

GENERAL CATALOGUE

**OMNI Lifter &** 

System

With a joyful logistics



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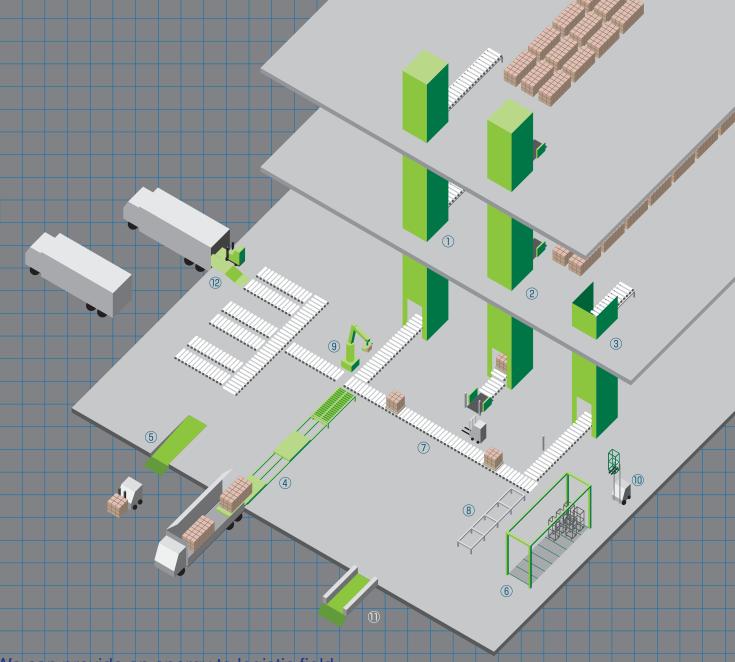


### GENERAL CATALOGUE OMNI Lifter & System

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RAY 13.04



We can provide an energy to logistic field.



### We aim for a direction to

## we aim for a direction to provide international-standard logistic machines.

We have obtained an International Registered Organization ISO9001 by our vertical lifter "Omni-Lifter" and achieved an international standardized quality. Currently, we take an advantage of technologies about material handling devices and aim at an international manufacturer of logistic system throughour continuous education.

We look forward to receiving a future patronage from you.

### Main Products

- ① OMNI LIFTER SYSTEM
- ② OMNI LIFTER CIRCULATION SYSTEM
- 3 SKYVEYOR
- 4 SHUTTLE LOADER
- © CLIMBING LEVELER & SLIDE SLOPE
- ® CARGO SHELTER
- © ROLLER CONVEYORS
- ® CHAIN CONVEYORS
- **9 ROBOTIC PALLETIZER**
- **® SAFETY CART**
- ① CARRYING LIFTER
- ® EXTENOR SYSTEM



- →P02 Summary of Omni-Lifter system
- →P04 ●①Roller conveyor type <Exclusive use for pallet>
- →P06 ●②Σ type <Special pallet circulation type (with high efficiency·space saving)>
- >P08 ●③PL type <Pallet circulation type>
- →P10 •4TL type <Pallet circulation type>
- →P12 ●⑤HB type <Simple circulation type (responding to a transportation by forklift)>
- →P14 ●⑥Skyveyor type <Continuous vertical lifter>
- P16 ●⑦Delivery lists
- P20 ●®CL type <Clean type>

## Summary of Omni-Lifter system LIFTER-SYSTEM

#### **Features**

Omni-Lifter was claimed for an examination as a machine facility not elevator equipped various safety devices with high safety of works to Japanese Land, Infrastructure and Transportation Ministry-Health, Labor and Welfare Ministry (1975) first recognized as a "vertical pallet





#### The rule of law

The committee of Lifter performance in Japanese Land, Infrastructure and Transportation Ministry recognized our lifter as a mechanical equipment. And also this lifter was received a permission by approval No.2183 as a machine which is not affected by Labor Safety Law in Health, Labor and Welfare Ministry (The Safety Law for crane etc).

#### **Omni-Lifter system**

#### Luggage elevator

- No machine room No lifter way
- Automatic feeding conveyor is required.
- The machine room is
- The work of lifter space is
- The total height contains wind up space and the height of motor room.
- Full automatic operation
- Drive to a cycle operation, no loss time
- Call out operation is required.
- A setting for destination is required.
- A modification of the door
- There is a loss time drive to a waiting time of calling out.
- Non approved indication by building standard law.
- Non approved indication by industrial safety and health law.
- This lifter can be approved by fire defense law.
- The approved indication by building standard law must be required.
- This elevator must be approved by industrial safety and health law.
- This elevator must be

#### Selection code of Omni-Lifter type (\*Common to every type)

You can select a best type of Omni-Lifter by combining with stop floors, conveyor type, unit count, lifter speed and total weight of products on the pallet etc.

Please indicate a type code as a right column when you place an order. <Example of type code> D3RE-H-3-10-PL Stop floors Direction of door way Total quantity of feeding conveyor (13 types)

Lifter special specifications | Type of feeding conveyor | Classification of lifter speed | Weight of products of the pallet | C/V special specifications

- A D(Automatic Door) R (Roller conveyor type) F(Fork transfer) S(S type)
- S (Slat conveyor type) T(Traverser) **P** (Circulation)
- CT(Chain Transer) TT (Turn Table) CL(Clean type)
- **H**(High speed type) **05** (500kg) S (Constant speed type) 10 (1,000kg) HH(Supper high speed 15 (1,500kg)

4 CZ Type

- 20 (2,000kg) 25 (2,500kg) **30** (3,000kg)
- C/V-S (Swing type) T (Traverser) CT(Chain Trancer)

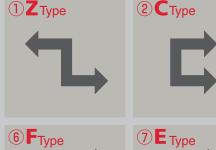
PL (Pit-Less)

**HL** (Hand Lift)

TT (Turn Table) **TL** (Table Lifter) **HB** (Hybrid) SH (Roundtrip type for special pallet)

∑ (Save space • high performance)

#### [Direction of door way]







**8 Z E** Type

C (Chain conveyor type)





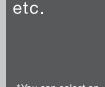












## OMNI LIFTER

Roller conveyor type <exclusive use for pallet>

#### [Features]

#### **1** Machine facility

Transportation Ministry • Health, Labor and Welfare Ministry (1975) first recognized as a "Vertical pallet lifter" not elevator in Japan.

②A voluntary inspection is ok!! The four voluntary inspections in a year is enough because this lifter is recognized as a vertical pallet lifter not elevator. It can reduce a running cost.

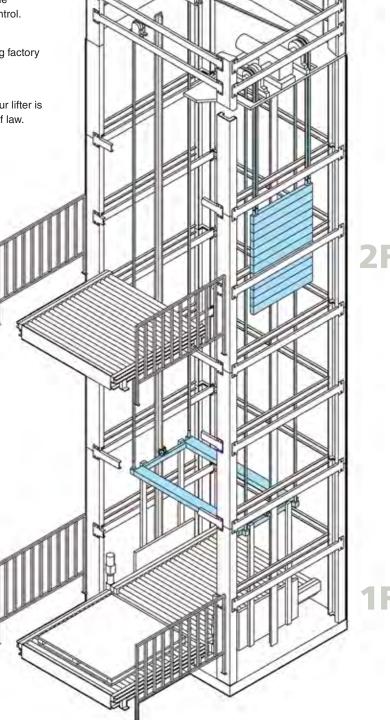
3 Smooth acceleration and deceleration Don't worry about the collapse of the cargo due to the smooth acceleration and deceleration by inverter control.

4 Self-standing tower frame
We do not make any distinction about new or existing factory due to our original self-standing tower frame.

5 Perfect safety device

We can provide "Safety" during operation because our lifter is complete with safety device based on a safety rule of law.





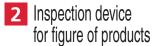
#### [Main devices]

1 Automatic feeding device





It contains a mechanical strength. are located together with a cross-stitch style. It provides a safety to customers for a long time



 By the inspection sensor located on the conveyor, the lifter can detect an over dimension of height and width of products on the pallet, and then the automatic operation will be stopped.

3 Standard control cabinet



Both pillow blocks and roller chains





4 Roller sensor

 A certain and rigid roller sensor (patent)



5 Standard control box (Touch panel)

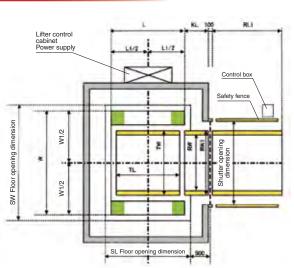
• Full automatic operation with no operator.



6 Fork stopper



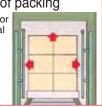
#### [Standard drawing]



#### [Safety device]

Detection an abnormalDetection for a trouble figure of packing when lifter going up

(Detection for àn abnormal width and height of products)



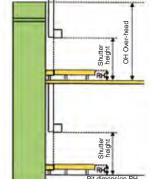
(Checking a condition of upper part of Lifter gate)

around the gate

(Checking a condition of lower part of

Detection for a troubleDetection for a trouble when lifter going down

(Checking a condition of lower part of Lifter table)



Туре	Pallet dimension	Max. figure of products	Table dimension	Tower dimension	Gate dimension
	Width × Depth	Width × Depth × Height	TW×TL	$W \times L$	SW×SL
15 type	1,100 × 1,100	1,200 × 1,200 × 2,000	1,520 × 1,500	2,520 × 1,750	2,820 × 2,050
18 type	$1,300 \times 1,300$	1,500 × 1,500 × 2,000	1,820 × 1,800	2,820 × 2,050	$3,120 \times 2,350$
21 type	$1,600 \times 1,600$	$1,800 \times 1,800 \times 2,000$	2,120 × 2,100	$3,120 \times 2,350$	$3,420 \times 2,650$
24 type	1,900 × 1,900	$2,100 \times 2,100 \times 2,000$	$2,420 \times 2,400$	$3,420 \times 2,650$	$3,720 \times 2,950$

Туре	Connecting	CV roller	Feeding conveyor x Length	Height	Pit dimension	Motor height	Shutter height
	KL	RW	RL1 × RW1	RH	PH	ОН	Width × Height
15 type	600	1,300	1,860 × 1,650	600	500	Products height	2,000
18 type	600	1,600	$2,090 \times 1,950$	600	500	+ CV height	2,300 Products height +CV height
21 type	600	1,900	$2,380 \times 2,250$	600	500	+	2,600 +500
24 type	600	2,200	$2,630 \times 1,750$	600	500	2,000	2,900

\*The above values are for loads of less than 1.750kg

### Circulation System NI LIFTER<sub>(Σ Туре)</sub>

Special pallet circulation type <Patented products> <with high efficiency space saving>

#### [Summary]

#### Realizing a space saving! A vertical transfer system with pallet circulation

This Lifter aims at a space saving around a transfer gate. This system will be a big help in a narrow space in a factor. Due to an elimination of a legal inspection, this lifter holds a good feature of "PL Type" like running costs saving.

#### [Features]

#### ①Space saving type

You can save a space around gateway about 40% compared with a conventional machine.

#### ②Reduction of running cost

The elevator is obligated to receive a legal inspection twelve times a year, but Omni-Lifter is allowed to do the voluntary inspection, so you can save a running cost to a large extend.

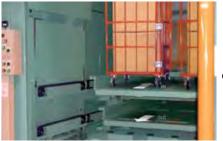
#### 3 The application of building certification is not required.

In case of an installation of Omni-Lifter, the application of building certification is not required.





A pallet will go up and be settled on a feeding conveyor when loading.



Moving condition of pallet with products (Upper) and pallet only (Lower)

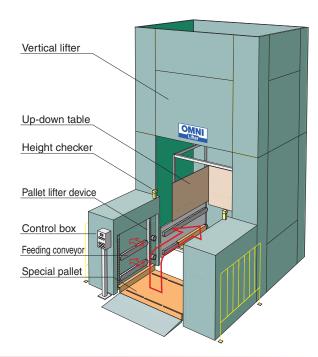




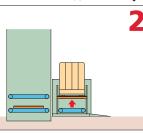
Standard

Safety fenceTrolley stopper (with sensor)

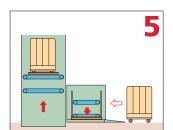
#### [Main devices]



The cargo is located in a special pallet. The vacant pallet will go down from the upper floor.

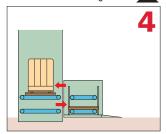


The cargo will go up to the same level of Omni-Lifter by the small lifter.

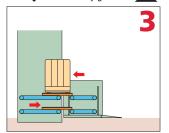


[Description loading of loading]

Omni-Lifter goes up and the vacant pallet will go down by small lifter and wait for next cargo.

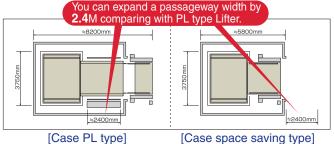


During this transportation, the vacant pallet will go out and be settled in a entry gate.



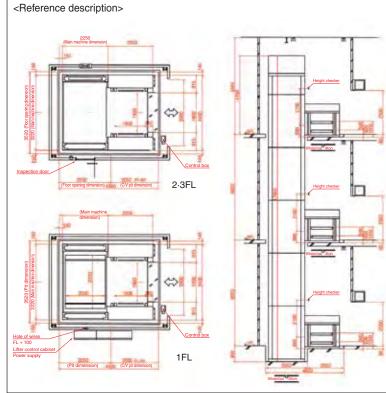
The cargo will go into a Omni-Lifter through chain conveyor.

#### [Installation dimension] (general case



[Case PL type]

	(Unit: mm)
Туре	3PE-H-3-10-Σ
Max. load	1,000kg
Figure of products	1,700W × 1,300L × 2,000H (Incl. pallet)
Cargo trolley	800W × 1,100L × 1,800H (2 cars, parallel)
Pallet dimension	1,500W × 1,200L
Special pallet dimension	1,800W × 1,600L
Table dimension	2,200W × 2,000L (Usable dimension)
Lifter speed	60m/min (Inverter control)
Lifter motor	11kW
Feeding speed	24m/min
Feeding motor	1.5kW × 2
Pallet lift of device	1 set on each floor, total 3 sets
Loading method	Forklift, Manual loading
Loading direction	Front side
Transportation capacity	1F to 2F: 70Pt/h, H, 1F to 3F: 40Pt/h



\*Specifications are subject to change

#### [Summary]

This circulation system realizes a cost reduction. PL type for both trolley and dedicated pallet

#### [Features]

①Reduction of running cost The elevator is obligated to receive a legal inspection twelve times a year, but Omni-Lifter is allowed to do the voluntary inspection, so you can save a running cost to a large extend.

2 The application of building certification is not required. In case of an installation of Omni-Lifter, the application of

building certification is not required.

3High operating efficiency

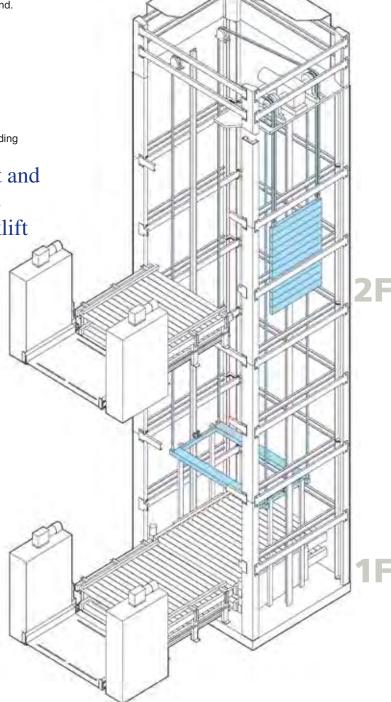
You can work in a smooth condition of entry and deliver operation because a special pallet is waiting around a loading gate. It is quite safe due to a full automatic pallet moving.

4 This lifter can load both pallet and trolley together with products.

5 You can load products by forklift and hand lift.

**6** This system does not require any modification of trolley.





#### [Main devices]

1 Checking device for a figure of products



This device checks a protrusion of the products



Products on a pallet will be carried in and vacant pallet will be carried out.

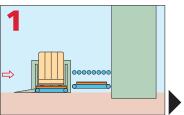
### 2 Loading plate with 3 Two steps auto feeding device

on a pallet move automatically to a lifter conveyor.

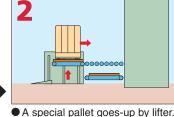
#### 4 Standard control **box** (Touch panel)

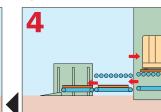


#### [Description of loading]

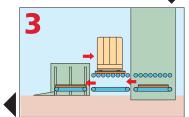


Loading products on a special



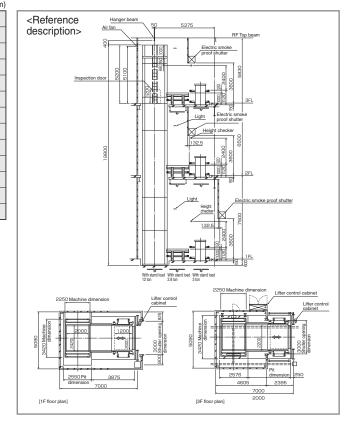


 During products are shifted to an descendent table, a vacant special pallet A table will go up and vacant pallet will move to an entrance and wait for next products. moves automatically to a loading device.



 Products move horizontally to an auto feeding device and wait until a lifter table comes down.

		(Unit: mm
Туре	3PE-H-6-10-PL	
Max. load	1,000kg	
Dimension of trolley	800W × 600L × 1,800H (2 sets)	
Pallet dimension	2,000W × 1,200L × 60H (Special pallet)	
Loading method	Manual loading	
Loading direction	Front loading and unloading	
Transportation capacity	1F to 2F: 70Pt/h, 1F to 3F: 50Pt/h	
Lifter speed	50m/min	
Lifter motor	11kW	
Table dimension	2,420W × 2,000L	
Feeding speed	24m/min Inverter control	
Feeding motor	0.75kW, 4P, GM	
Pallet lifting device	2 sets on every floor, total 6 sets	



### OMNI Lifter System Circulation System OMNI LIFTER(TLType) Special pallet circulation type

#### [Features]

#### ①Forklift type

#### This lifter can respond to various figure of products.

This forklift type lifter can directly load and unload an palletized products. The procedure of loading and unloading repeats automatically again and again in spite of various figure of products in a short time.

#### ②Trolley type (Floor type)



#### [Main devices]

#### 1 A loading and unloading device



This device checks a protrusion of the products and prevents an accident.

#### 2 An automatic feeding device



● The lifter repeats to go up and down. ● An elaborate and rigid roller Products on a pallet will be carried in and vacant pallet will be carried out.

#### Roller sensor

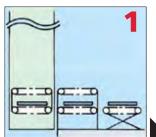


sensor is installed.

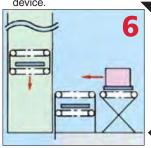
#### 4 Standard control box (Touch panel)



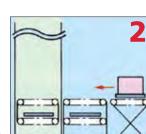
[Description of loading



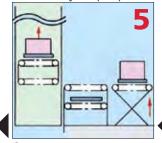
The vacant pallet is transferred to the lifting device.



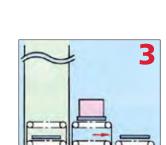
Lifter table is going down.



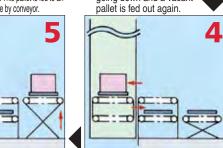
The lifting device is going up after the products are loaded on the pallet. This pallet is fed to an automatic feeding device by conveyor.



Both lifter table and a loading and unloading device is going up.

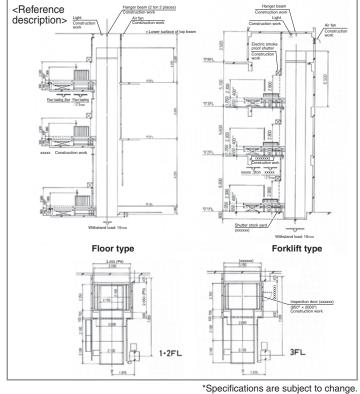


 A loading and unloading device is going down and a vacant



A product on the pallet is transferred to a lifter table. At the same time, the vacant pallet is fed to an automatic feeding device.

	(Unit: mm)
Туре	3PE-H-6-20-TL
Max. load	2,000kg
Pallet dimension	1,700W × 1,700W (Special pallet)
Figure of products	1,700W $\times$ 1,700W $\times$ 2,200W (Incl. pallet) (The protrusion from the pallet must be with in 100 mm.)
Table dimension	2,150W × 2,100L
Lifter speed	50m/min
Lifter motor	30kW
Feeding speed	24m/min
Feeding motor	1.5(0.4)kW Motor
Loading direction	2 sets on every floor (Incl. table lifter in loading stage) (Forklift, front loading)
Transportation capacity	1F to 2F: 86Pt/h, 1F to 3F: 65Pt/h (Calculated by 10 minutes feeding time)



# OMNI Lifter System Circulation System OMNI LIFTER (HB Type)

Simple circulation type responding to a forklift transportation

#### [Features]

#### ① Multi-correspondence This lifter can respond to forklift, long sized, heavy, various

This lifter can respond to forklift, long sized, heavy, various figure of object. It is a multi type lifter.

②This lifter can transport a larger quantity of products.

You can transport a larger quantity of products comparing with freight elevator.

#### 3 Reduction of running cost

In comparison with freight elevator, you can reduce a power consumption, maintenance fee, running cost dramatically.

### 4 You can realize a labor effectiveness and speed up.

Due to the circulation system, the lifter moves to be synchronized with an automatic feeding device. It can realize a speed up and labor effectiveness.

#### 5 This lifter can prevent an accident. Due to an automatic loading and unloading system, you can

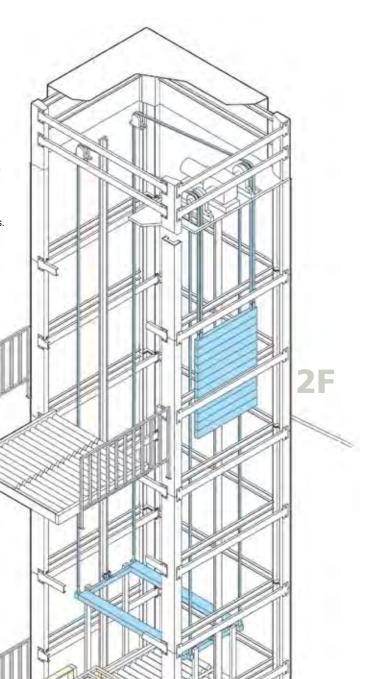
prevent a damage accident of elevator door by forklift.

#### 6 Available to leasing contract

Due to a machine facility, you can receive a leasing contract for seven years.

### This is a non-regulated product about elevator.

This lifter meets Building standards and Industrial Safety and Health Law. You are not expected to declare a Building certification and notification after installation.

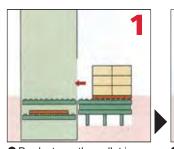


#### [Main devices]

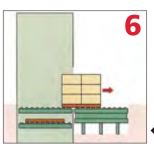


You can load forklift body.

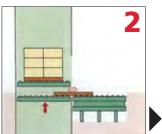
#### [Description of loading]



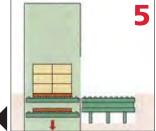
 Products on the pallet is loaded on the lifter table.



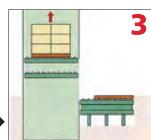
 Products on a pallet will be carried out automatically.



 A lower part of lifter table will go up to the polite position and then a vacant pallet will be fed to a loading position.



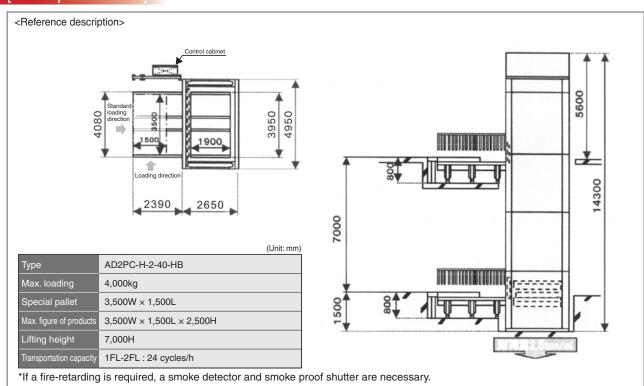
 An upper part of lifter table is located at a polite position.



Lifter table is going up.



 On a picking up floor, a vacant pallet will be fed to a lower part of lifter table.



### Inquiry of specification http://www.omni-yoshida.co.jp info@omni-yoshida.co.jp

## 6 Skyveyor Skyveyor-II

#### [Features]

### 1 Energy Saving for low power

This is the equipment using cylinder instead of motor during transfer.

#### 2 Suit for lightweight loads

Transfer the same loads with low cost, high power.

### 3 Available order made for unit addition

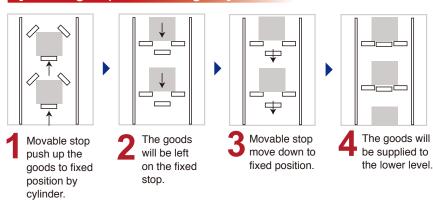
Suit for the same direction transportion by connecting to conveyor line.

#### [Total appearance]





#### [Loading explanation figure]



#### [Reference specification]

Base machine

Free-standing aluminum frame

Loads

220W×280L×330H 12.5KG

Base machine demension

730W×500L×3,820H

Loading stroke

2,600mm (MAX7,000mm)

Moving-up drive system

Air-Cylinder driving

Conveying ability

600packages/hour

\*Please consult us for demension of loads, weights and lift heights.

#### [Features]

#### 1 Quite operation

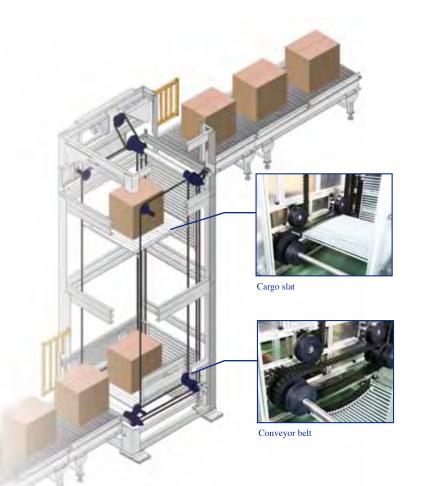
It excel in quite operation because of the special rubber belt.

#### 2 Suit for clean environment

Base machine frame is made of aluminum. It's the vertical conveyor which is suit for clean environment including corrosion resistance, abrasion resistance and hygiene standpoint.

### (3) Two types match to different applications

There are two types including C type and Z type by the difference of direction. The efficient vertical conveyor can be constructed by the option.







#### [Safty device]

- Frame exterior surface
- Buzzer
- Overload detector
- Width/height/length detector
- Protrusion detector during moving up
- Falling detector
- Terminal stopper(heavy mode only)
- Fork proximity detector(option)
- Nature falling prevention when power outage

#### Reference specification

Entrance width	Cargo slat		Max demension of loads	Max load (kg/slat)	Conveying ability (Package/hour)	Floor aperture demension
600 1,900	570W × 648L 1,860W × 2,058L		500 × 500 × 1,000 1,700 × 1,700 × 2,000	40	500 ≀ 75	1,300 × 1,550 2,900 × 3,400
Transportati	on velocity	(Normal)	15m/min ~ 8m/min (Max. 30m/mir	n ~ 15m/min)		
Conveyor belt #60~#12		20				

circulation

\*They have medium type and medium-heavy type between light type and heavy type

(Unit: mm)

Separate work

Supply dry air

ФЗ 200V/220V 50Hz/60Hz

### OMNI LIFTER DELIVERY LISTS



Omni-Lifter in aerosol factory



● Omni-Lifter special pallet circulation type (Table lifter type)



■ LL Type Omni-Lifter



Omni-Lifter turn table built in type





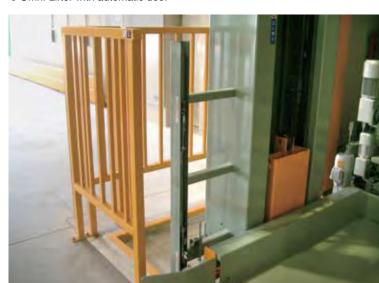
Hand lift type



• Newly installed Omni-Lifter after removal of elevator (NEDO target goods)



Omni-Lifter with automatic door



Checking device for operators approach



Self-standing tower with tower panel



Pallet circuration type Omni-Lifter (Table lift type)



Track loader





#### Odaiba Dock

This area is planned to be developed as a largest new Tokyo waterfront sub-center that contains various functions for internationalization and informatization and will take pride in a quite new multi-type of city structure.

#### ■ Daikoku Dock

This area has opened to Foreign countries long time ago and now is located in a center of big project of [Mianto mirai 21]. This area supplies various visions of development as a pioneer of bay-area developer.

#### ■Ooi Container Dock

Ooi Dock is closed to Tokyo and involves a center of wholesales market and various commercial and logistic facilities. The big scale container terminal in this area supports a capital function of big city Tokyo as a rigid logistic base.

#### ■Rokko Island

Rokko Island is aiming at multi city function incl. dock and harbor. This function of dock and harbor can respond to bigger vessels and various logistic requests. This area takes over the good atmosphere of mountain side of Rokko and gathers an attention due to its international facilities.

#### ■Osaka South Port

This area is located in the center of developing space in reclaimed area of Osaka port. This area involves International Ferry Terminal, Asia-Pacific Ocean Tread center and Osaka World Trade Center and plays a big role of international economic place.



#### Panasonic Electric Works Co., Ltd. (Distribution center in Eastern Japan)

In the distribution center, to respond quickly to high frequent entry and delivery operations is required. In order to achieve it, not only the manual works shift to mechanical works but also it is important to systemize a streaming in a warehouse. Omni Lifter system with conveyor can control vertical and horizontal streaming by computer. We can respond to various needs in distribution center by total system.

#### ■ Daikin Industries Ltd. (Distribution center in Sakai Water front.)

The big themes in distribution center are how to obtain an efficient traffic operation of trucks and a speed-up of entry and delivery operations. Omni Lifter system can respond to these themes by automatic truck loader, conveyors that connect during factory and distribution center and digital pick-up systems etc. We can realize a speedy and timely products supply by reducing an operation time dramatically.

#### Mitsubishi Logistic corporation (Honjou Warehouse)

This is a warehouse that can respond to various needs, for example, an increasing amount of handling of new products and multi-products, many entries and deliveries of products without stopping. This warehouse developed a uniform control of entries, deliveries and stocks and also developed an epoch making system that can realize an operation control for sure transportation. This warehouse established a newest distribution station that realized full automatic systems and manpower savings.



Odaiba Dock, Ariake Dock
(1) World Ryuutuu Center Co., Ltd. (2) Nippon Express Co., Ltd. (3) Sumitomo Warehouse Co., Ltd. (4) Mitsui Soko Co., Ltd. (5) Kuribayashi Unyu Co., Ltd. (6) Tokyo International Terminal

(7) Mitsui Soko Co., Ltd.

(9) Mochizuki kaiun Co., Ltd. (10) Sankyo Unyu Co., Ltd. (11) Hirata Souko Co., Ltd.

(12) Oji Butsuryuu Co., Ltd. (13) Mitsubishi Logistic Co., Ltd. (14) Japan Pulp and Paper Co., Ltd.

(16) Ogawa Unyu Co., Ltd.

(1) Kamigumi Co., Ltd. (10) Daidou Transplanet Co., Ltd (2) Nisshin Corporation (3) Fujiki Enterprise Co., Ltd. (11) Naigai Rittou Co., Ltd. (12) Chugai Warehouse and

(4) Yamatane Corporation (5) Mitsui Soko Co., Ltd. (6) Sumitomo Warehouse Co., Ltd. (7) Mitsubishi Logistic Corporation (8) Kawanishi Warehouse Co., Ltd. (9) Hitachi Transport System Ltd

Transportation Co., Ltd.

(13) Japan Express Co., Ltd.

(14) Kouei Sagvou Co., Ltd.

(15) Keihin Import and Export Operation Co-op.





(1) Osaka-Mitsui O.S.K. Line (2) Yamatane corporation (3) Mitsubishi Logistic Corporation (4) NYK Logistic and Mega-carrier

Co., Ltd. (5) Naigai Nittou Co., Ltd. (6) Sumitomo Warehouse Co., Ltd. (7) Yasuda Soko Co., Ltd. (8) Nihon Koun Co., Ltd. (9) Nissin Corporation

(10) Japan Express Co., Ltd. (11) Konoike Transport Co., Ltd. (12) Shibaura Kairiku Sangyo Co., Ltd. (13) Meisei corporation

(14) Kawanishi Warehouse Co., Ltd. (15) Kamigumi Co., Ltd. (16) The Shibusawa Warehous

(17) Suzuvo & Co., Ltd.

(18) Fuji Logitech Co., Ltd. (19) Daitou Unyu Co., Ltd.



(2) Sanyu Kigyo Co., Ltd. (3) NYK Logistic and Megacrarrier 4) Simizu Warehouse Co, Ltd. (5) Kobe Ports and Harbors Bureau

(No 4 Shed) (6) Hakutsuru Sake Brewing Co., Ltd. 7) Morimoto Warehouse Co., Ltd. 8) Ryoden Warehouse Co., Ltd. (9) Kirin Brewery Co., Ltd.

(10) Rokko Warehouse & Transport Co., Ltd.
(11) Sankyu Incorporation

(12) The Keihin Co., Ltd. (13) Dainichi Unyu Co., Ltd.

(14) Mitsubishi Logistic Corporation (15) Umeda Reizou Co., Ltd.

(16) Nitto Warehouse Co. Ltd.

(17) Kobe Ports and Harbors Bureau (No.5 Shed)



(1)Osaka Bay Integrated Logictic Center (4)Nippon Koun Kaisha Ltd. •No.1 Wing ·Tatsumi Shokai Corporation Kokusai Logistic Co., Ltd. Isewan Terminal Service Co., Ltd. Sanyu Kigyo Co., Ltd.

No.2 Wing -Kamigumi Co., Ltd. -Mitsui Soko Co., Ltd. ·Konoike Transport Co., Ltd. ·Sumitomo Warehouse Co., Ltd. Mitsubishi Logistic Corporation (3) Kamigumi Co., Ltd.

(5) Nisshin Corporation (6) Sumitomo Warehouse Co., Ltd. (7) Konoike Transport Co., Ltd. (8) Kamigumi Co., Ltd. (R) (9) Nitto Logistic Co., Ltd. ·Tabuchi Kaiun Co., Ltd. Osaka Godo Logistic Co., Ltd. -i-Logistic Co., Ltd. Yusen Air and Sea Service Co., Ltd. International Express Service Co., Ltd. Japan Express Co., Ltd.

#### [Features]

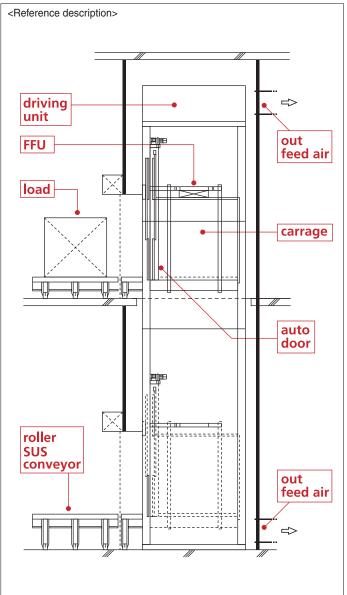
- 1) This lifter can build a smooth products flow between clean rooms.
- ②Even a standard type can transport larger size products.

  Standard model Max. 2,000W × 2,000L × 2,000H (mm)

  Max. products weight 2,000kg

3 Even a standard type can respond up-to 1,000 class clean room.

Corresponding to 1,000, 10,000, 100,000 class clean room.







Туре	CL-AD2RC-H-2-20
Lifting ways	Self-stand steel tower vending process (Three bends) Sub-frame vending process
Products weight	MAX 2,000kg
Products (pallet) dimension (Width indicates table travel direction.)	2,000W × 2,000L × 2,000H
Table dimension	2,450W × 2,400L
Lifter dimension	3,450W × 2,850L
Lifter speed	0.5m/s (30m/min)
Feeding speed	0.2m/s (12m/min) INV control
Operation method	Fixed control panel 2 sets (for maintenance 2 sets)
Control	Control cabinet 1 set
Special note	Specification for clean

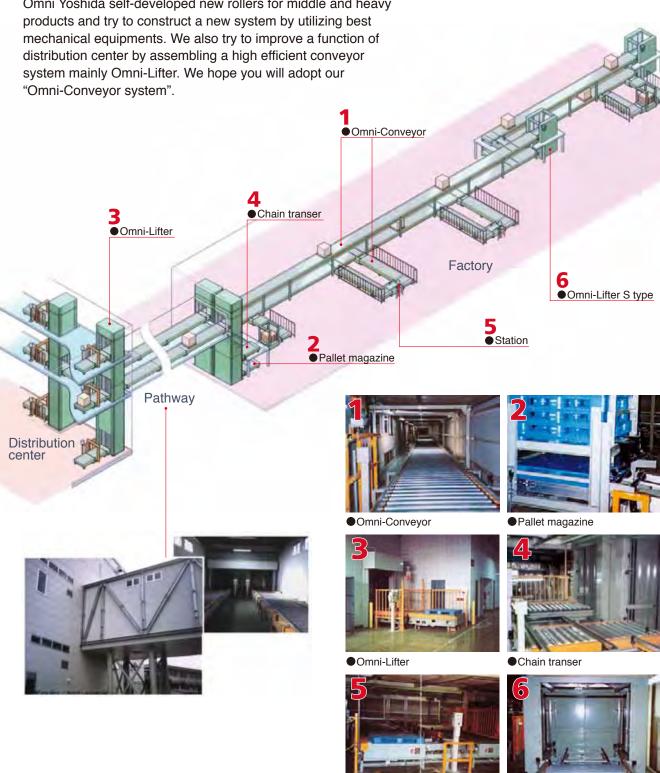


- P22 OMNI CONVEYOR SYSTEM
- P23 ●OMNI SORTER SYSTEM
- P24 ●OMNI GREENGROCERY DELIVERY SYSTEM
- P26 ●OMNI AUTOMOBILE PARTS DELIVERY SYSTEM
- P28 OMNI HOME ELECTRONICS DELIVERY SYSTEM

#### [Features]

Combining with a vertical transportation by Omni-Lifer and a horizontal transportation by Omni-Conveyor, you can build a smooth products flow of whole delivery system.

Omni Yoshida self-developed new rollers for middle and heavy products and try to construct a new system by utilizing best mechanical equipments. We also try to improve a function of distribution center by assembling a high efficient conveyor "Omni-Conveyor system".





#### [Features]

In a distribution center, it is one of the most efficient delivery system if the products in a trolley are sorted in their destinations in a deliver gate on 1F remaining a same condition when the products are picked up to a trolley on 2nd and 3rd floor. By using a special pallet, we can realize a smooth products flow from Omni-Lifter to sorting system. New idea that the trolley moves on a conveyor comes from our long experience and performance. We hope you will adopt our "Omni-Sorter system".



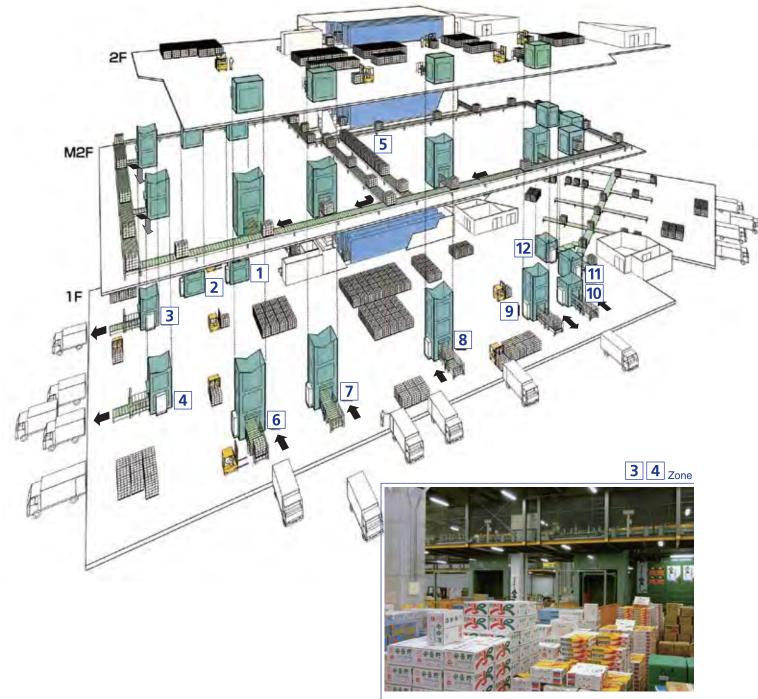
**1 2** Zone

6 7 8 9 <sub>Zone</sub>

### OMNI Delivery System OMNI GREENGROCERY **DELIVERY SYSTEM**

#### [Features]

We can build up a new intermediate floor and double an efficiency of products flow by using 12 sets of Omni-Lifter. Especially, we install a endless conveyor on an intermediate floor and ease an smooth products flow like <immediate delivery after entry>, <entry, temporary storage, delivery>. Omni-Lifter NO.1, 2, 6, 7, 8, 10 are for entry, NO.3, 4, 5, 11, 12 are for delivery and only NO.9 is for changeover. We can expand a track space and then the object damages are decreased during an operation.



• 1F floor is full of goods. Traverse motion cannot be done. First every goods are fed to M2F by Omni-Lifter. You can see NO.9 & NO.10 Omni-Lifter and conveyor lines in M2F.



1F NO1, NO2 feeding conveyor



Products are fed to 1F to M2F.



• "Short-cut line" is installed in a endless conveyor line. Easy to be combined to delivery gate.



• Change in direction of pallet on the conveyor will be done by chain up-down device.



Omni-Lifter in stall go on 2F
Products are delivered going-down through slope. 10 11 Zone



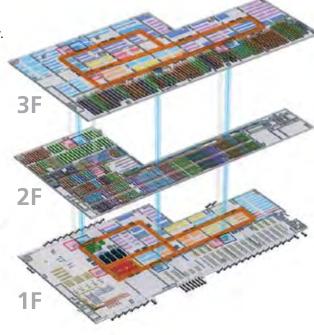
 Products from two Omni-Lifters are flowed in one way by direction exchanger. (A conveyor in a O mark turns around and products from Omni-Lifter go into conveyor line.) **12** Zone



Conveyor line to 1F user

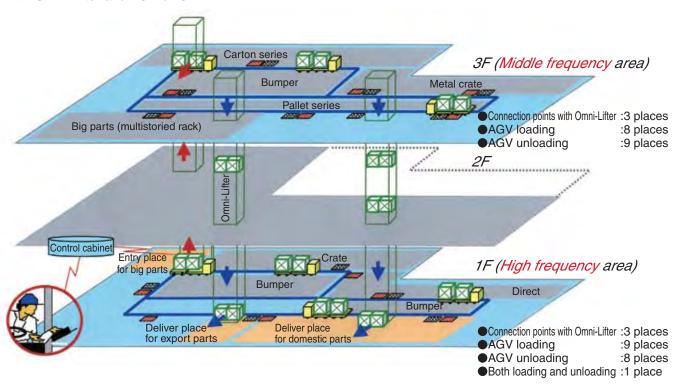
#### [Features]

In a three stories distribution center, we can build a smooth products flow combining with Omni-Lifter and AGV. Though the parts for automobiles range from Min. 500kg to 1,000kg, these products are stocked and classified from high to low frequency. All entry and delivery instruction are controlled by computer, therefore, you can improve a reliability of products flow.



#### Flow of big parts

Products are transferred to every station in an area by AGV on 1F. Products are transferred to every station in an area combining with Omni-Lifter and AGV on 3F.





Connection conveyor with AGV (3F)



Station conveyor



The cargo is shifting from AGV to feeding conveyor in a deliver area.



● 1F loading conveyor



Station conveyor (Products weight 1,000 kg/1pc)



[Main specifications]

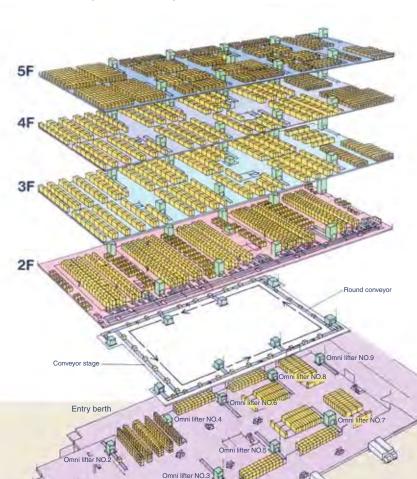
[Specificatio	n of Omni-Lifter] (Unit: mm
Туре	No.1, 2 3RZC-H-7-10 No.3, 4, 5, 6 2RZC-H-6-10
Operation mode	Button switches between fully-automatic and manual operation
Control mode	Rasing/lowering control Inverter control for lifter
Lifter speed	40m/min
Motor of lifter	7.5kW Inverter control for lifter
Feeding speed	12m/min 24m/min
Feeding motor	0.4kW Inverter control for lifter
Transportation method	Independent bearing, cross stitch chain drive, conveyor roller
Roller specification	Lifter table: 114.3Φ × 1,200W × 127.0P × 2 lines Loading part: 114.3Φ × 1,200W × 127.0P × 2 lines
Loading direction	Front loading
Loading method	Connection with conveyor line and forklift
Power source	3Ф 220V 60Hz 11.5kw/1 set
Others	Safety fence, installed in loading area Fork stopper Interlock with AGV, Optical communication

Specification of Type	Chain drive roller conveyor
Roller specification	•
Bearing	Independent pillow bearing
Chain drive	2 pieces roller cross stitch
$W \times L \times H$	2600W × 3,250L × 550H
Speed	Feeding: 12m/min
Power drive	0.4kW GM × 2 sets
Frame	Bolt-fixed, folded sheet steel construction
Guide	Center: Up-down guide Both side: Fixed guide
Interlock with AGV	Optical communication

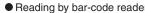
# OMNI Delivery System OMNI HOME ELECTRONICS DELIVERY SYSTEM

#### [Features]

In order to get an efficient products flow in a many stories distribution center, we activate some Omni-Lifters and realize a smooth entry and delivery works combining with conveyor system. In every floor, we install our original "Round conveyor system". Finally we can respond to various requirements in distribution center because the complex vertical and horizontal products flows are controlled by computer. Please adopt our abundant experience and performance.





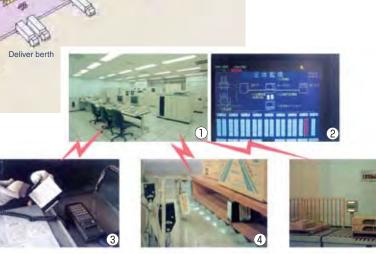




Omni-Lifter loading side



Omni-Lifter unloading side





●①Computer room ●②Operation monitoring pane

●③Handy scanner ●④Barcode reader ●⑤Message indicator