a LITE-FLEX combined control head flexible handle with trigger valve assembly.

For the Standard LITE-HAND trigger valve assembly, an adaptor is required which is fitted between the trigger valve and the suction foot. Palamatic offer a variety of fittings for this purpose that can be matched to the lifting application and operator needs.
The option of the LITE-FLEX control head flexible handle offers solutions for high lifting and long reach handling with a pivoting handle.

The handle is pivoted close to the centre line of the lifter so the operator gains greater control when positioning the suction feet.

The recommended working heights for the operator of 900-1200mm is achieved effortlessly.

The handle is cranked so when working at high levels the lifter handle will not touch or damage the load.

Palamatic LITE Suction Foot Assemblies

Single suction foot assemblies

- **Oval Suction foot** for slightly uneven non porous surfaces
- **Single bellows foot** for achieving instant grip
- **Hook assembly for lifting drums/containers and baggage handling**
- **Combination hook and bellows assembly**

Double and Quad suction foot assemblies

**Optional Airborne Release**

The new Palamatic LITE-HAND Trigger valve control assembly is factory set to utilise an in-built assisted release to assist with the release of the load when landed.

As an alternative to the above Palamatic can factory set the Trigger Valve for release when airborne i.e. without landing the product first. It is anticipated that this would ONLY be used for those processes that require a planned quick release such as parcels or other small loads onto a conveyor or into bins.

**WARNING**: There are risks associated with using the airborne release feature and specific training is required in its use. Palamatic will only offer this option once the application has been reviewed for safety and will then price the option on application.
Palamatic’s LITE-HAND and LITE-FLEX options are ideal for repetitive, fast operations where a high throughput of loads have to be lifted.

**LITE-HAND FLT LIFTING SYSTEM**

The advantage gained from combining handling with Fork Lift Trucks is undeniable. Palamatic have developed a LITE-HAND FLT lifting system which can be installed on a Fork Lift Truck to increase its versatility in warehouses. The LITE-HAND FLT is suspended off an articulated jib which is mounted on the truck so when the lifter is not required it can be parked safely and neatly out of the way and locked with a manual jib arm locking device. The whole assembly including the vacuum pump, gantry and lifter system are designed to achieve easy mounting/dis-mounting from the Fork Lift Truck by the use of a parking station and quick release fixings. This lifter can achieve a reach of 2.5m and a height of 1550mm from pallet height. Loads of up to 55 Kg can be lifted such as wooden boards, drums, cartons, plastic sacks and reels.
...AIRPORT LUGGAGE AND FREIGHT HANDLING
The picking and placing of passenger luggage and freight at airports where loads up to 15 - 40 Kg can be lifted effortlessly and quickly in a one-handed operation. A feature of the luggage/freight handling system is an integral hook arrangement which can be included with the suction pad to take care of loads that cannot be gripped and lifted by suction. The operator just needs to choose whether suction pad or hook is required and the response is instantaneous to pick the load.

...PARCEL CARRIER STATIONS
This is a work environment that demands rapid handling of boxed goods. The speed of operation of the ergonomically design Palamatic LITE-HAND makes it the ideal operator lifting aid. Parcels are protected from potential rough handling within this intensive workplace with the safe and user-friendly LITE-HAND taking the strain so productivity is assured and even increased. Either suction pad or single hook or combination hook and pad end effector can be supplied to suit the operation. Where even faster handling is required the AIRBORNE RELEASE feature can be set so that the load can be released without landing when task requires it.

...DISTRIBUTION AND LOGISTIC CENTRES
This is a work environment where speed of handling is uppermost with thousands of orders being picked and despatched by operators 24 hours a day. The use of a Palamatic LITE-HAND lifting system on order picking lines and high speed conveyor sorting systems reduces operator effort and injury and ensures quick turnaround of customer orders. Boxes weighing up to 30 Kg whether glued, strapped or open can be effortlessly lifted, scanned and moved for onward despatch and transport.

...MANUFACTURING AND PRODUCTION ENVIRONMENTS
A typical job for the Palamatic LITE-HAND is the careful picking of boxed IT hardware off a conveyor from horizontal to vertical, moving to the pallet and by rotating the suction foot/box to be in the correct orientation for palletising. Loads up to 40 kg can be handled in this precise and safe handling operation. Other applications include palletising sacks off a filling line from vertical to horizontal and palletising finished goods in cartons. When the finished product needs to be palletised the long reach Palamatic LITE-FLEX effortlessly deals with the handling of boxes up to 40 kg. Heights of up to 2.2m can be reached with no strain for the operator.

Why Vacuum Lifting? …
Prevent back, shoulder, elbow, arm and wrist injuries
Keep operators, product and environment safe.
Increase productivity and profits
Decrease operator stress, discomfort and product damage
Solutions for all types of industrial process and products
Lift from 5-300kg (11-660) and up to 2750mm (108”) high
Slewing and articulating jib and ergonomic bridge crane options

Reasons to choose Palamatic…
Over 25 years experience
Standard systems and parts stocked, Bespoke systems designed engineered to suit requirement
Globally experienced distribution network available locally
Service and spares team

Some Typical Applications…….

...CONTAINER UNLOADING WITH LITE-HAND
Typically containers do not arrive at docks with palletised goods but with packaged goods stacked to the ceiling of the container to maximise payload in transport. Telescopic conveyors have been developed to transport the product out of the container as it is progressively unloaded. The Palamatic LITE-HAND mounted on a knuckle support gantry attached to the front section of the telescopic conveyor allows the operator to keep up with the unloading of product placing it onto the conveyor. Thousands of packages are handled by operators in this intensive and potentially hazardous working environment where Injuries to limbs and backs are commonplace when operator effort alone is used for this job.

An integrated handling system using the Palamatic LITE-HAND lifting system eliminates the manual effort required.

DESIGNED AND MANUFACTURED BY
Palamatic Ltd
Cobnar Wood Close
Chesterfield Trading Estate
Chesterfield
Derbyshire
S41 9RQ, UK
Tel: +44 (0)1246 452054
Fax: +44 (0)1246 451379
USA: 888-922-1119/ +1 919-779-0988
Email: sales@palamatic.com
Web: www.palamatic.com

LITE MARCH 13

Changes can and will be made under our policy of continuous improvement