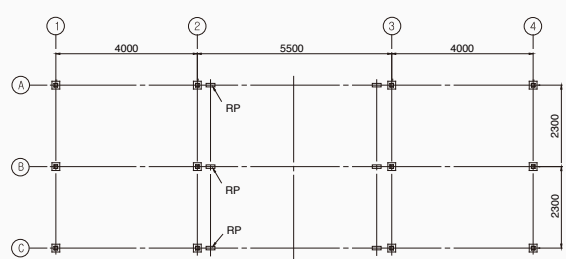
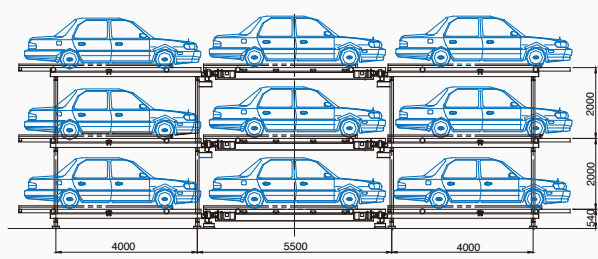


LOAD DATA (VERTICAL LOAD)



GRF SU series

Level	Vertical load for each column (Ton)								
	A,C-1	A,C-2	A,C-3	A,C-4	B-1	B-2	B-3	B-4	RP
1	1.8	3.5	3.2	2.3	3.7	5.9	5.1	4.9	1.5
2	2.7	5.9	5.6	3.7	5.5	9.5	8.3	7.3	1.5
3	3.7	8.2	8.0	4.9	7.3	13.0	11.1	9.7	1.5
4	4.5	10.5	10.2	6.0	9.2	16.6	14.9	12.1	1.5

GRF L series

Level	Vertical load for each column (Ton)								
	A,C-1	A,C-2	A,C-3	A,C-4	B-1	B-2	B-3	B-4	RP
1	1.7	3.3	3.0	2.2	3.4	5.5	4.7	4.5	1.4
2	2.5	5.5	5.2	3.4	5.1	8.8	7.7	6.7	1.4
3	3.4	7.6	7.4	4.5	6.8	12.1	10.8	9.0	1.4
4	4.2	9.8	9.5	5.6	8.5	15.4	13.8	11.2	1.4



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* The technical data and illustrations are subject to change for improvement without any notice

Grand Parking for medium to large size solution

Grand Parking System is a multi-floor, Cart type parking system that quickly and safely parks as many vehicles as possible within a confined space. Because the parking facility executes the parking and extracting vehicles simultaneously, it enhances spatial efficiency, which makes it perfect for parking facilities of large-sized building.

Steel structure

The main frame of Grand Parking System is made of Structural Steel. It is designed to withstand the Structural dead load as well as the live load of the vehicles.

Machinery

The mechanical components of Grand Parking System include; pallets onto which vehicles are loaded and transported; carts that transport the vehicles horizontally; lifts that transport the vehicles vertically; drive parts that operate each unit; guides and rails; containment unit that stores the vehicles; lift platforms on the entry floor; and automatic door at the entrance.

Electrical Work

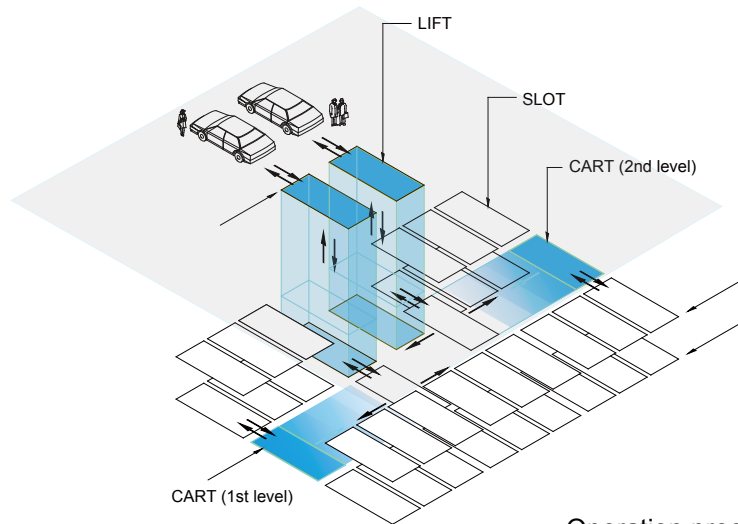
Electrical works include pipe-laying, wiring, grounding, lighting of the entry floor, and installing the wiring ducts within the parking facility. If Grand Parking is installed and contained within a larger building, the grounding work may be omitted unless specified otherwise.

Control Work

Control works include installations of various sensors, the main control panel, the local control panel, the operation panel, the hardware and the software programs of the computer and the PLC.

Appurtenant Devices

Appurtenant Devices Other devices include the vehicle guiding lamps above the automatic door; the induction indicators and mirrors along the vehicle-entry.



Operation process

Operation process

The nearest available pallet selection is fullycomputerized. The car lift will elevate the car to the required level, and the cart will transport the car to thedesignated pallet slot for parking. Retrieval of car is just the reverse process.

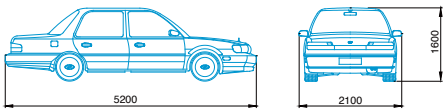


Technical specification (Typ.)

Parking capacity		45 slots	
Type		GRF45L / GRF45SU	
Avrg. tact time		90~110 sec/car	
Temperature range		-25°C ~ + 45°C	
Equipment	LIFT	Q'ty	2 sets
		Elevating	Motor 22~30Kw x 4P x 1/39.79 geared motor
			Speed 40~45 m/min
			Mechanism Ø14 x 8 wire ropes
		Shifting	Motor 2Kw x 4P x 1/30 geared motor
			Speed 30~46 m/min at max.
			Mechanism Driving at the friction wheel
	CART	Q'ty	3 sets
		Traveling	Motor 2.2~3.7 Kw x 4P x 1/10 geared motor
			Speed 60~80 m/min
		Mechanism	Direct driving at the cart wheel
		Motor	2.2~3.7 Kw x 4P x 1/60 geared motor
			Speed 35~465 m/min at max
		Mechanism	Driving at the friction wheel
		Picking	Motor 0.5Kw x 4P x 1/60 geared motor
			Speed 6.3 m/min at max.
		Mechanism	Direct driving at the pinion and rack
	AUTO DOOR	Q'ty	2 sets
		Opening size	2600mm(W) x 2100mm(H)
		Opening type	upside sliding door
		Motor	0.2Kw x 4P x 1/20
	CONTROL	Opening speed	15 ~20 m/min
		Speed control	Vector inverter
		Sequence control	PLC & computer control
		Operation board	Touch screen and computer
	PALLET	Q'ty	45 pallets
		Size	2100mm(W) x 5300mm(D)
		Pallet rail	100 x 100 x 3.2t square pipe
	FRAME		Structural steel
Power		AC 380V, 50/60Hz, 3PH	

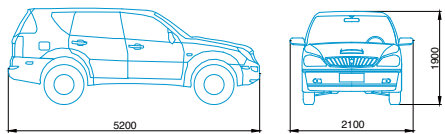
Available car in GRF L series

Total length	5200mm
Total width	2100mm
Total height	1600mm
Total weight	2150kg



Available car in GRF SU series

Total length	5200mm
Total width	2100mm
Total height	1900mm
Total weight	2400kg





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