

RANDEX VERTICAL LIFT STORAGE SYSTEM



Randex provides efficient storage systems. Our industrial products include vertical lifts, carousels, pallet racking, shelving and mezzanine floors.

COMPACT VERTICAL LIFTS FOR EFFICIENT STOCK HANDLING

Compact vertical lifts can completely transform your stock handling. You can achieve faster and easier handling of more items in a considerably smaller floor space. At the same time your staff will benefit from dramatically improved working conditions.

Vertical lifts are adaptable to the physical constraints of their environment and can fulfil various critical functions in stock keeping routines.

- Storage of finished goods to maximise the efficiency of storing and controlling goods awaiting despatch.
- Storage of part processed components ensuring continuity to the manufacturing

process by providing availability of required components.

- Maintenance, Repair and Operating Material (MRO) ensuring the availability of parts and materials essential to the production/ operating process.
- Change part storage enables convenient storage of change parts on a production floor whilst minimising floor space consumed by storage racks or shelving.
- **Stock** facilitate fast and accurate handling of consumables and components.
- **Tool storage** secure, safe and controlled management of tool inventory.



VERTICAL STORAGE LIFTS



INTELLIGENT SOLUTIONS SAVING TIME AND RELEASING FLOOR SPACE

A Compact vertical lift provides a secure and controlled way to store your articles and products.

Compact automatic lifts save 70-90% of floor space compared to normal storage racks. This is important; not only if you just want to gain additional floor space but when you are planning a new building.

Compact automatic lifts are designed with smaller spaces between the storage trays than other systems, thus you get even greater capacity. Remember you not only achieve great space savings but massive efficiency gains too.

Modern production methods call for the elimination of unnecessary operator travel time. However, many organisations still employ staff to walk around storage racks. Thousands of unproductive steps, hundreds of wasted hours every month. Today there is a solution available to prevent your company investing money merely to move people around. There is no need to move the whole store around by means of horizontal or vertical carousels. Our solution moves and delivers only the item required to the requesting operative.

Select the item you want and it arrives on a tray at the delivery window, all at a comfortable working height. Whilst you pick up the item, the next lift is already on its way to fetch the next item selected. The waiting time comes down to almost zero. A picking operator with three automatic lifts is capable of picking more than 200 orders per hour, in normal operation. This is 2-4 times faster than traditional stock handling systems. There is no bending, stretching or climbing. The job is done in a clean, safe and modern working environment. Consequently staff turnover and absenteeism is often found to reduce.





COMPACT LIFT – AN EXCELLENT SOLUTION FOR MOST COMPANIES

Our concept for automatic vertical lifts is based on our unique principle – the lift does not move by means of chains or cables but by 4 gear wheels which travel in four homogenous racks (rack and pinion). This creates a robust stable running action and precise positioning of the tray. The smooth operation minimises wear and tear, maintenance is reduced and outstanding operational safety and reliability is achieved.

The design of our lifts allows for the provision of flexible solutions. Units are configured to fit the site; located to maximise the efficiency of the activity they support. The is adapted to the conditions on site and the automatic lift is positioned where it suits the activity.

The solution provides safe and secure storage of your materials. Access can be controlled to ensure tht only authorised staff can pick stock items.

Unique Features

- Stable and smooth running action with precise positioning
- Minimum maintenance requirements
- Outstanding safety in operation
- Extraordinary reliability
- Safe and secure storage





TECHNICAL DATA COMPACT LIFT



Model	1220	1830	2440	3050	3660
Width, load tray, mm	1 216	1 826	2 436	3 046	3 656
Depth, load tray, mm	820	820	820	820	820
Loading per load tray, kg	500	500	500	300/500	500

Height of units: From 3 metres up to 16 metres Standard load: 40 tonnes standard Tray dimensions: Internal dimensions

- Horizontally photo cells monitor the height of goods.
- Error codes displayed in plain text.
- The lifts are designed to provide ergonomically optimum working position for the operator.
- Cycle counter informs when it is time for service. The calculation takes into account the lift's activity and monthly intervals between services.



COMPACT TWIN – THE SOLUTION FOR HIGHLY REPETITIVE PICKING

Compact Twins unique way of handling trays within the machine radically raises picking efficiency. By handling two trays in the same sequence with one tray in waiting position and one in picking position the picking speed is more than doubled.

The advantages of the Compact Twin system are fully apparent when a pick list consists of numerous order lines. When the operator begins to work from a pick list the Compact Twin will collect the first tray. Once delivered to the opening and picking is in progress, Compact Twin collects the next tray on the picking list and returns to the 'ready' position. When the first pick on the picking list is confirmed (acknowledged), the tray returns to the lift and the next tray is presented immediately from its waiting position to the opening. This starts the next picking sequence.



This is how Compact Twin works







1. Tray no. 1 is retrieved.

2. Tray no. 2 is collected and delivered to waiting position.

3. Collects tray no.1; tray no. 2 is placed in picking position.

4. Puts back tray no. 1 and retrieves tray no. 3.



TECHNICAL DATA COMPACT TWIN



Height of units: From 3 metres up to 16 metres Standard load: 40 tonnes standard Tray dimensions: Internal dimensions



Model	2440	3050
Width, load tray, mm	2 436	3 046
Depth, load tray, mm	820	820
Loading per load tray, kg	300	300

- Horizontally photo cells monitor the height of goods.
- Error codes displayed in plain text.
- The lifts are designed to provide ergonomically optimum working position for the operator.
- Cycle counter informs when it is time for service. The calculation takes into account the lift's activity and monthly intervals between services.

CONTROL SYSTEM VERTICAL STORAGE LIFTS

>> COMPACT BAS

Compact Bas is a WMS (Warehouse Management System) system that makes it easy to use our vertical storage lifts. Compact Bas has been developed especially for Weland Lagersystem AB's vertical storage lifts and for that reason the installation and integration times are minimal.

Compact Bas is presented via an interface that makes it easy to build article directories, tray structures and create batch jobs. When the vertical storage lift holds positioned articles, Compact Bas is used to handle the input and output of articles, with traceability if required.

Compact Bas handles a number of different picking labels, which means that traceability can be created directly in the order flow. With functions for managing the stock inventory, the system can save valuable time and eliminate a great deal of manual work.

>> OTHER WMS SYSTEMS

In principle, our vertical storage lifts can be controlled by all available WMS systems. Compact Store and Logia WMS are examples of systems



that are often used with vertical storage lifts from Weland Lagersystem AB.

Compact Store can be used to control and monitor the complete warehouse function. The system, which is managed via a web interface, is cost-effective and easy to use. No installation of software is required when new types of clients are added. With the help of easy-to-use dialogues and a simple menu system, training time is minimised. Compact Store displays what has to be picked in real time. A new operator can obtain help throughout the picking process and rapidly get started.

The system is modular and always holds the functions required. Compact Store covers all the work stages, such as registration of incoming deliveries, combination, prioritising and starting picking orders, transfer and refilling with articles as well as stocktaking.

Compact Store can be used as an independent system to control stock functions, but in most cases a connection is made to the company's business system. In this case, Compact Store functions as an integrated stock module that supplements the management system with efficient stock keeping.

Today, Compact Store is used with most commercially available business systems.

Logia WMS can be used with a separate module to control individual vertical storage lifts or together with other Logia modules as a complete control system for the entire warehouse.

The solution can be expanded, from control of one vertical storage lift to controlling a conventional warehouse or other automated systems.

Logia WMS integrates conventional and automated warehouse functions in the same system and ensures efficient order management. This contributes to the maximum utilisation of staff, warehouse capacity and automated equipment.

>> COMPACT TALK

Compact Talk is a program that makes it easy to integrate Weland Lagersystem's vertical storage lifts into new or existing business systems. Compact Talk acts as the business system's gateway to the vertical storage lift by controlling almost all of the constituent parts.

Thanks to Compact Talk, there is no need for machine status, queues or other technical details to be taken into consideration. Compact Talk receives information about the rack to be fetched, the lift in which the rack is to be found and then looks after the whole process. Compact Talk manages most accessories and distributes the requisite information, for example for visual presentation on a picking display. Compact Talk is based on Microsoft technology and is suitable for integration with many different systems.

>> ACCESSORIES AND EQUIPMENT

Accessories

- Scanner
- Printer
- Picking display
- Laser pointer
- Shuttle unit
- LED strip
- ESD application

Equipment

- Plate edgings
- Plate partitions
- Tray partitions/pallet partitions
- Folding boxes in corrugated cardboard
- Plastic boxes
- Euro containers







REFERENCES

>> The manufacturer of loaders, **Ljungby Maskin** has since 2006 installed six Compact Lift units, and the warehouse manager Anders Strandqvist hopes to acquire another two in the near future.

"Since we have arranged our complete stock with automatic lifts we have obtained very good order in our stock handling", Anders reports. "Just to be able to extract a balance by means of the software and in this way obtain the complete spares inventory makes the handling much easier. The auditor has no objections to accept the figures as being correct". "The erection of the lifts on site and the current service has functioned to our full satisfaction".

"Their way of acting is very professional and they know exactly how to mount the equipment in a fast and smooth way, Anders says. They handle the service at anticipated intervals, and we have not had any stoppages".

"Another advantage is that the equipment offers such flexibility of application. We have been able to use both pallet collars and plastic containers from our previous storeroom in the automatic lifts thus enabling us to make considerable savings", Anders says.



"An important link in our production"



>> 11 million toothbrushes and many other oral health products are manufactured every year at **TePe Munhygienprodukter AB** in Malmö. To manage increased volumes, a neighbouring building was purchased, and production of toothbrushes has been moved there.

"We designed the premises so we could obtain a better production flow," explains Markus Meijer, Head of Logistics at TePe. "The store for the raw material and semi-finished goods is placed next to the toothbrush production and in between there is now a Compact Lift."

"The vertical storage lift has an opening in our direction," Markus continues. "We fill up from the store side and in production every operator can fetch the components needed, according to an order specification."

"We see several advantages with this. The operator does not need to search for parts in the store, which saves time. The forklift driver on the other side of the wall can look after the handling of the goods without any risk of an incident if someone gets in the way," says Markus. "We have obtained improved working conditions, with a genuine ergonomic solution that creates a more efficient flow."

"It works very well and we are very pleased with the way Weland Lagersystem AB has solved the issue. TePe have recently invested in two Compact Twin units for the finished goods store. These will save unloading space and considerably increase the picking rate with a maintained low percentage of errors," concludes Markus Meijer at TePe.





>> Gremo AB develops, manufactures and sells efficient high performance forest machines causing least possible damage to the forest.

The company has three Compact Lift lifts and a fourth will be purchased shortly. Christer Sjöström is the purchasing manager and at Gremo responsible for the stock keeping:

"The automatic lifts have made the stock keeping of spares and mounting components much easier", says Christer.

"We don't have to run up and down the stairways to fetch components from the storage racks. The working environment is much more comfortable and safer, when you are standing in one place and the working height is correct and remains this way all the time."

"We doubled production for the same area"

"The new storage system also provides better utilisation of Gremo's production areas. We have increased our production volume by 100% without requiring more space than that released



by means of the automatic lifts" says Christer.

The expansion also provided more job opportunities. At the same time we have been able to redistribute the assignments, as the stock handling has become more rational. In summary we have achieved more benefits in one and the same investment.

>> CapTech Distribution AB manufactures PC products and as a wholesale dealer keeps stock of everything within the computer field. Four Compact Twin lifts are in operation handling the stock of components.

Recently another two automatic lifts have been purchased allocated to the company's section for distribution of DVD films. Magnus Gustafsson is project manager at CapTech.

"We already knew that the lifts with twin function are an excellent solution. But as to the films we are able to state that it functions ridiculously well!

"We stock 9.000 titles of film. All products have the same size, and we can utilize the space in the trays with maximum efficiency. When we fill the stock we keep the trays outside the lift. When we push the loaded trays into the lift, the automatic lifts have been idle not more than 10-15minutes per day".

"The lifts work without stoppages"

Magnus is very satisfied, with the effective handling of stock as well as with the service provided. "We have obtained a very dependable solution giving us maximum velocity of handling orders. We gladly go back to Weland, where we have found the perfect combination of right product, right price and people to work with to find a solution that suits our activities", affirms Mats Gustafsson.

RANDEX

www.randex.com

London Office:

Randex Ltd Rowlandson House 289-293 Ballards Lane Finchley London N12 8NP +44 (0)870 609 1965 info@randex.com

Scotland Office:

Randex Ltd CEVA Building Erskine Harbour Erskine Renfrewshire PA8 6PA +44 (0)141 812 4440 info@randex.com