

Parking Solution

Samjung Parking Systems

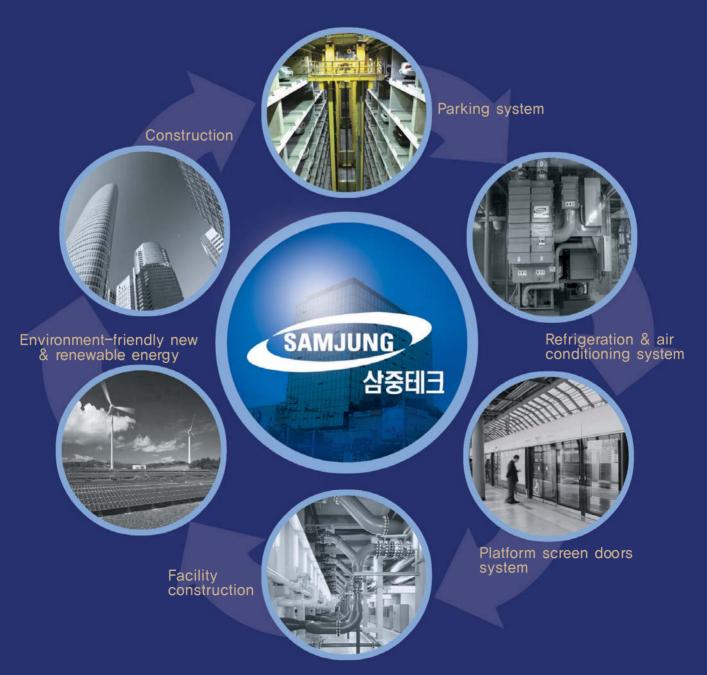
SAMJUNG TECH





Challenging to the 21st century with innovative technology

SAMJUNG TECH has sought for sustainable technology development and extensive marketing activities ever since separated from Samsung Heavy Industries in 1999 and continued to grow steadily. It ends up higher reputation and enhanced competitiveness in various businesses like Parking system and Refrigeration & air conditioning system, facility construction, platform screen door system, construction and Environment-friendly new & renewable energy.









Revolution of Parking Systems using cutting edge technologies of Samjung

In these days of increasingly more congested and tougher urban life, car parking system should be able not only to get vehicles parked but also provide a great comfort to users. In particular as value of the building can be influenced by quality of car parking system, it's so critical how much innovative its technology is in order to meet demands of new era.

Complete with high standards of safety, durability, quickness, people-friendly design, various models, and thorough After-sale Service,

Samjung Parking Systems is offering utmost convenience and pleasantness to both users and vehicles.

SAMJUNG PARKING SYSTEM **MODEL CLASSIFICATION**

ELE PARKING





An elevator located at the center of the tower delivers a pallet with car loaded in both vertical and horizontal ways. Further inverter control system enables the elevator to reach at max. speed of 120 m/min while providing lessen noise and low vibration

CART PARKING





The cart parking which is one of pallet types shortens entry/exit time of vehicles due to simultaneous operation of lift and cart. Possible to ease traffic of entry/exit through increasing number of lift.

TROLLEY PARKING





Using lift and trolley at the same time, arrangement of entrance is so flexible. So efficient system preferred when setting up plans on underground space utilization and traffic flow improvement. It features shortest entry/exit time among pallet less systems.

TRANSLATOR PARKING





For parking/retrieval, translator runs along the horizontal way and at the same time, trolley mounted on translator starts to operate vertically. Parking/retrieval time is less than a minute in average. Adding number of entrance and exit or arranging their locations in flexible ways, either will lead to increase of car park number and easier management of traffic flow.

CARBOT PARKING





Features quick operation time of pallet less system and a few advantages of pallet system. Further based on new concept of mechanism, it can be applied to trolley and translator parking system.

BOX PARKING





Combined with the way a lift moves vertically and how a conveyer moves horizontally and keeps hoisting and transferring pallets arranged in a row each floor for parking/retrieval. Suitable for small buildings with parking capacity of 20-40 vehicles. Also arranging by multi-level is possible.

SAMJUNG TECH has resolved the problems of parking in small or big cities by providing the most convenient and innovative quality of parking systems underpinning the world's best technology and long-accumulated experiences. Based on such know how and experiences, SAMJUNG TECH is creating pleasant parking environment by providing diverse parking systems complete with high standards of safety, durability, and quickness.

PUZZLE PARKING





Upper or lower pallets keep moving vertically or horizontally to get vehicles in and out. Depending on site conditions, addition of modules is possible. Simple installation and easy maintenance.

ROTARY PARKING





Cages holding cars are fastened to vertically rotating chains. Compact and most effective in small area. Available with max, 16 cars (12 cars for SUV).

CAR LIFT





It helps deliver a car vertically and manipulated in person by driver seated inside car.

FREE PARKING



If when constructing the garage, assembling type of light-weighted steel materials are used to increase floors, the parking space can be multiplied easily, it's financially advantageous.

PARKING CONTROL SYSTEM



Widely used for parking garages of hospital, residence, shopping mall, etc. Products range from barrier gate, automatic machine to collect parking fee to various advanced equipments to help safe and swift control of the traffic

SAMJUNG PARKING SYSTEMS

From Planning to A/S You're welcomed to consult with best experts of Samjung Tech Car Parking Systems who are able to offer optimized solutions under experiences and technologies accumulated over past a few decades. We will do our best efforts to provide total solutions to our esteemed clients from planning to A/S.









Consultation

You may visit us or call us from anywhere to share with our experts. We're readily visiting the site to help client to plan on construction of parking system such as adoption of parking system suitable with plot, advice on regulations, budget, how to install and after-sale service etc.

Planning and Construction

Our specialists will draw a blue print based on meticulous on-site research and consultation results. During the process of initial plan, corrections and final design, we will keep close contact with you for finding the best way of carrying out the job. Especially, construction is the most important stage among entire steps. We will do our best to cut down any inconvenience to existing building as well as to shorten the construction time allowed to us.

A/S

Samjung Tech's after-sale service is available throughout the country. Our principle is accident-free and trouble free around the clock. However, just in case of any problem, we are set to provide second to none after-sale service to our customers every corner of country.

CLASSIFICATION OF ACCOMMODATION VEHICLE

overall width overall height





Standard Dimension

Overall width(mm)	2,100
Overall height(mm)	1,550
Overall length(mm)	5,205
Weight(kg)	2,250

**Please contact us, SAMJUNG TECH, for more information about other vehicles. *The figure in () represent the dimension when the side mirrors are open.

ELE PARKING

An elevator located at the center of the tower delivers a pallet with car loaded in both vertical and horizontal directions. Further inverter control system enables the elevator to reach at max. speed of 120 m/min while providing lessen noise and low vibration. You can explore Samjung's advanced technology with the highest safety standards considered.









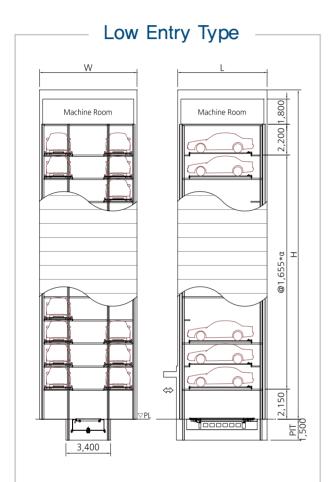


Special Features

- Low-noise and lessen vibration featured by wire rope for elevator.
- Fast entry/exit time
- Adoption of turn table mounted on the lift to offer easier and more comfortable parking & retrieval for all of users, especially for woman or inexperienced drivers. The location of entrance can be appropriately decided as per site needs.
- Various safety devices & sensors to detect vehicle like door opening sensor or pallet derailing sensor.
- Excellent flexibility in design change for higher, bigger and heavier vehicles.
- Type of system can be optionally chosen as per site requirements.

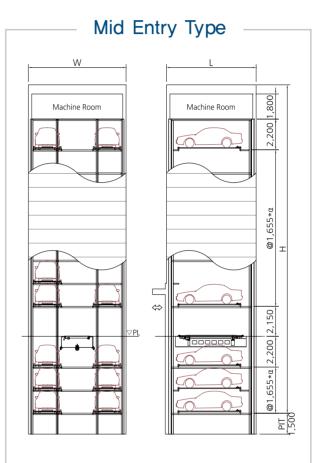
Lifting	Motor	$18.5 \mathrm{kW} \sim 45 \mathrm{kW}$
Lifting	Speed	90~145m/min
Traversing	Motor	1.5kW
	Speed	30m/min
Tuwatalala	Motor	0.75kW
Turntable	Speed	3.24RPM
Power Supply		50KVA or 60KVA

ELE PARKING (Independent Steel Type)



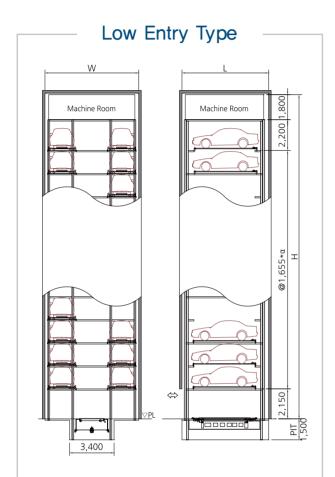
Standard Dimension

Capacity (vehicles)	W(mm)	L(mm)	H(mm)
20			21,700
24			25,000
28			28,300
32			31,600
36	7,500		34,900
40			38,200
44			41,600
48		6,955	44,900
52			48,200
56			51,500
60			54,800
64			58,100
68			61,400
72			64,700
76			68,000



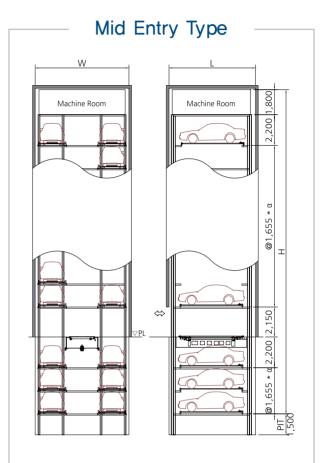
Capacity (vehicles)	VV(mm)	L(mm)	H(mm)
20			22,200
24			25,600
28			28,900
32			32,200
36	7,500		35,500
40			38,800
44			42,100
48		6,955	45,400
52			48,700
56			52,000
60			55,300
64			58,700
68			62,000
72			65,300
76			68,600

ELE PARKING (Built-in Type)



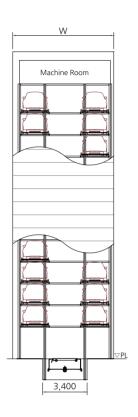
Standard Dimension

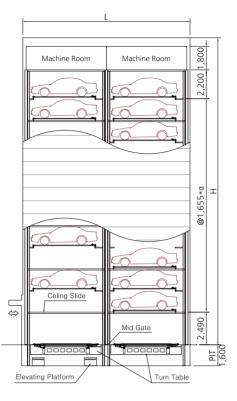
Capacity (vehicles)	VV(mm)	L(mm)	H(mm)
20			21,100
24			24,400
28			27,700
32	7,000		31,000
36			34,300
40			37,600
44			41,000
48		6,600	44,300
52			47,600
56			50,900
60			54,200
64			57,500
68			60,800
72			64,100
76			67,400

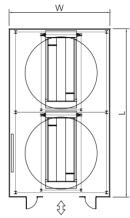


Capacity (vehicles)	VV(mm)	L(mm)	H(mm)		
20			21,600		
24			24,900		
28			28,300		
32			31,600		
36	7,000		34,900		
40			38,200		
44			41,500		
48		6,600	44,800		
52			48,100		
56			51,400		
60			54,700		
64			58,000		
68			61,400		
72			64,700		
76			68,000		

ELE PARKING (Double Type)







- · Ceiling Slide: When parking a vehicle at inner tower, operation from 2nd level and upward by lift of outer tower won't discontinue because ceiling slide installed at upper part of entrance level of outer tower ensures safety of driver and vehicle. Ceiling slide is programmed to close automatically when a vehicle is under parking or retrieving process at the entrance of inner tower.
- · Mid Gate: Located in between two towers and blocks out tower car's access to inner tower.
- · Elevating Platform: Rising to cover up the pit of outer tower so that it can help a car to drive in to inner tower.



Special Features

- This system is most appropriate for area where land is narrow shaped and long. As one module of system corresponds to twice of single unit and two modules does four times of single unit, more than efficient in terms of capacity.
- Simultaneous operation of both towers to substantially drop parking/retrieval time.
- Possible to have either one single entrance or separately arranged entry and exit, according to site requirements.

Capacity (vehicles)	W(mm)	L(mm)	H(mm)
31			18,805
35			20,460
39			22,115
43	7700	12.600	23,770
47	7,700	12,600	25,425
51			27,080
55			28,735
59			30,390
63			32,045
67			33,700
71	7,800		35,355
75		12,600	37,010
79			38,665
83			40,320
87			41,975

BOX PARKING

Using the way a lift moves vertically and how a conveyer moves horizontally, it keeps hoisting and transferring pallets arranged in a row each floor for parking/retrieval. Suitable for small buildings with parking capacity of 20-40 vehicles. Arranging by multi-level is also possible.







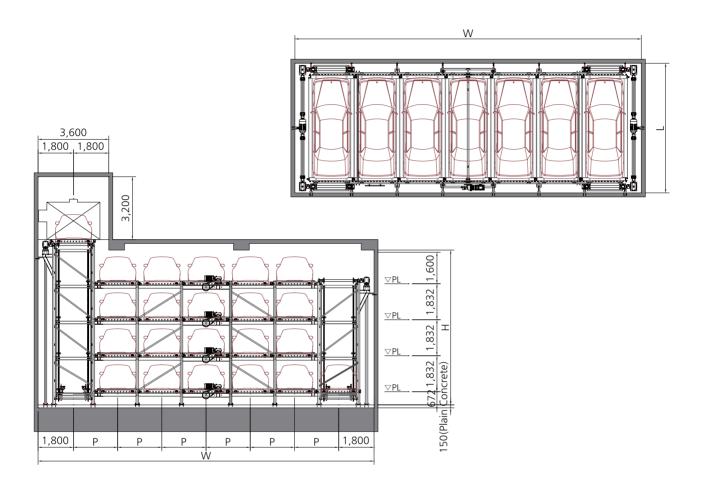


Special Features

- Suitable for the plot with narrow and long shape and space efficient,
- Turn table mounted lift is optional.

l iffica	Motor	15kW
Lifting	Speed	20m/min
T	Motor	3.7kW(5.5kW)
Traversing	Speed	20m/min
Power Supply		45KVA
		·

BOX PARKING



	Level2		Level3		Level4	W(mm)	L(mm)
N	H(mm)	N	H(mm)	N	H(mm)	(P:2,250)	L (11111)
6		8		10		10,350	
8		11		14		12,600	
10		14		18		14,850	
12		17		22		17,100	
14		20		26		19,350	
16		23		30		21,600	
18	4,220	26	6,050	34	7,880	23,850	6,600
20		29		38		26,100	
22		32				28,350	
24		35				30,600	
26						32,850	
28						35,100	
30						37,350	

 $[\]cdot$ Please contact us, it's smaller than standard measurements. \cdot N means capacity of vehicles,

CART PARKING

➤ Pallet Type The cart parking which is one of pallet types shortens entry/exit time of vehicles due to simultaneous operation of lift and cart. Possible to ease traffic of entry/exit by increasing number of lift.









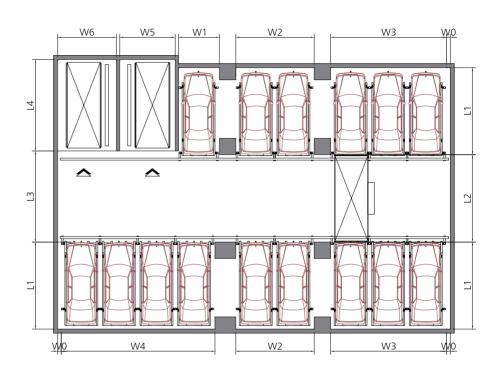
Special Features

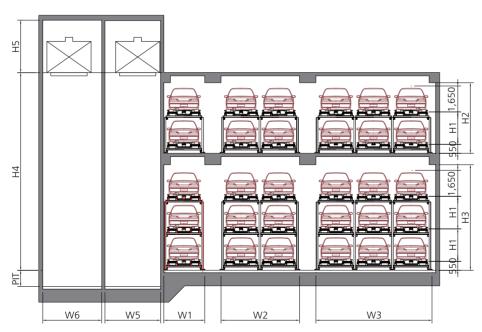
- Simultaneous operation of lift and carts to substantially drop entry/exit time.
- Addition of lift to enable smoother arrangement of entrance.



1 :4:	Motor	22kW					
Lifting	Speed	60m/min					
	Direction	Traversing	Shifting				
Cart	Driving Type	Friction	Friction				
	Motor	AC MOTOR	AC MOTOR				
	Speed	60~120m/min	46m/min				
Power Supply		1 LIFT: 50KVA					
POWE	er Supply	2 LIFT: 75KVA					

CART PARKING





		٧	V(mm)				L(mm)			H(mm)					PIT	
WO	W1	W2	W3	W4	W5	W6	L1	L2	L3	L4	H1	H2	НЗ	H4	H5	(mm)
300	2,600	5,000	7,400	9,800	3,500	3,700	5,450	5,450	5,650	6,000	2,000	4,200	6,300	VAR.	3,200	1,200

TROLLEY PARKING

➤ No Pallet Type Combined with lift vertically formed from entrance to parking floors and trolley running individually every floor for parking/retrieval, arrangement of entry and exit is so flexible. Possible to efficiently cope with plans on underground space utilization and traffic flow improvement.

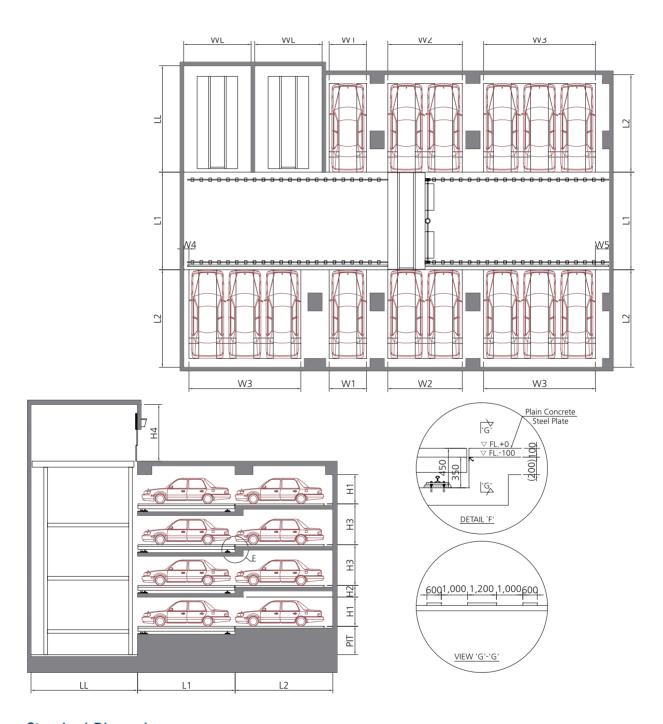


Special Features

- Way through type of entrance and addition of lift to enable increase of the car number and improvement of traffic flow.
- Making full use of parking space whichever elevated or underground when designing building. Semi permanent concrete parking shelves to offer easier maintenance environment.
- Palletless, simultaneous process of entry/exit to substantially drop parking/retrieval time (one minute)
- Parking lots can be built with steel frame structure. (possible to reduce construction time)

	1						
1.0	Driving Type	Rope or Chain					
Lift	Motor	22kW					
	Speed	60m/min					
	Direction	Traversing	Shifting				
Trolley	Motor	3.7kW	5.5kW				
	Speed	90m/min	16sec/cycle				
Pow	ver Supply	60KVA					

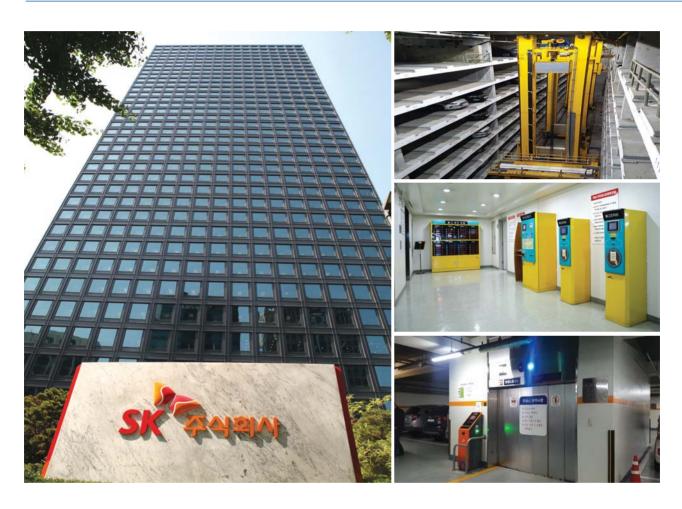
TROLLEY PARKING



W(mm)				L(mm)			H(mm)				PIT		
W1	W2	W3	W4	W5	WL	L1	L2	LL	H1	H2	Н3	H4	(mm)
2,200	4,400	6,600	300	800	3,800	5,500	5,500	6,000	1,650	650	2,300	3,200	1,600

TRANSLATOR PARKING

➤ No Pallet Type Translator running in both vertical and horizontal way to park/retrieve vehicles to parking lots on either right or left hand like automated warehouse. Arranging their locations in flexible ways will lead to better utilization of underground space and easier management of traffic flow.

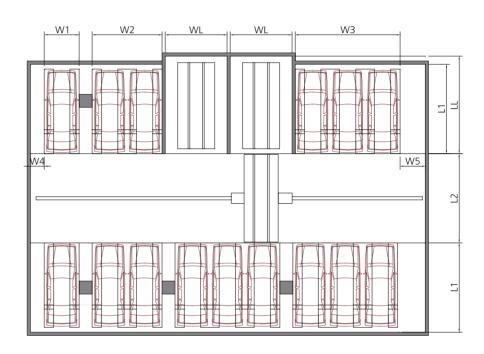


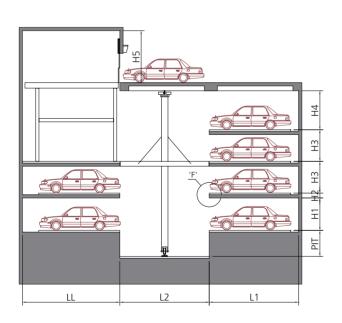
Special Features

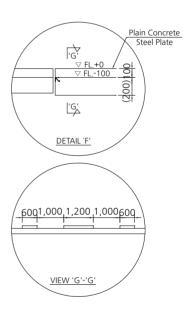
- Simultaneous operation of both driving and lifting to enable quick parking/retrieval time (one minute in average).
- Possible to add lift in operating system and combined it with translator will give more flexible location preference of entrance.
- Semi-permanent parking shelves in concrete and as there are no pallets to take care, maintenance is not required.
- Lower floor height (1,900mm) to minimize floor height and maximize space utilization when new building construction is considered.
- Parking lots can be built with steel frame structure (possible to reduce construction time).

	Driving Type	Rope & Chain						
Lift	Motor	22kW						
	Speed	60m/min						
	Direction	Lifting	Traversing	Shifting				
Translator	Motor	18.5kW	5.5kW					
	Speed	50m/min 50m/min 16sec/cycle						
Pow	er Supply	60KVA						

TRANSLATOR PARKING







	W(mm) L(mm)					H(mm)				PIT				
W1	W2	W3	W4	W5	WL	L1	L2	LL	H1	H2	НЗ	H4	H5	(mm)
2,200	4,400	6,600	850	1,550	3,800	5,500	5,500	6,000	1,650	300	1,950	2,400	3,200	1,800

CARBOT PARKING

➤ No pallet type Combined with quick operation time of pallet less system and a few advantages of pallet system. In addition, based on new concept of mechanism using battery it can be applied to trolley and translator parking system.







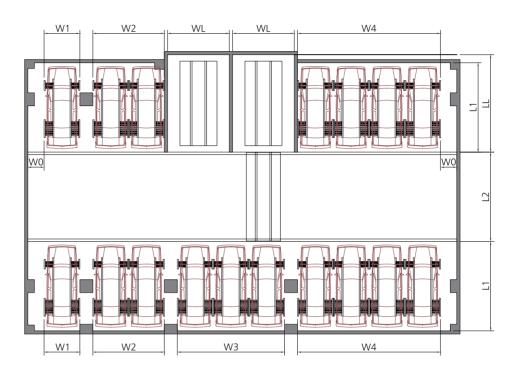


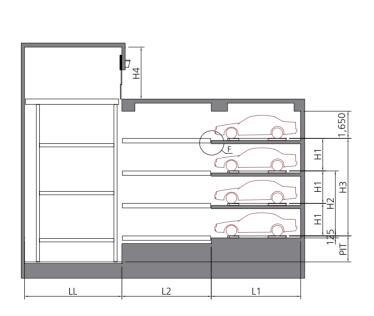
Special Features

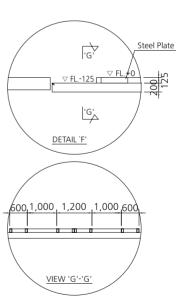
- Car wheels lifting up system
- Highly efficient as several layers can be covered by one carbot
- Simple construction of parking slots
- Steel structure is available as parking slot (Short construction period, high quality of performance.)

	Driving Type	Rope					
Lift	Motor	22	kW				
	Speed	60m/min					
	Direction	Cart	Carbot				
Carbot	Motor	1.5kW	4kW, 1.5kW				
	Speed	60m/min 50m/mir					
Power Supply		50k	(VA				

Carbot Parking







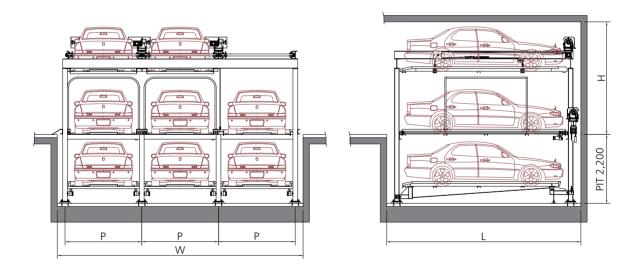
W(mm)						L(mm) H(mm)					PIT	
WO	W1	W2	W3	W4	WL	L1	L2	LL	H1	H2	Н3	(mm)
1,000	2,200	4,400	6,600	8,800	3,800	5,600	5,600	6,000	2,000	4,000	6,000	1,800

PUZZLE PARKING

Upper or lower pallets keep moving vertically or horizontally to get vehicles in and out. Depending on site condition, addition of modules is possible. Features simple installation and easy maintenance.







Special Features

- Utmost space efficiency.
- In case multiple modules are installed even if one module is out of order, other modules will be operated without obstruction.
- Quick entry/exit time.

Standard Specifications and Dimension

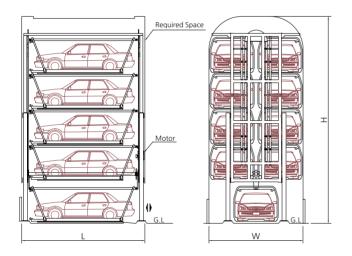
Class	ification	2F / 5 Cars	3F / 8 Cars	4F / 10 Cars				
P(mm)	2,450	2,450	2,500				
W	(mm)	7,850	7,850	8,000				
L(mm)	6,250	6,250	6,600				
H	(mm)	2,600	3,700	5,450				
Pľ	T(mm)	2,200	2,200					
Lifting	Motor	3.7kW						
Litting	Speed	5m/min						
Troversing	Motor							
Traversing	Speed		10m/min					

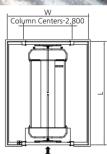
ROTARY PARKING

Cages holding cars are fastened to vertically rotating chains. It's compact but effective in small area. Available with max. 16 cars (12 cars for SUV).









Standard Specifications

Driving Type	Chain
Speed	3.8m/min
Motor	11kW
Operation Type	Line-Start Column
Control Type	Micom type
Power	15KVA

Special Features

- Short consecutive parking/retrieval time.
- High efficiency of space utilization. (Max. 16 cars on the plot available with two car park bays).
- Rapid parking/retrieval process
- Suitable for downtown parking facility

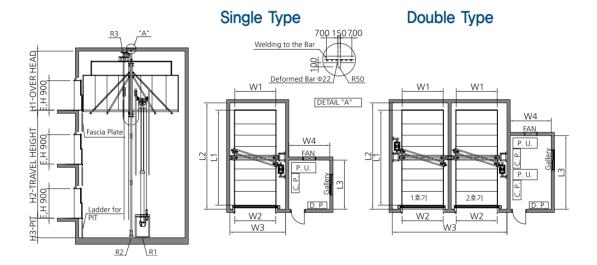
Capacity (vehicles)	W(mm)	L(mm)	H(mm)
7			8,810
8			9,700
9			10,590
10			11,480
11	5,000	6,300	12,370
12	5,000	0,300	13,270
13			14,160
14			15,050
15			15,940
16			16,830

Please secure W+350, L+300, and H2+300 in cases of additionally installing exterior(based upon 50T panel of an independent steel tower).
Please secure W+100, L+300, and H2+300 in cases of interior type.

CAR LIFT

It helps deliver a car vertically and is manipulated in person by driver seated inside car.





* Requirements for Building Construction

- 1. A ventilation fan (over W300 x H300) and gallery should be installed in the machine room.
- 2. Entrance door (over W900 x H1800) equipped with a lock should be fire-proof and above fire-proof door sill as high as H250.
- 3. Cables and ducts for water tank, elevator, relevant devices only can be installed and cannot be used for any other purpose. If Styrofoam needs to be used as ceiling material, it must be finished with a fireproof
- 4. Switches for lights and ventilation fan have to be located nearby entrance and power supply should be separately drawn.
- 5. Wires and conduits for intercom device need to be laid up to control room.
- 6. Machine room is required to keep min. 2100mm in height, and equipped with a fire extinguisher.

Standard Specifications

Max Capacity	3,000kg
Motor	37kW
Speed	20m/min

Classif	ication	Single Double				
	W1	2,500				
W(mm)	W2	2,70	00			
	W3	3,800	7,400			
	W4	2,5	00			
	L1	6,0	00			
L(mm)	L2	6,600	(6,800)			
	L3	3,000	4,500			
	H1	4,0	00			
H(mm)	H2	20,0	000			
	НЗ	1,6	00			
Reaction	R1	10,5	500			
Force	R2	9,9	00			
(Kg)	R3	6,6	00			

FREE PARKING

If when constructing the garage, assembling type of light-weighted steel materials are used to increase floors. the parking space can be multiplied easily, it's financially advantageous.



Special Features

- Existing parking garage is least disturbed as it offers a short construction time.
- Financially favorable as light-weighted assembling type of steel frame structure is used, which is easy to assemble and disassemble.
- Economical as it doesn't require electric power.
- Possible to make optimized design as per site requirements and construct more than 3 layers.
- Suitable for various usages like factory, parks, residence, department store, temporary parking garages, etc.



Chunan Branch office of Samsung SDI(2 floors, 3 levels)



Geoje Shipyard of Samsung Heavy Industries(3 floors, 4 levels)



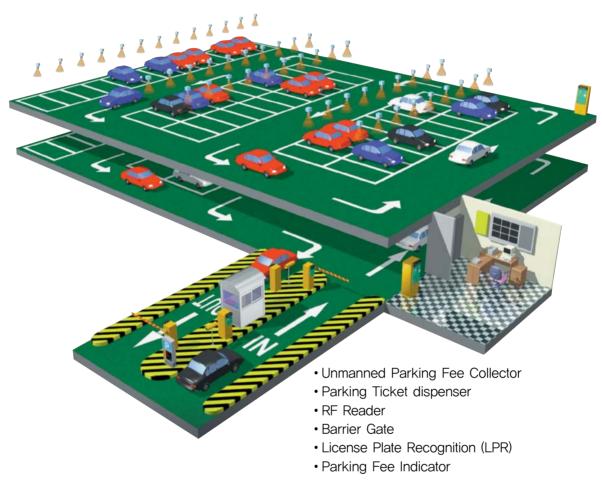
Gumi Plant of Samsung Electronics(2 floors, 3 levels)



Newcore Dept. gangnam Centre(3 floors, 4 levels)

PARKING CONTROL SYSTEM

SamJung's know-how on parking systems will lead to parking control system.





ADVANCED PARKING CONTROL SYSTEM







History of SAMJUNG TECH

2019	Dec.	Awarded the Export Tower of \$ 10,000,000.	2006	Nov.	Awarded a 'Korea's best brand Certification' for the
	Jun.	Got awarded 100 Million USD worth of Platform Screen			Parking System Business
		Doors project in Brazil (44 stations in total).	2005	Dec.	Launched Platform Screen Door Business
2018	Dec.	Bagged more than 15 Million USD worth of contracts in		Apr.	Established R&D Center and acquired the certification
		Automated Parking Systems from overseas.			from Korea Industrial Technology Association (KOITA)
2015	Apr.	Awarded Management Innovation Business (MAIN-BIZ)	2002	Feb.	Registered specialized fire-fighting facility construction
2012	Dec.	Acquired NET (New Excellent Technology) Certification			business
		of Solar Energy Hybrid Absorption Chilling and	2001	Sep.	Established a factory in Gimpo
		Heating system from MKE		Aug.	Established a subsidiary company, Samjung Parking
2011	Nov.	Awarded Excellent Quality Competitiveness Enterprise			System
		from Ministry of Knowledge Economy (three years in a		Jul.	Acquired ISO 9001 certification. Acquired a license for
		row) (Ministry of Knowledge Economy)			steel structure construction business, mechanical
2010	Nov.	Awarded the Export Tower of \$5,000,000			equipment construction business
	Oct.	Awarded Excellent Quality Competitiveness Enterprise		May.	Acquired a license for iron and steel construction
		from Ministry of Knowledge Economy (two years in a			business
		row) (Ministry of Knowledge Economy)		May.	Established a subsidiary company, Samjung System
	Mar.	Launched Nature type daylighting system business		Apr.	Established a subsidiary company, Samjung Machines
2009	Nov.	Awarded Excellent Quality Competitiveness Enterprise			and Electrics
		(Ministry of Knowledge Economy)		Mar.	Acquired a license for iron and steel construction
	Oct.	Acquired CE Certification			business / Selected as a venture capital investment
	Sep.	Registered Renewable Energy Company from Ministry			business from SMBA
		of Knowledge Economy		Feb.	Established a subsidiary company, Samjung HVAC
	Jul.	Exported Parking system to Vietnam and India			ENG
2008	Oct.	Acquired ISO 14001:2004 (Environmental management	1999	Dec.	Established Samjung Tech Co., Ltd. (separated from
		system)			Samsung Group)
	Mar.	Established Samjung engineering and construction	1992	Jan.	Launched refrigeration & air conditioning business
		Co., Ltd.	1979	Oct.	Delivered tower parking #1(Daegu, Mido Department
2007	Oct.	Exported parking system to Russia			Store)
	Aug.	Exported Parking system to India	1974	Aug.	Established Samsung Heavy Industries Co., Ltd.





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