



-----Automatic storage systems



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Product Introduction



Vertical Lift Module

Vertical Carousel ▶



◀ Customisation



Vertical Carousel



Modular structure & high frequency access
Meet the needs of efficient and safe storage

Based on the operation of the chain bucket elevator, the hopper can be sent to the pick-up by the shortest path. cargo port, so it is especially suitable for frequently accessed goods



Product Advantage



Convenient

Modular structure, flexible carrier design, can be used online. It has the characteristics of short scheduling distance and fast pickup speed.

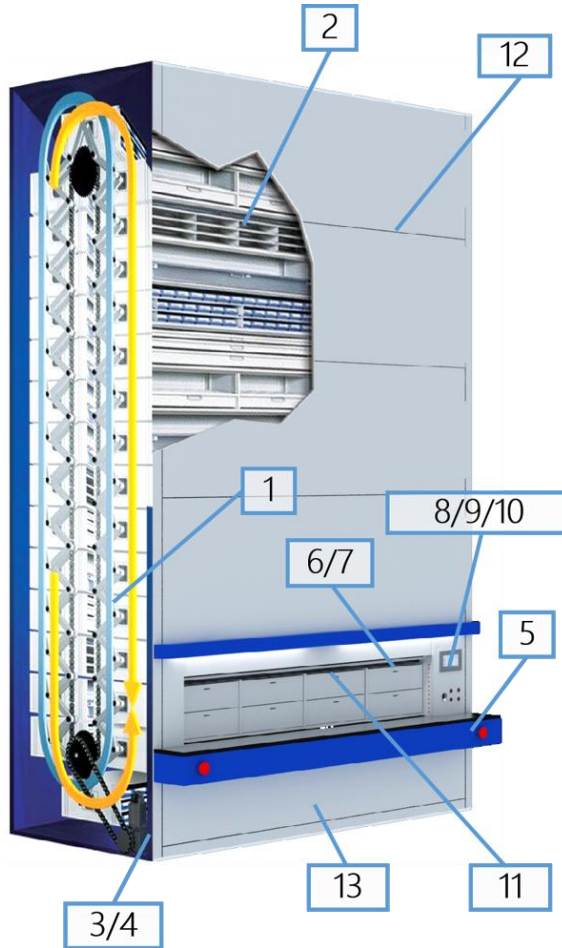
Efficient

The system has the advantages of high storage density, high flexibility, convenience and safety, and is one of the most ideal storage solutions so far.

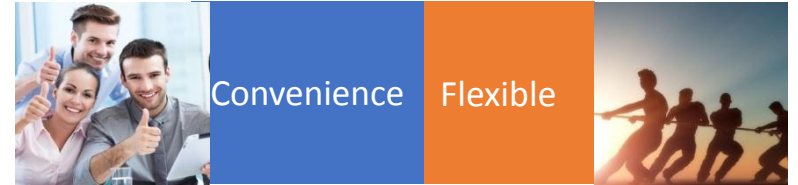
Vertical Lift Module:

Convenient, flexible and efficient storage options

Structure Principle



1. Link Rotary Mechanism
2. Multifunctional storage carrier
3. Built-in driver
4. Soft start control
5. Multifunctional work surface
6. Safety protection device
7. safety grating
8. Microprocessor Control Unit
9. Electrical control cabinet
10. Positioning systems
11. Automatic doors
12. Eco-friendly coating
13. Repairing doors



The product is based on the main principle of mechanical transmission and uses the box hopper as the storage unit and addressing unit, intelligently screening the best path to transfer the stored items to the operator at the fastest possible speed.

Especially in the production area of the workshop, this product has a clear advantage over other common storage racks. With up to 60% more storage space and precise positioning, it can be used in less time to meet the needs of various products with high storage rates such as medical drugs & consumables, equipment parts, production tools, CNC tools, etc.

Basic Parameters

No.	Item	Contents
Basic parameters		
1	Product size	Length 3800mm x Depth 1450/300mm x Height 2800-8000mm (dimensions on request)
2	Carrier (L*W*H)	3100mm×485mm×450mm (Sizes can be made to order)
3	Number of carriers	12
4	Worktop height	800mm
5	Carrier load	350kg
6	Max. load of equipment	4200kg
7	Running speed	4-6m/min
8	Weight of equipment/set	1500Kg/set
9	Main motor power	2.2kW
10	Carrier positioning accuracy	±2mm , Can be positioned to each level
11	Control systems	PLC (Siemens)
12	Power supply	Three phase five wire system , AC380V / 50HZ
13	System integration	Can be interfaced with ERP, WMS, MES and other systems



Vertical Lift Module



Efficient storage & accurate sorting Palletased material management

The pallets are used as storage units and are picked up by the lifting movement of the extractor to bring the stored goods to the operator or to the appropriate position in the lift module



Product Advantage



more
compatible

Vertical lift modules are ideal for storing items of widely varying sizes and irregular shapes. The modular design of the vertical lift system allows for almost perfect space flexibility and maximum usage height up to the top of the house.

More
flexible

Each fixed unit has a height of 100mm and can be flexibly adapted to the height of any plant or warehouse on request. If you need to change your warehouse or plant, the machine can be moved to a new location with the rest of the equipment and the optimum height can be easily adjusted by adding or removing modular units.

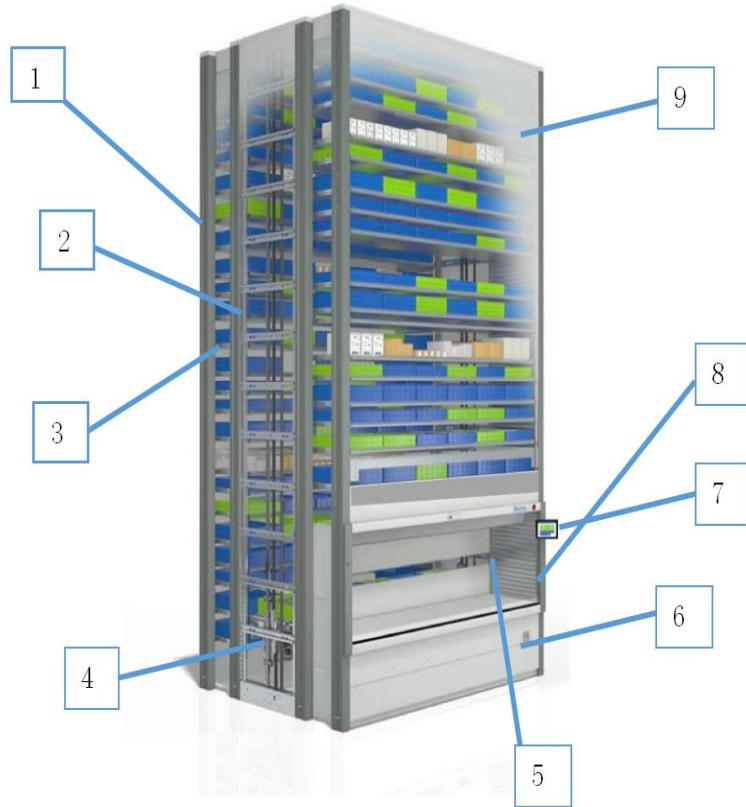
more
stable

The basic module unit, which is made up of pallets stored vertically on both sides of the module, and an access device in the centre of the module. During each task, the vertically raised and lowered pallets can automatically place the stored goods in the desired window or on the corresponding level, according to manual settings or barcode scanning.

Vertical Lift Module:

Intelligent, efficient, higher capacity storage

Structure Principle



1. Columns
2. Lifting rails
3. Tray shelves
4. Extraction units
5. Height measuring light curtains
6. Electrical control cabinets
7. Industrial computers
8. Safety light curtains
9. Outer skin



The vertical lift storage system is an enclosed system in which pallets are loaded vertically on both sides of the machine. In the middle there is a picker which automatically transports the pallets with the stored goods to the picking gate by pressing a button or reading a barcode. The modular design allows the vertical lift container to be adapted to different height requirements.

In terms of convenience, the intelligent positioning and vertical scanning system scans the height of the stored goods during storage to find the ideal storage position in the unit, automatically storing the goods and making the best use of space. In terms of storage density, the height between each vertical bin is only 25mm, maximising storage density in the smallest space possible.

Basic Parameters

No.	Item	Contents
Basic parameters		
1	Product size	L3380mm x D3074mm x H8000mm (dimensions on request)
2	Pallets (L*W*H)	3050mm×864mm×53mm (Sizes can be made to order)
3	Worktop height	780mm
4	Number of pallets	40Pallets/set (layer spacing 125)
5	Pallet loading	400kg
6	Boosting speed	Full load 0.8m/s, no load 1.0m/s
7	Weight of equipment/set	2500Kg/set ; Additional pallet 60Kg/each
8	Floor load-bearing	1300Kg/m²
9	Pallet positioning accuracy	±5mm , Can be positioned to each level
10	Withdrawal speed & access time	0.5m/s; closest distance: 20s , furthest distance: 31s , average time: 26s
11	Power supply	AC380V / 8.6KVA / 50HZ
12	Control systems	PLC (Siemens)
13	Whole machine noise	Less than 75dB



Software System

The iWMS is an intelligent material management system developed independently for vertical rotary cabinets & lifting cabinets, which is easy to operate, stable and reliable, and can achieve automation, digitalisation and intelligence of material management. It can be integrated with MES, ERP and WMS to achieve the whole life cycle management of material storage, picking, distribution, verification and issuance according to work order instructions.



Industry applications



■ Application Scenarios

Maximum available storage space for a wide range of different materials in a highly dense storage format, from bulky materials to small parts, from assembly components to fragmented parts. The versatile hoppers meet the needs of most applications and can be retrofitted to suit your requirements.



■ Application Scenarios

Vertical Carousels & vertical lift modules are used for storing medicines, medical consumables, medical files, etc. It has features such as fast transmission, accuracy and reliability. Relieves the work of pharmacists with the following advantages: improves pharmacy pick-up efficiency, reduces pharmacists' work intensity and reduces medical staff and drug inventory costs.



■ Application Scenarios

It can store books, power materials, archives, public security evidence and other materials. It is widely used in the management of various files and materials, such as cadres and personnel, finance, etc. It can be seamlessly connected to the cadre file management system of the Central Organization Department and the cadre file management system of the General Political Department of the PLA.

Product cases

Application Cases

ZYNP Corporation

Purpose: To store cylinder liners, pistons and other spare parts and production tools required for the production of automotive internal combustion engine parts, to achieve lean control of materials



Changzhou Shenli Company

Use: To replace the original shelves and store medium and large moulds, gears and other parts in warehouses to improve space utilisation



Application Cases

Sumitomo Electric Industries, Ltd

Use: To improve the automation rate of the parts warehouse and to replace the original imported storage equipment



Shanghai XXX Rail Transit

Purpose: To store the spare parts and maintenance tools required for the maintenance of urban rail vehicles and to achieve lean control of materials



Product Cases

NORINCO GROUP

Purpose: To store spare parts and maintenance tools required for the production of combat weapons such as missiles and to achieve lean control of materials



Product Cases

Autoliv (China)

Use: Line edge caching system for
airbag inspection tools for line edge
storage to improve production



Nanjing Children's Hospital

Use: Storage of medical drugs, medical consumables



Suzhou Nine Hospitals

Use: Storage of medical drugs, medical consumables



Other Cases



THANK YOU

The company is one of the professional automatic storage equipment manufacturers in China

The company's main products include vertical carousels, Vertical Lift Modules (VLM), Vertical Carousel Filing Systems, Automated storage and retrieval systems(ASRS), Smart tower storage, SMT Reel Storage, Automated Pharmacy Systems. The factory produces conveyor lines and automatic storage systems for storage parts, etc. The products are mainly used in the storage of parts and components in electronics, machinery, communications, automobiles, chemicals, and military industries.

The company's product research and development team is composed of mechanical design engineers and software design engineers.



<https://www.infismash.com/>



+86 15267227775



sales@infismash.com

INFISMASH