

CAR PARK SYSTEMS

Let’s build smarter spaces together



- PIT PARKING
- SINGLE STACKER
- 3 LEVEL STACKER
- PUZZLE PARKING
- ROTARY PARKING
- TOWER LIFT PARKING
- CANTILEVER STACKER
- HORIZONTAL PUZZLE PARKING

ABOUT US

Engineering Excellence Backed by a Legacy of Trust

NK Car Park Systems is an Indian engineering-driven company focused on delivering intelligent and space-efficient parking solutions for modern infrastructure developments.

Our foundation is built on a strong legacy of over 30 years in the engineering and fabrication industry, where we have successfully manufactured and supplied OEM spares and precision-engineered components to multiple industries across diverse sectors.

With decades of expertise in fabrication, mechanical engineering, structural systems, and industrial manufacturing, we are now bringing our technical excellence into the rapidly growing smart parking industry.

Supported by a skilled team of engineers, technicians, automation experts, and infrastructure planners, NK Car Park Systems is committed to creating innovative, reliable, and future-ready parking solutions that meet the evolving demands of urban India.

Our focus lies in delivering:

- Space Optimization
- Advanced Engineering
- Operational Reliability
- Safety & Compliance
- Cost-Effective Parking Infrastructure

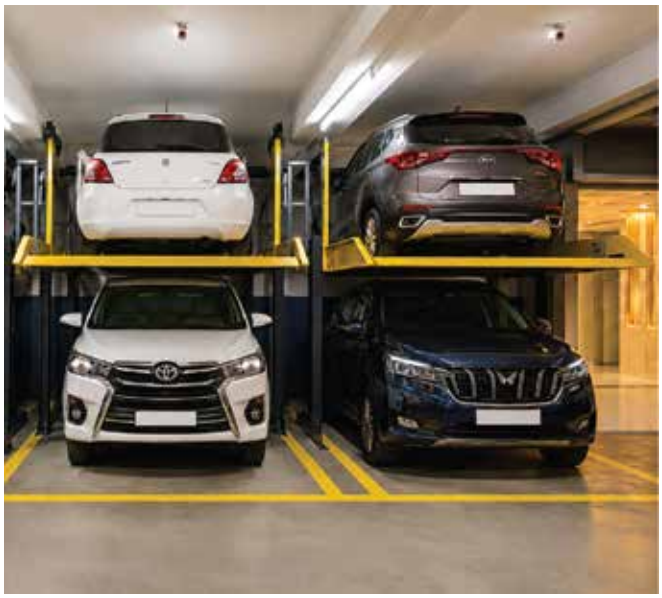
We believe smart parking is not just about vehicle storage — it is about transforming urban mobility and maximizing the value of every square foot.

Our Mission

To revolutionize urban parking infrastructure through innovative, reliable, and space-efficient smart parking solutions backed by engineering excellence, advanced automation, and customer-centric service.

We aim to help developers, businesses, and communities overcome parking challenges by delivering safe, sustainable, and technologically advanced parking systems that maximize convenience and infrastructure efficiency.

SINGLE STACKER



Stack Parking system is a multi-level car parking system that has parking space for two non-independent vehicles.

One vehicle can be parked on the lower platform and one vehicle on the upper platform.

Stack park models are available in various dimensions to suit specific requirements.

Standard Features :

- Minimum footprint allows multiple installations in minimum space.
- Independent lifting structures allows for staggered or offset installation.
- Integrated key-activated power On/Off switch.
- Smooth & Quiet hydraulic operation.
- Wide deck platform accommodates maximum car variants.
- Durable construction for maximum stability.
- Dual hydraulic cylinders combined with heavy-duty lifting chain & Equalizing mechanism.
- Automatic safety lock.
- Maintenance free composite carriage bearings.

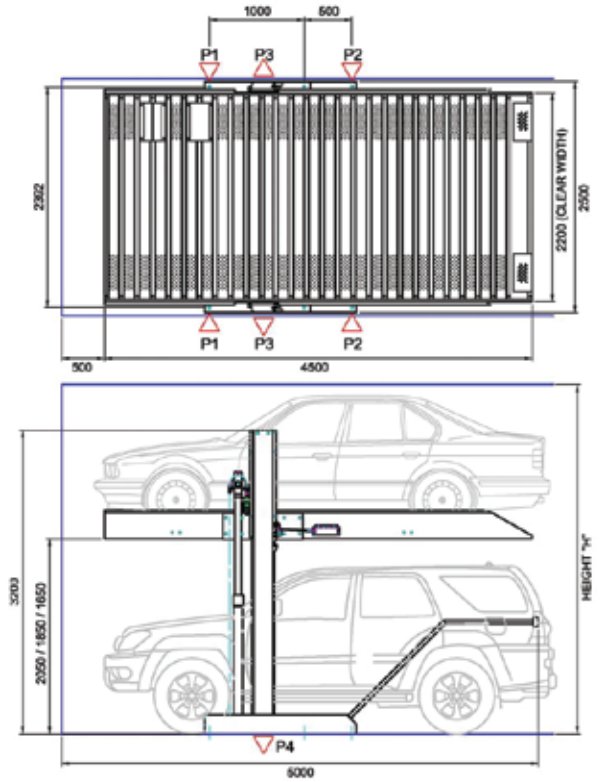
Technical Specification:

- Lifting Capacity: 2 Tons.
- Lifting Height (steps) : 2050 / 1850 / 1650mm.
- Overall Height: 4200 max.
- Overall Width: 2300mm - 2500mm.
- Platform Clear width: 2000 - 2200mm.
- System Length: 4500mm - 5500mm
- Rising / Lowering speed: Less than 45-50 sec.
- Power: 3 HP, 415V, 3 Ph, 50 Hz.
- Platform Length: 3750mm.

Benefits :

- Designed for Quick Installation & Dismantle.
- Three position parking locks.
- Silent Operation.
- Low Maintenance Cost.
- No Exposed Hydraulic Lines & Electrical Components.
- Double Hydraulic cylinder design ensured safer lifting operations.
- Hydraulic & Mechanical Lock for Safety.
- Anti-skid driving platform.
- Lockable Emergency stop button.
- Designed with Fail proof locking devices.
- Lesser retrieving time.

GENERAL ASSEMBLY LAYOUT :

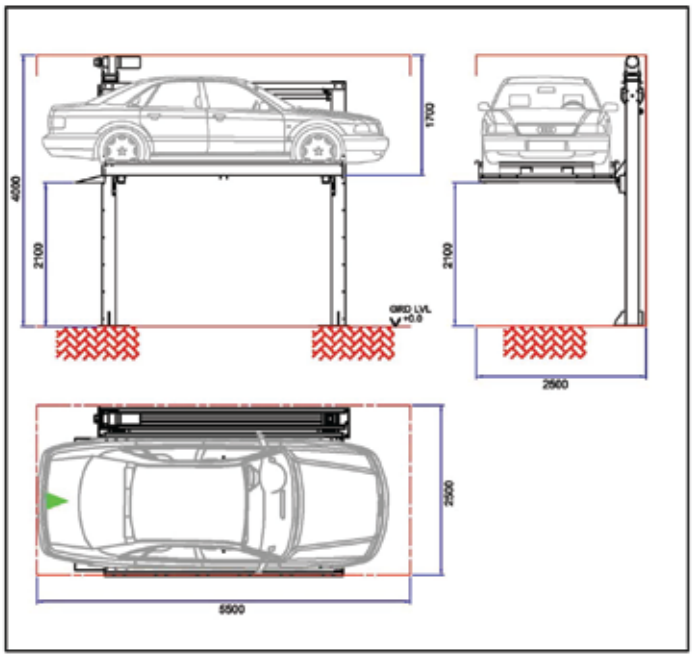


CANTILEVER STACKER



A 2-level cantilever system is a space-saving, two-story structure supported on one side, commonly used for high-density car parking.

It features stacked platforms lifted by hydraulic or electric mechanisms that eliminate front supporting columns, maximizing maneuverability and increasing parking capacity in tight, urban areas.



GENERAL ASSEMBLY LAYOUT

Standard Features :

- Main advantage of cantilever parking is one side column construction, which give more drive way area & makes maneuverability on site very easier.
- Ground level car has to be remove to retrieve top level car.
- Smooth & Quiet Traction Drive operation.
- Two Pole Design make system more rigid & Stable
- Wide deck platform accommodates maximum car variants.
- Durable construction for maximum stability.
- Fail safe brake motor, with manual brake release arrangement. .
- Automatic two position pallet safety lock, for car anti-fall protection.
- Maintenance Heavy duty roller bearing for carriage.

Technical Specification:

- Overall Length : 5500 mm
- Overall Height: 4000 mm
- Overall Width: 2500 mm.
- Platform Clear width: 2000 mm.
- Platform Length: 3800 mm.
- Rising / Lowering speed: 2 meters/min.
- Power : 1.5 HP, Brake motor
- Anti fall lock for Pallet at two positions, operated by 230 VAC solenoid actuator
- Power: 415V, 3 Ph, 50 Hz.

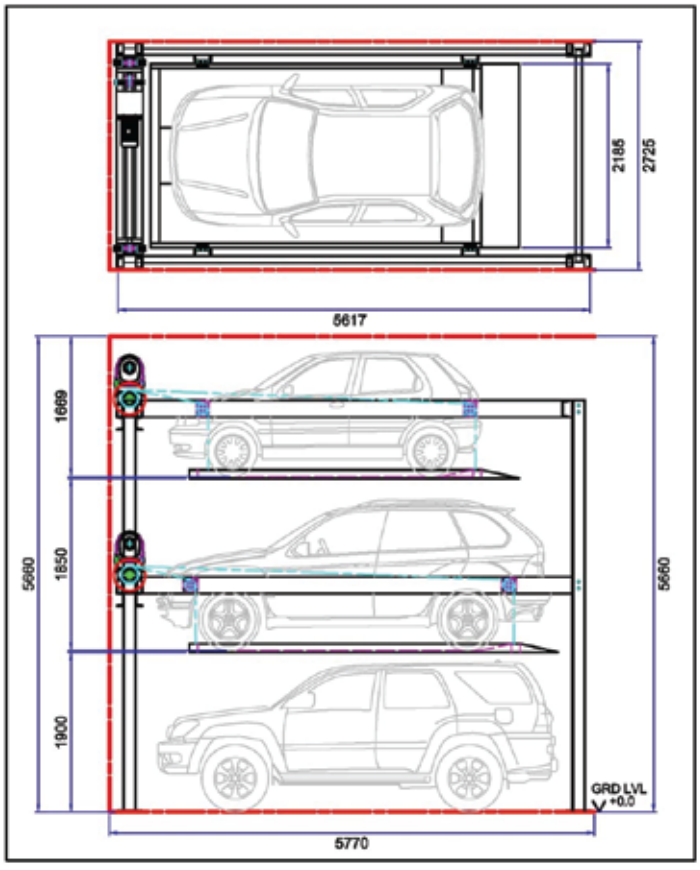
3 LEVEL STACKER



Our advanced 3-level stack parking system is a space-efficient solution designed to accommodate three non-independent vehicles vertically one on the ground level, one on the middle platform, and one on the upper platform.

Ideal for locations with limited ground area and high parking demand, this system maximizes vehicle capacity without requiring additional land.

Available in various dimensions and configurations to meet your specific requirements.



GENERAL ASSEMBLY LAYOUT

Standard Features :

- Allow maximum car in same parking space ie. Three cars per system.
- Ground level car & Middle level car has to be remove to retrieve top level car, and same for middle level car
- Through beam sensor allows safety during the operation.
- Smooth & Quiet Traction Drive.
- Four Pole Design make system more rigid & Stable
- Wide deck platform accommodates maximum car variants.
- Durable construction for maximum stability.
- Automatic safety lock.

Technical Specification:

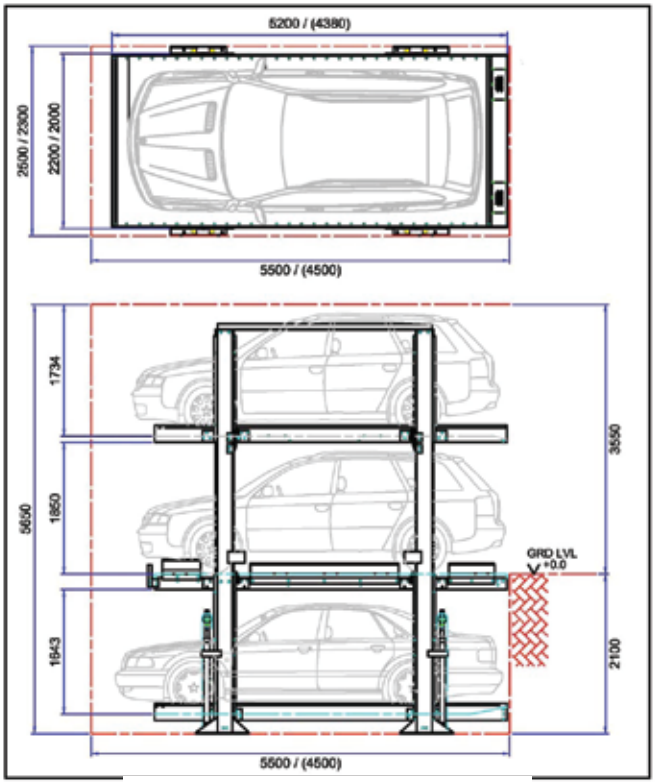
- Overall Length : 5500 mm - 4500 mm
- Overall Height: 5650 mm.(2100 mm Pit Depth)
- Overall Width: 2300 - 2500 mm.
- Platform Clear width: 2000 - 2200 mm.
- Platform Length: 4000 mm.
- Rising / Lowering speed: 2 meters/min.
- Power : 3 HP, Brake motor.
- Anti fall lock for all pallet at four positions, operated by 230 VAC solenoid actuator
- Power: 3 HP, 415V, 3 Ph, 50 Hz.

PIT PARKING



A pit parking system is a semi-automatic or fully automatic parking solution where vehicles are parked on vertically movable platforms installed in an underground pit.

It maximizes parking capacity by allowing one or more cars to be stacked below ground level, making efficient use of limited space without altering the surface layout



GENERAL ASSEMBLY LAYOUT

Standard Features:

- Allow maximum car in same parking space ie. Three cars per system.
- Ground level car has to be remove to retrieve top or pit level car, this can be a partly independent parking system
- Through beam sensor allows safety during the operation.
- Smooth & Quiet hydraulic operation.
- Four Pole Design make system more rigid & Stable
- Wide deck platform accommodates maximum car variants.
- Durable construction for maximum stability.
- Dual hydraulic cylinders combined with heavy-duty lifting chain & Equalizing mechanism.
- Automatic safety lock.
- Maintenance free composite carriage bearings.

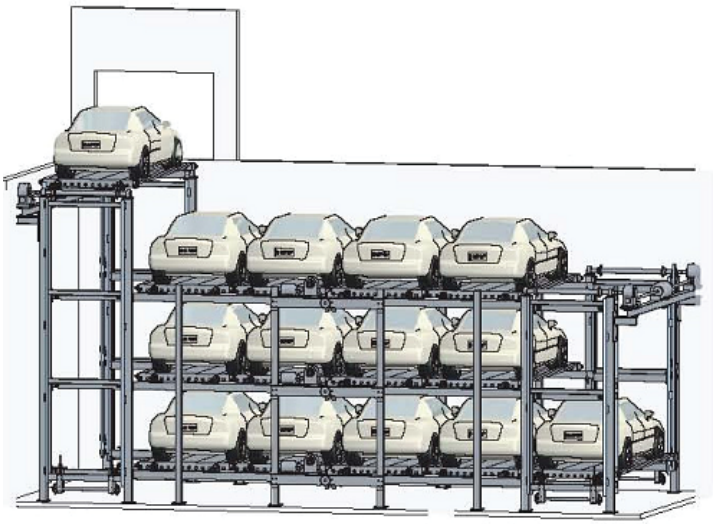
Technical Specification:

- Overall Length : 4500 mm - 5500 mm
- Overall Height: 5650 mm.(2100 mm Pit Depth)
- Overall Width: 2300 - 2500 mm.
- Platform Clear width: 2000 - 2200 mm.
- Platform Length: 4100 mm - 5100 mm.
- Rising / Lowering speed: 2 meters/min., Individual Power-pack Operating, Power: 3 HP/ 2HP, 415 VAC, 3 Ph, with Solenoid operated direction control Valve (230 VAC), pressure proportionate valve & Pressure Relief Valve (200 bar).
- Anti fall lock for all pallet at four positions, operated by 230 VAC solenoid actuator
- Power: 3 HP, 3 Ph, 50 Hz.

HORIZONTAL PUZZLE PARKING

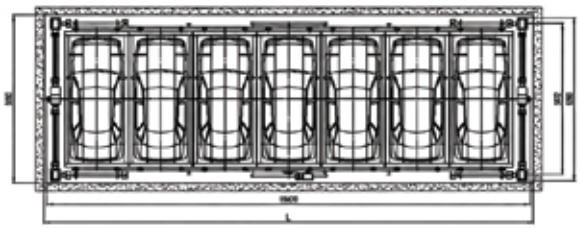


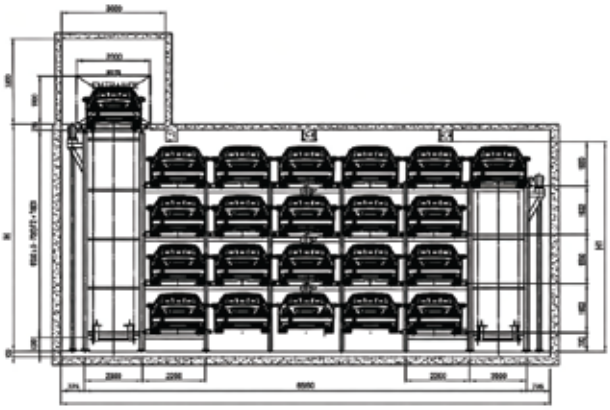
The Horizontal Puzzle Parking System is an advanced semi-automatic parking solution designed to maximize vehicle capacity within limited spaces. By utilizing horizontal and vertical movement of parking platforms, the system efficiently creates additional parking spaces without the need for ramps or extensive driving aisles.



Standard Features:

- Because this type of parking has 8 times more efficient use of space than the non mechanical parking type, relatively small underground space can be used to the maximum.
- The newest technology will make it possible to construct up to 6 levels.
- The speed of lifting has been dramatically increased with the adoption of the high-speed lifting method so that the time requested for the automobiles to be put in and taken out has been extremely shortened.
- Operation is easier with the adoption PLC controls





PARKING SPACE

LEVEL	NO. OF SPACE	WIDTH (mm)	LENGTH (mm)	HEIGHT (mm)	HEIGHT (mm)
2 LEVEL	18	2300	5000	1600	1600
3 LEVEL	27	2300	5000	1600	1600
4 LEVEL	36	2800	5000	1800	1600
INTERIORLIFT SIZE	2300	4700	4700	≥ 2100	≥ 2100

Technical Specification:

- Entrance : Top (End), Middel (Side) and Bottom (Side)
- Number of vehicles : Min. 10 & Max. 46
- Size of Vehicle : 5000L x 2000W x 1600 -1950H. in mm
- Vehicle weight : 2000 Kg. Max.
- Elevating Power : 10 - 15 Kw.
- Elevating Speed : 15 - 20 meters/min.
- Horizontal Movement Power : 3.75 - 5.5 Kw.
- Horizontal Speed : 15 – 20 meters/min.
- Operation Type : PLC based, Ten keys.
- Safety Device :
  - > Mechanical trouble detecting & indicating function.
  - > Vehical Size & position detecting sensors.
  - > Equiped with anti-fall device.
  - > Equiped with overrun detection & prevention equipement.
- Power : 220V, 415V, 3Ph, 50 Hz.

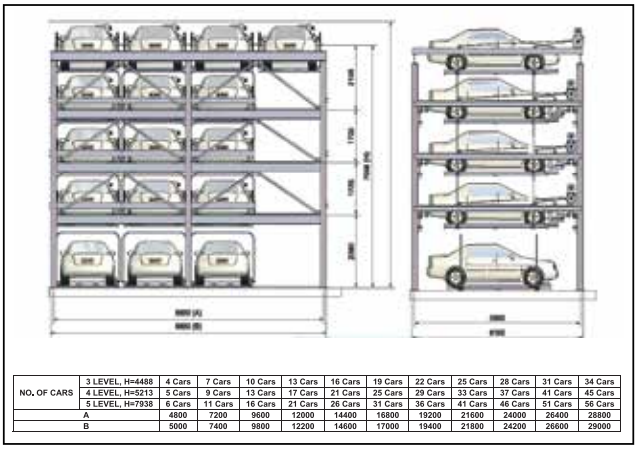
PUZZLE PARKING



Puzzle Parking Systems are automated and semi-automated parking solutions that utilize vertical and horizontal movement of platforms to accommodate more vehicles in limited areas. The system intelligently rearranges vehicles, providing easy access while significantly optimizing land utilization.

Standard Features:

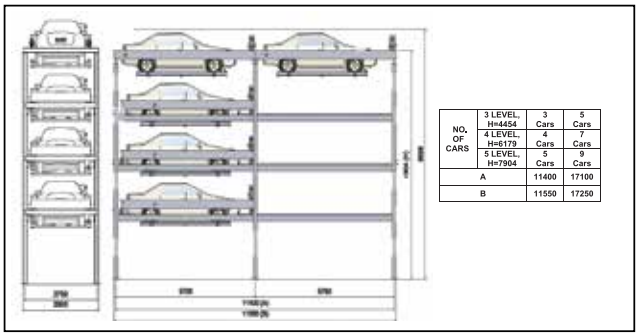
- Independent parking
- The top layer pallets can move up and down lower layer pallets can move either left to right or up and down.
- Max time to retrieve cars is 60 sec with 2 & 3 high systems and 90 sec with 4 & 5 high systems
- PLC control, easy operation, push button
- Lifting with chain for 2 levels & for 3 to 6 level wire rope is used.
- Built in drop-protection, prevents failure and accidents.
- Photoelectric checking system which controls vehicle size.
- Emergency stop push button.
- Rugged steel construction.
- Safe operation, low maintenance.



NO. OF CARS	3 LEVEL, H=4488	4 Cars	7 Cars	10 Cars	13 Cars	16 Cars	19 Cars	22 Cars	25 Cars	28 Cars	31 Cars	34 Cars
	4 LEVEL, H=5213	5 Cars	9 Cars	13 Cars	17 Cars	21 Cars	25 Cars	29 Cars	33 Cars	37 Cars	41 Cars	45 Cars
	5 LEVEL, H=7938	6 Cars	11 Cars	16 Cars	21 Cars	26 Cars	31 Cars	36 Cars	41 Cars	46 Cars	51 Cars	56 Cars
A		4800	7200	9600	12000	14400	16800	19200	21600	24000	26400	28800
B		5000	7400	9800	12200	14600	17000	19400	21800	24200	26600	29000

Technical Specification:

- Size of Vehicle : 5000L x 2000W x 1600 -1950H. in mm
- Vehicle weight : 2000 Kg. - 2500 Kg.Max.
- Elevating Power : 3 Kw.
- Elevating Speed : 3 meters/min.
- Horizontal Movement Power : 0.33 Kw.
- Horizontal Speed : 6 – 8 meters/min.
- Operation Type : PLC based, Ten keys, HMI Operated
- Safety Device:
  - > Mechanical trouble detecting & indicating function.
  - > Vehical Size & position detecting sensors.
  - > Equiped with anti-fall device.
  - > Equiped with overrun detection & prevention equipement.
- Power : 220V, 415V, 3Ph, 50 Hz.



NO. OF CARS	3 LEVEL, H=4454	3 Cars	5 Cars
	4 LEVEL, H=6179	4 Cars	7 Cars
	5 LEVEL, H=7904	5 Cars	9 Cars
A		11400	17100
B		11550	17250

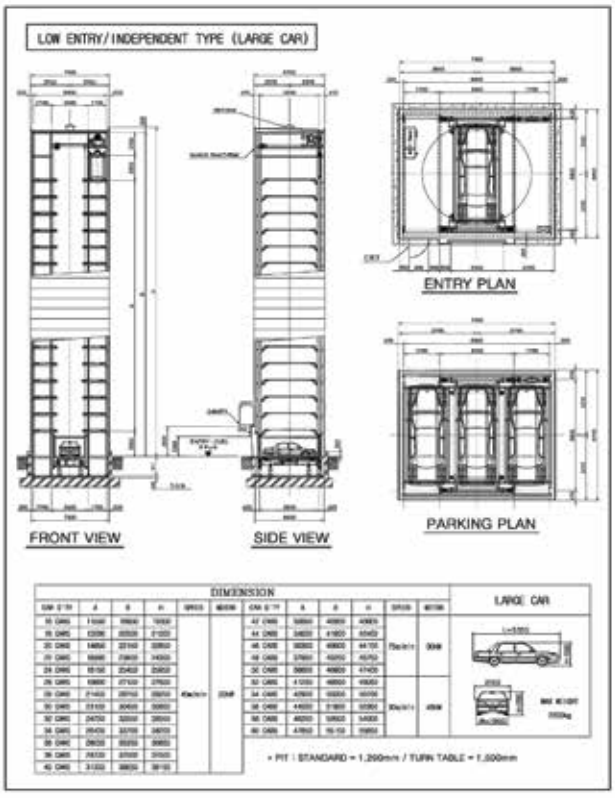
TOWER LIFT PARKING



Tower Parking Systems are fully automated vertical parking solutions designed to accommodate a large number of vehicles within a minimal ground footprint. Vehicles are automatically transported and stored using advanced lifting and transfer mechanisms, ensuring fast, secure, and convenient parking.

Standard Features:

- Minimal land use. An area of 7100x6500mm can park up to 50 vehicles.
- Lower noise & Vibration.
- Entry and exit is very quick and convenient, it is incorporated with a built in turntable on the elevator and retrieval time is less than two minutes.
- Equipped with multiple sensors and triple safety devices. A self malfunction diagnostic control provides you with an excellent level of safety.
- Capability of holding cue memory when multiple patrons come to retrieve their vehicles during rush hours.
- Integrated control with PLC, the operation situation is can be seen at one glance & operation is very easy.



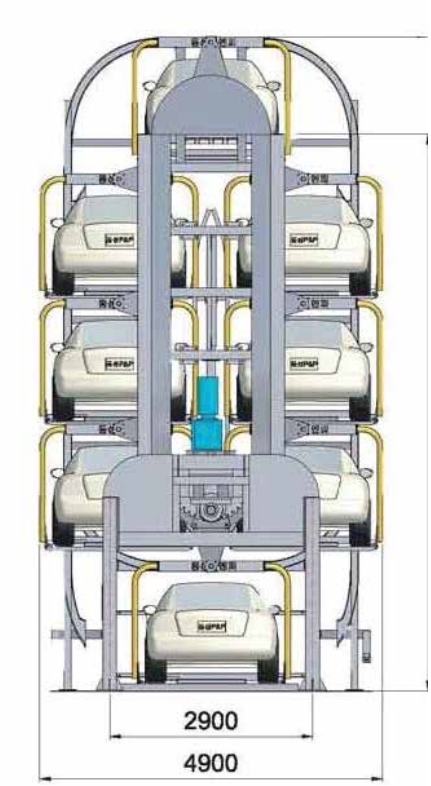
Technical Specification:

- Type : Front raise type (Built-in type, Outdoor type)
- Number of vehicles : Min. 16 & Max. 50
- Size of Vehicle : 5000L x 1950W x 1550 - 2000H. in mm
- Vehicle weight : 2000 Kg. Max.
- Elevating Power : 22 Kw. - 40 Kw.
- Elevating Speed : 45 meters/min.
- Takeup unit Power : 1.5 Kw.
- Takeup unit Speed : 18 meters/min.
- Turn table Power : 2.2 Kw
- Turn table Speed : 2.5 RPM.
- Operation Type : PLC based, Ten keys, HMI Operated
- Safety Device: Vehicle Size & position sensors, Door Sensors, Fall & overrun, prevention system, Emergancy stop switch & Various safety sensors
- Power : 220V, 415V, 3Ph, 50 Hz.

ROTARY PARKING



Rotary Parking Systems provide an efficient and economical parking solution by arranging vehicles on a rotating vertical carousel. Designed for locations where land availability is limited, the system allows multiple vehicles to be parked within the footprint of just two conventional parking spaces.



No. of Cars	Structure Height 'h'	Total Height 'H'
5	5300 mm	6750 mm
6	6200 mm	7650 mm
7	7100 mm	8550 mm
8	8000 mm	9450 mm
9	8900 mm	10400 mm
10	9800 mm	11300 mm
11	10700 mm	12200 mm
12	11600 mm	13250 mm

Standard Features:

- Independent parking
- 5 to 12 cars can be parked in the area of 2 cars.
- It is doesn't come under the building to land ratio.
- PLC control, easy operation, push button, no concierge is needed because of the plain one-touch operation method.
- As it rotates to a closer side, the time required for an automobile to be put in and taken out is short.
- Safety equipment, including the machine for preventing the pallet from falling, is perfect.
- Photoelectric checking system which controls vehicle size.
- Emergency stop push button.
- Rugged steel construction.

Technical Specification:

- Size of Vehicle : 5000L x 1950W x 1600 - 1950H. in mm
- Vehicle weight : 2000 Kg. Max.
- Power : 7.5 - 11 KW.
- Elevating Speed : 4 meters/min.
- Drive : Heavy Duty Chain & Sprocket
- Operation Type : PLC based, Ten keys, HMI Operated
- Safety Device :
  - > Mechanical trouble detecting & indicating function.
  - > Vehicle Size & position detecting sensors.
  - > Equiped with anti-fall device.
  - > Equiped with overrun detection & prevention equipement.
- Power : 220V, 415V, 3Ph, 50 Hz.
- Parking design as per available size

CAR PARK SYSTEMS

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