

LARSSON Automated Car Parking System

Product Series:

■ Lift and Slide Parking System



LARSSON PSH-YF lifting and slide parking equipment is popular as safety and fast. Stake cars to 2-8 layers depends on conventional parking slot arrangement. Adopt motor driving with chain or steel rope transmission system, stacking car by lifting and sliding pallet. Every sliding layer leaves a free space for other layer pallet lifting. Every unit runs independently and optional capacity per unit effectively controls the peak time car flow. PLC program help modern management requirement. 7 times load rate and covered with multiplex electric protection to ensure safety.

Advantages:

1. Simple structure meets standard producing, lower cost
2. Suitable for basement parking, over ground or with pit, can make 2-8 layers
3. Flexible arrangement suitable for any space
4. Security protection: Anti-falling hook, E.Stop, over limit protection devices
5. Simple structure, short assembly time

6. Multiple operation modes, including card reading, keypad and manual mode help management and charging.

7. Freely distribution and combination maximize the utilization of space.

Specification: 3 layers with pit

| | |
|---------------------------------|-------------------------------|
| Model | PSH11D3-YF |
| Capacity | 11 cars |
| Car type | Car/SUV |
| Car size(L*W*H) | 5200*2050*2100(1550)mm |
| Car weight | 2200kg |
| Lifting speed/Power Consumption | 6.0m/min 3.7kw |
| Sliding speed/Power Consumption | 10m/min 0.4kw |
| Control mode | PLC |
| Operation mode | IC card/Keypad/Manual |
| Power Supply | 3 phases, 5 lines AC380V/50HZ |

■ **Simple Lift Parking System**





LARSSON PJS-YF Simple Lift is a kind of mini-parking equipment, popular in factory, villa, private house, etc. The principle of the equipment is simple, only do lifting action via chain driving. Safety thanks to multi protection, including anti-fall hook, car detection, and special switch key. No special requirement of base work, lower cost, easy to assembly and disassembly. Simple design and less malfunction suitable for normally user operation.

Specification

| | |
|-----------------|--|
| Model | PJS2D-YF |
| Capacity | 2 cars |
| Car type | Medium-sized sedan/Large sedan(3000CC) |
| Car size(L*W*H) | 5200*2050*1950/1550mm |
| Car weight | 2200KG |
| Control mode | Electrical control |
| Operation mode | Button |
| Power Supply | 3 phases, 5 lines AC380V/50HZ |

■ Vertical Lift Parking System





LARSSON PCS-YF Vertical Lift Parking Equipment is known as parking tower in the parking industry. System combined with elevator and movable comb frame. The elevator lifts the car automatically to the appointed layer and then the sliding comb frame will take over the car in time. Fast exchange action thanks to comb theory technology. Compare to pallet type tower parking, it save half of the time. The continual action controlled by PLC program and covered with multiplex electric protection.

Advantages

1. Smart control: Light, mechanical, electrical and computer management integration.
2. High density, almost only 1 square meter land to park a car in average.
3. Long tested structure and devices to ensure system runs in best performs.
4. Adopt comb exchange technology to save time in half, the average store/retrieve time is only 60 seconds.
5. No back car required.
6. Security protection: Intelligence Management deduces human operation and multiple detection device ensure human and car safety.
7. 2.8 tons max. load to meet luxury vehicle or SUV
8. Suitable for high density parking requirement, like office building, hospital

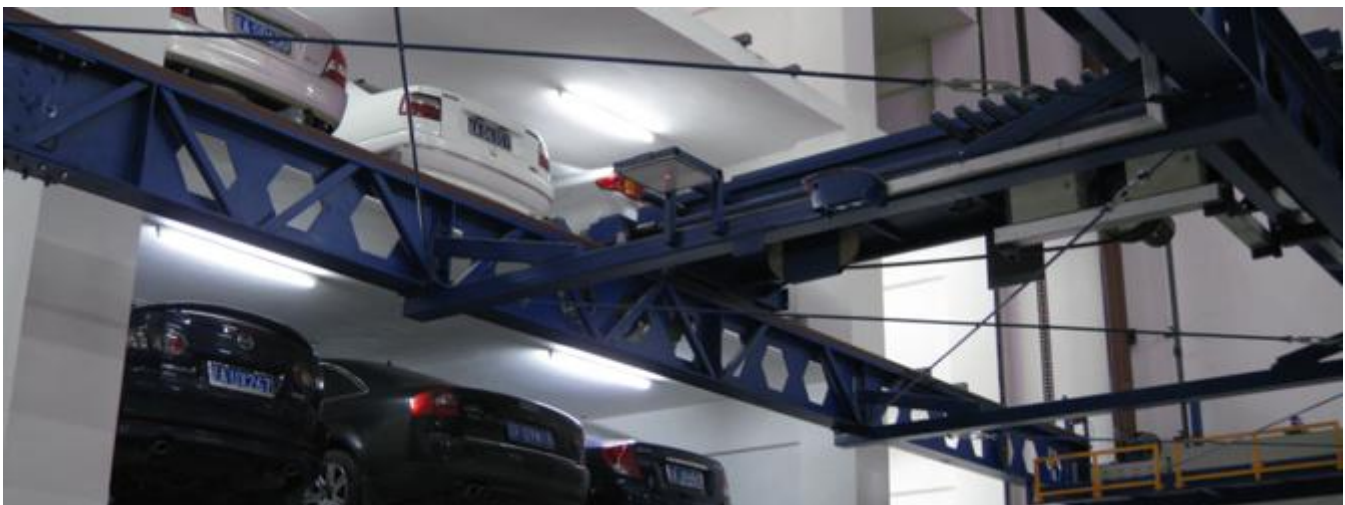
System components

1. Entrance/Exit platform
2. Turntable
3. Lift
4. Movable comb frame
5. Structure
6. Electronic control system
7. Monitor system
8. Computer record and charge system
9. Remote diagnosis system

Specification

| | |
|----------------------------------|--|
| Model | PCS50D-YF |
| Capacity | 50 cars |
| Exchange type | Comb exchange |
| Car type | Car/SUV |
| Car dimensions (mm) | L5200*W1900*H1550(2100)mm |
| Weight (kg) | 2200kgs/2800kgs |
| Lifting speed, power consumption | 90m/min, 18.5kw |
| Sliding speed/power consumption | 25m/min, 0.2kw |
| Operation mode | IC card/Touch panel/Manual |
| Electric Control mode | PLC |
| Power Supply | 3 phases, 5 lines AC380V/50HZ |
| Safety control | Guiding light, Safety stopper, Buffer, Positioning system; Emergency stop switch, Sequence protection relays, Closed circuit monitoring system |

■ New Vertical Lift Parking System





LARSSON PCY-YF is a new type of Vertical Lift parking equipment with advantages of PXD-YF, PPY-YF and PCS-YS type. Structure higher as parking tower and arrange 4-12 cars in one layer achieve to store 100 cars or more in one system. System combined with lift with platform and shuttling dolly. The lifting platform takes car arriving to every layer, and dolly arranges the car. The continual action controlled by PLC program and covered with multiplex electric protection. Freely cars quantity arrange per layer character suitable for different land. Multi entrances terminal accepted to meet peak time requirement. Fast store or retrieve thanks to speedy palletfree forking technology and synchronous lifting and moving action.

Advantages

1. With all the advantages of PXD-YF, PPY-YF, PCS-YF types.
2. High density parking as parking tower.
3. Can make in 25 layers, and
3. Customized design for irregular land size.
4. Arrange several entries or exits at different directions.
5. Combined with light, mechanical device, PLC control and computer management integration.
6. No back car required.
7. Store or retrieve a car 90 seconds in average.
8. Multiple detection system ensures human safety at the entrance/exit room.
9. 2.8 tons max. load to meet luxury vehicle or SUV parking requirement.
10. Suitable for business area, office building, hospital, hotel, etc.

System components

1. Entrance/Exit
2. Turntable
3. Lifting platform
4. Shuttling carrier

- 5.Dolly
- 6.Comb frame
- 7.Structure
- 8.Electronic control system
- 9.Monitor system
- 10.Computer record and charge system
- 11.Remote diagnosis system

Specification

| | | |
|-----------------------|---|---------------------------|
| Model | PCSD-YF | |
| Max. height | 25 layers | |
| Capacity | 120 cars | |
| Car dimensions | Dimensions(mm) | L5200*W1900*H1550(2100)mm |
| Weight(kg) | 2200-2800kgs | |
| Max. lifting speed | 90m/min | |
| Max. sliding speed | 75m/min | |
| Operation mode | IC card/Touch panel/Manual | |
| Electric Control mode | PLC | |
| Power Supply | 3 phases, 5 lines AC380V/50HZ | |
| Safety control | Guiding light, Safety stopper, Buffer, Positioning system; Emergency stop switch, Sequence protection relays, Closed circuit monitoring system | |

■ Shuttling Parking System



LARSSON PPY-YF is one of the best kinds of smart parking storage also. Suitable to make 2-11 layers, enlarge land usage to 10 times. System mainly combined with parking terminal, lift, shuttling carrier with dolly and parking space structure. Lift car from entrance terminal to appointed layer, the carrier with dolly take over the car and shuttling to appoint parking space. The stable devices work independently at the same time. The continual action controlled by PLC program and covered with multiplex electric protection. System deals with several cars in same time. Fast store or retrieve thanks speedy palletfree forking technology.

Devices combined method is changeable. Shuttling carrier can go to every layer or fixing on one layer. Lift can be installed on end of laneway or same position of entrance/exit terminal. Design according to practical requirement.

Specification

| | | |
|-------------------------|---|------------------------|
| Height | 2-10 layers | |
| Car Dimension | Dimension(mm) | L5200*W1900*H1550/2100 |
| | Weight(kg) | 2200-2800kgs |
| Capacity | 50-300 cars | |
| Running speed | Lifting speed | 90m/min |
| | Shuttling speed | 100m/min |
| | Dolly moving speed | 50m/min |
| Power supply | 3 phases, 5 lines AC380V/50HZ | |
| Electric Control System | PLC | |
| Operation mode | IC card/Touch panel/Manual | |
| Safety measures | Guiding light, Safety stopper, Buffer, Positioning system; Emergency stop switch, Sequence protection relays, Closed circuit monitoring system | |

■ Traveling Stack Parking System





LARSSON PXD-YF is one of the best kinds of smart parking storage. Suitable to make 2-7 layers, enlarge land usage to 5 or more times. System mainly combined with parking terminal, traveling crane with dolly and parking space structure. Traveling crane moving in laneway, fork car from entrance terminal, and send to appointed parking space. The continual action controlled by PLC program and covered with multiplex electric protection. Fast store or retrieve thanks to speedy palletfree forking technology and synchronous lifting and moving action.

Specification

| | | |
|-------------------------|---|-------------------------------|
| Height | | 2-7 layers |
| Car dimensions | Dimensions(mm) | 5200*1900*1550(2100)(L*W*H) |
| | Weight (KG) | 2200-2800kgs |
| Capacity | | 30~120 cars/set |
| Running speed | Lifting speed | 30m/min |
| | Moving speed | 70m/min |
| | Dolly sliding speed | 50m/min |
| Motors power | Lifting motor | 7.5KW |
| | Sliding motor | 3.0KW |
| | Dolly sliding motor | 0.75KW |
| Power supply | | 3 phases, 5 lines AC380V/50HZ |
| Operation mode | | IC card/Touch panel/Manual |
| Electric Control system | | PLC |
| Safety measures | Guiding light, Safety stopper, Buffer, Positioning system; Emergency stop switch, Sequence protection relays, Closed circuit monitoring system | |

Factory Show:



Solutions:

Bank:

As a service industry, banks usually service big amount of customer every day, with large stream of people. A lot of people have to park on road because not able to find a parking lot, or some people may turn to another bank who can provide parking spaces for them. So, the mechanical parking systems in bank are a good way to provide a quick/convenient/reliable parking, solve the road-parking, keep the customers.

Hospitals:

More and more people are willing to visit hospital by cars, so the lack of parking spaces and traffic control in hospital is causing a big problem. Because the cars are randomly park in hospital, blocked the road in hospital and make the traffic around hospital very bad. The worst is these chaotic parking sometimes blocks the road of ambulance, influence the hospital environment.

We provide shaft parking system or lifts & traveling tower parking system, which has reliable optimal parking efficiency on a limited land, fully considered the hospital situation, parked as more parking spaces as it can on the limited hospital land. With intelligent manage system and charging system/ Distance Automatic identification system/parking guiding system all in one, the parking system can stop the cars which not on hospital purpose, giving more convenience to patients and visitors.

Hotels:

Choosing mechanical parking in hotel, not only providing more car spaces, but also upgrade the hotel level. The parking charging

can related to customer consumption, modernization and Facilitation feeling to client.

Real Estate:

Real estate projects has commercial and residential types, here we specially introduce residential. The difference between residential and commercial is: there is retrieving peak hour in the morning, and parking peak hour at night. This require our system set different prior strategy at different time, using different management mode to suit the parking/retrieving; at the same time, the parking system can use the underground or Civil Defense space, meet the requirements of parking quantity.

Government building:

The parking situation in government and Public Institution influences the work environment quality. A good parking can give a good work environment, also increases the working/performing efficiency. The parking in government and public institution have to follow National Industrial Policy and requirements of energy conservation, environmental protection, safe, system advanced, reliability, also have to consider the special cars' (police car, van, etc.) height and weight parameters, adopted most types of vehicle.

Commercial building:

Commercial buildings are located in the city center or crowded place, near to shop, hotel, bank and residential, all the people and vehicles for shopping/eating/living/working will pass by, very crowd. So, the parking here have to optimal use the land, to leave more space for commercial; have to convenient, to suit for the long time peak-hour; have to reliable to driver, to frequently used for parking/retrieving; have to with powerful management system, to connect with the intelligent management and one-card solution.

Public parking:

Public parking could be built by government, street administration or any other investor, or BOT. Public parking can integrated with garden, civil defense, sightseeing while keep the original purpose of them, well use the room to get more spaces for public using. It is able to use "P+R" type, considering the traffic/parking spaces requirement/location, choose land and optimal design a big or medium size public parking.

Projects Show:

■ LARSSON PXD-YF Lifts & Traveling Tower Parking System

Shenyang Royal Wanxin International Hotel



Shenyang Royal Wanxin International Hotel is located in the very center of the Shenyang City, which is the capital of Liaoning Province, in Northeast China. The construction area of the whole Royal Wanxin project are 240,000.00 square meters, The Royal Wanxin Hotel is honored as the Tallest Building in Northeast China, including 5-star hotel, 5-A class office building. The underground parking area using PXD-YF parking system, providing 595 car parking places, not only solve hotel's parking problem, but also bring customers fun of car parking.

Jordan Swefiyeh Project



LARSSON parking system products has been used overseas, we have exported into USA, Russia, India and some other areas, Swefiyeh Project is located in Amman, Jordan, a Middle-East country. Using PXD-YF parking system, 3 systems, 7 levels, total 256 parking places, currently it is running well and solved the parking problem in nearby areas, we get widespread praise from Swefiyeh Project.

■ LARSSON PPY-YF Lifts & Shuttle Carrier Parking System

Zhengzhou Yonghe International Plaza



This project is located in Zhengdong New District in Zhengzhou, Henan province. Yonghe International Plaza is a complex of hotel, shopping mall and entertainment center etc. There are underground parking garages in front of the plaza and at back of the plaza. Total 1183 car places, 3 levels underground PPY-YF parking system, and LARSSON got CE certifications through this project, this project is fully reflecting LARSSON's technology on automatic parking system.

Urumqi No.5 Wenhua Road project



Located in Urumqi, northwest china's big city, it is invested by local government, for the sake of solving parking problem of downtown city. PPY-YF model, total 547 car places, came into use in January 2011, it is the first and biggest fully automatic parking system in northwest china.

■ **LARSSON PCS-YF Parking Tower**

Xiamen Maternal and Child Care Service Centre



This project is located in Xiamen, a beautiful seaside city which is not far from Taiwan. Before automatic parking, total ground parking places in this center are only about 20, car enter and exit caused a big traffic problem. While the parking tower is the most efficient parking system, which occupies around 60 square meters to park more than 50 cars if the height limit is not a problem. LARSSON using 6 parking towers to provide 200 car parking places, traffic and parking problems have been solved generally.

Hunan People's Hospital



This project is built for Hunan People's Hospital, LARSSON using 2 parking towers to supply 100 car parking places, considering hospital parking conditions, it is a successful solution to hospital parking problem.

■ PCS-YF Shaft Parking System

Shenyang Electric Power Bureau



LARSSON using shaft parking system for this project, which is a kind of automatic parking tower which uses main lift and dolly to store and retrieve cars automatically, total 126 parking places.

■ **PSH-YF Lift and Slide Parking Equipment**

Mercedes Benz 4S exhibition hall in Manhattan, USA



This project is for Mercedes Benz 4S shop, as there are a lot of cars in storage, it needs automatic parking to supply more parking places, considering Mercedes Benz car weight, LARSSON using PSH- YF parking equipment, which can park cars less than 2.5T, successfully meet client's demand and we received high credit from client.

CNC Project (China Netcom)



This Project is located in headquarters of CNC, 2 layers ad 3 layers of PSH parking equipments, total 472 car parking places, which is twice as many as initial designed ground parking places.

■ LARSSON PJS-YF Simple Parking Equipment

Shanghai Building Research Institute



This project is located in Shanghai, LARSSON PJS parking equipment to supply twice as many as ground parking places in this institute before, mechanical parking makes parking in order and good appearance.

Shanghai General Motor Project



LARSSON also provided a PPY parking system for this project, PJS parking equipment is used on ground parking, which provided twice as many as ground car parking places.

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