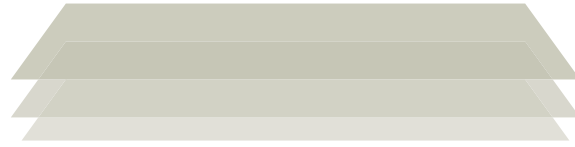


DE PARK

Parking. Surprisingly simple.



DE-800 XY

ROBOTIZED CAR PARKING SYSTEM
WITH FULLY AUTOMATIC CONTROL

Vehicles are parked close together in a limited space,
the system can be customized for your project's needs.

R

Robotized parking technologies



Suitable for

commercial & residential buildings, as well as for hotels. Recommended for new and existing buildings.

Robotized Car Parking Systems of DE-PARK create maximum space utilization, allowing maximum comfort, with no compromises. State of the art engineering and manufacturing – made in Germany.

CLEVER PLANNING

Save time and costs

With our unique Car Parking Systems, you will be able to save up to 80% of the parking area, and its construction costs.

Supporting pillars can be included in the planning.

Save space and money by making the best possible use of the available space in your property. Avoid losing valuable space due to ramps and driving lanes.

Increase parking comfort for residents, and gain more parking spaces to increase profit and the attractiveness of your property.

LUXURIOUS

Your own valet parking service

Don't waste time on searching for parking. Your own valet parking service is ready for you. You can easily leave your car, after placing it in the parking transfer area. The system will safely place your car inside the parking area and will deliver it back to you automatically.

Your vehicle is safe and secure from theft, vandalism, and accidents caused by other maneuvering cars, you are the only one who can access it.

Our Car Parking Systems are easy to operate. Choose your preferred operating method to fit your needs.



Parking. Surprisingly simple.

Combining high-end design with functionality of the system, we maximize comfort for users.

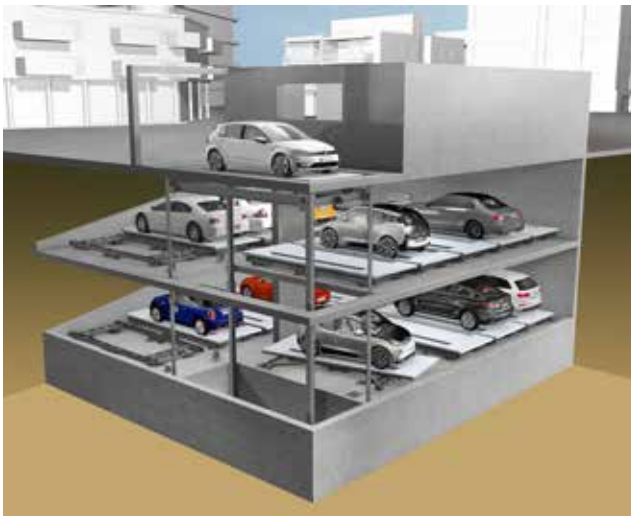
DE-PARK ROBOTIZED: WORRY FREE. PARK AND GO.



We offer the best parking solution for all projects:
The main benefit of the **DE-800** system is the ability to maximize the amount of parking spaces, in comparison with any other solution.

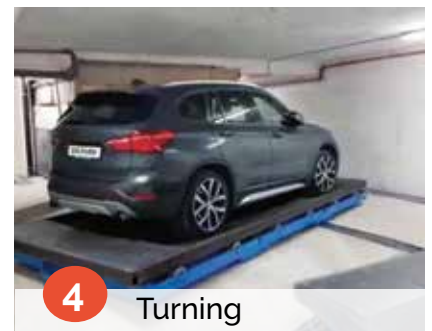
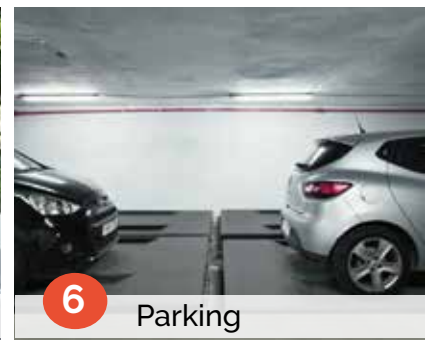
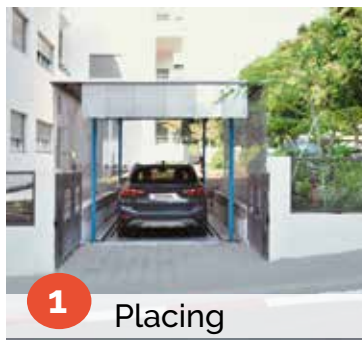


SIMPLE, YES BRILLANT



Project example:

DE-800 installed on 2 parking levels with a turning device in the level below.



- Fully automatic parking on pallets (XY) which move longitudinally and horizontally, just like a puzzle.
- Installation on 1 to 4 parking levels for up to 50 vehicles in rows.
- The system can be easily customized to each project.
- Maximum space utilization due to lining up the pallets in a modular design.
- No ramps or driving lanes are required.
- Park your car in the transfer cabin and let the system do the rest.
- Maximum comfort & safety for user and vehicle.



DE-800 • Ready for all projects!



PALLET SYSTEM

On the parking levels and lift, there are innovative conveyors to transport your vehicles with pallets in X- and/or Y-direction.

The modularly designed conveyors are placed on the parking floors, and can be adaptable as needed.

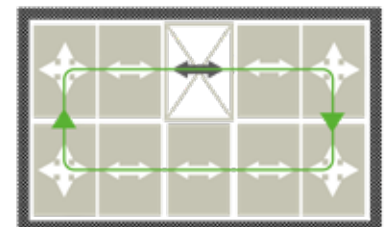
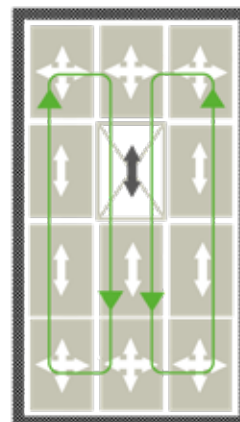


ARRANGEMENT OF PALLETS

- An arrangement of 2 or more rows/columns with pallets following each other or side-by-side (depending on the project, empty spaces may be required).
- Elevator may be positioned within the system or on the sides.
- A turning device is an option.

SYSTEM'S MOVEMENTS & CYCLES

Cycles are dependant on the project's size and the arrangement of the pallets. One or more empty places are required. When a lift is part of the cycle, it may be used as the empty place.



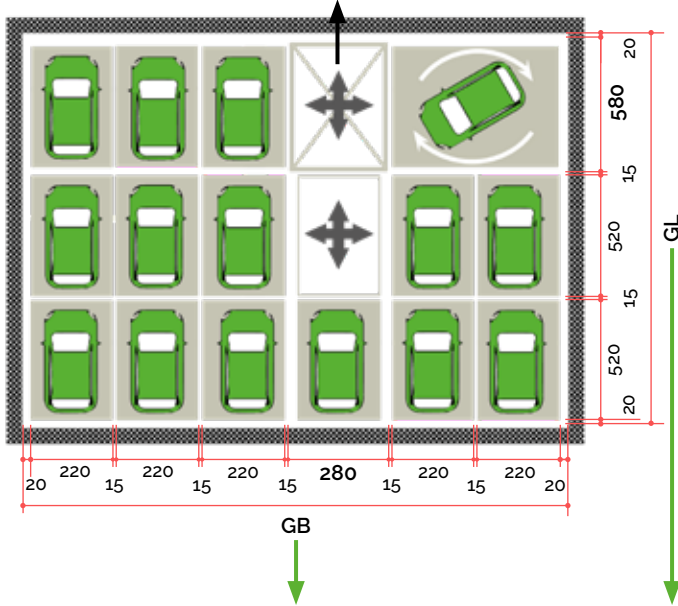
Building supporting pillars are also not an obstacle and can be part of the planning.

WIDTH & LENGTH DIMENSIONS

Note: The size of the Lift may vary with a pop-up cabin (see page 6).

Mentioned dimensions for pallet width 220 cm and pallet length 520 cm, and elevator. All dimensions are in cm.

Elevator shaft (width x depth): mind. 280 cm x 580 cm



Planning example: **TOTAL INSTALLATION WIDTH**

Pallet rows side-by-side	GB for pallet width		
	210 cm	220 cm	230 cm
4	995 cm	1025 cm	1055 cm
5	1220 cm	1260 cm	1300 cm
6	1445 cm	1495 cm	1545 cm
7	1670 cm	1730 cm	1790 cm

Planning example: **TOTAL INSTALLATION LENGTH**

Pallet rows behind each others	GL for pallet length		
	500 cm	510 cm	520 cm
2	1145 cm	1155 cm	1165 cm
3	1670 cm	1690 cm	1710 cm
4	2195 cm	2225 cm	2255 cm
5	2720 cm	2760 cm	2800 cm

GB = Total installation width depends on

- the number of pallets placed side-by-side.
- the empty spaces to building wall: min. 20 cm.
- the empty spaces between the pallets: min. 15 cm.
- the pallet width: 210 cm, 220 cm, 230 cm, up to 240 cm (as an option).
- the shaft width: min. 280 cm for pallet width up to 230 cm, shaft width for bigger pallets on request.

GL = Total installation length depends on

- the number of pallets placed behind each others.
- the empty spaces to building wall: min. 20 cm.
- the empty spaces between the pallets: min. 15 cm.
- the pallet length: 510 cm, 520 cm, 530 cm, up to 540 cm (as an option).
- the shaft length: min. 580 cm for pallet length up to 530 cm, shaft length for bigger pallets on request.

UNIQUE SIZES ARE AVAILABLE, PLEASE ADVISE WITH YOUR AGENT.

HEIGHT DIMENSIONS

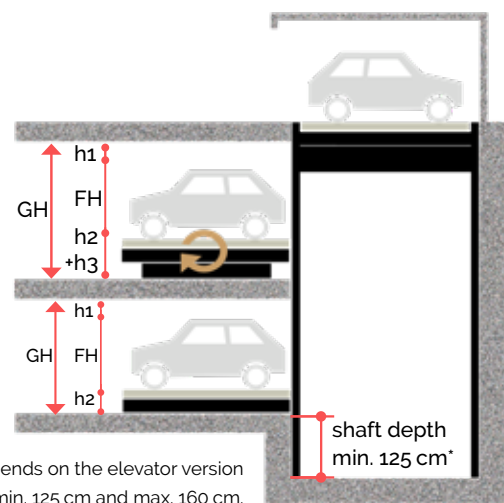
GH: Total height (finished floor level to ceiling)

- h1: safety tolerances
- h2: height of pallet system with pallet: 35 cm
- h3: height of turning: 35 cm
- Remaining height = max. car height (FH)

Note: Please consider more height if further features, such as lighting or sprinklers, are necessary in your project.

Calculation example: Turning device in top parking level

	PARKING LEVEL 1	PARKING LEVEL 2
GH:	250 cm	215 cm
-h1:	10 cm	10 cm
-h2:	35 cm	35 cm
-h3:	35 cm	
	= FH max. 170 cm	= FH max. 170 cm



*Shaft depth depends on the elevator version with min. 125 cm and max. 160 cm.

Vehicle data



- **Vehicle weight:** 2.5 t (2.8 t optional)
- **Vehicle length (pallet length -20 cm):** 490 cm, 500 cm, 510 cm, 520 cm
- **Vehicle width (pallet width -20 cm):** 190 cm, 200 cm, 210 cm, 220 cm
- **Vehicle height:** see height dimensions

Rotating device

A space of at least 2 to 3 transverse pallets is required for the installation of a rotating device within the parking levels. The position of the rotating device is project-specific. Alternatively, the rotating device can also be installed on the elevator or in the transfer cabin. Technical data is available upon request.

Technical planning notes: DE-800

TRANSFER CABIN

The users park their vehicles on pallets in the transfer cabin (hand-over area to the parking system). A vertical lifting system runs below the vehicle pallet for vehicle transportation to the parking levels. Depending on local regulations or requirements, the transfer cabin is designed as a closed room with concrete walls and ceiling or can be delivered as a "pop-up cabin" with additions, safety devices may be required on site.



Transfer cabin with concrete walls and roof



Transfer cabin with pop-up cabin

Minimum dimensions

The transfer cabin should have a minimum width of 3,5m and the parking area should be arranged in the center. Access gates are placed in the middle with a minimum width of 2,5m. A clear height of at least 2,00 m must be provided within the transfer cabin. The larger the transfer cabin, the more comfort for the user.

User guidance as drive-in aids

An easy to understand user guidance system monitors the correct parking position. The entry position is already facilitated due to wheel recesses in the pallets.

- Standard kit: 1x LED panel, display panel with light signal (drive-in aid with signal: drive forwards, sideways, backwards until correct positioning).
- Optional kit: HMI panel, monitor with large image display

Vehicle surveying and monitoring

The vehicle limit contours are also measured in the transfer cabin according to the permitted sizes in terms of height, length and width. The pallet occupancy is also monitored here.

Wall and floor openings

Project specific information on floor openings for a vertical lifting system, and wall openings for cables and lines are available upon request.

Other features

- Emergency stop, button for door open and safety signs, are placed within the transfer cabin.
- Traffic light (red/green) for visualization of the system status (red signal = parking process running, green = free access for parking), can be placed outside the transfer cabin.
- Escape or access door to enter the building (on-site delivery) can be integrated into the system according to safety regulations.

Access gate (on-site delivery)

Access to the transfer cabin is given by a roller shutter door or sliding gate, which is electrically driven and integrated into the parking facility control. Safety requirements and devices for the gate must be supplied by the customer in accordance to DIN 14010 and machine directive.

We will support you in selecting the appropriate safety equipment for your doors and gates.

Technical planning notes: DE-800



Elevator

The main vertical lifting system transports the vehicles to the parking levels. We offer multiple designs of lifting systems to provide the best solution for your project.

4-column lifts, 2-column lifts or scissor lifts, electrical or hydraulically driven – the decision of usage is dependant on the lifting height, number of stops and access times.

Please provide a drainage in the pit of the lift shaft.



Control & operation

We offer a high-tech system control and software with various hierarchies in the operating processes for users, system operators or service personnel. Of course, also teleservice options (remote operation and remote control system) are available. You can choose the operation via a touch screen terminal, or RFID chip cards and wireless remote control.

Technical room

Please provide a technical room for the placement of the control cabinet, which includes the main electricity components of the Parking System. This should be as close as possible to the Car Parking System or directly in the storage area (parking levels). Accessibility to the control cabinet and adequate ventilation and lighting of this room must be taken into account during the planning.

Noise proofing

The generally valid noise protection regulations pursuant to DIN 4109, as well as the emission guideline values pursuant to guideline VDI 2058, Part 1 must be taken into account. The noise in the Car Parking System should be measured at a distance of 1m and not exceed 85 dB(A) as the mean value of the envelope (responsibility of the manufacturer). Suitable construction measures must be taken into consideration to ensure that the permissible noise emission values at the construction location (residential area, industrial area) are in compliance with regulations (responsibility of the customer).

Static & construction work

The Car Parking System is preferably installed on concrete floors according to the on-site statics. The system loads should be taken into consideration during planning stages. A steel structure can also be supplied as an option.

Fire protection & regulatory requirements

Any official requirements, in particular for fire protection (such as sprinklers) including any gates and doors, must be clarified at the time of planning. Please advise with local safety engineers.

Declaration of conformity

Car Parking Systems of DE-PARK conform to EG-Machinery Directive 2006/42/EG and to DIN EN 14010 (safety).

Maintenance access

Safe access should be provided to any storage area. A maintenance access and maintenance door(s) must be provided to allow system operators and service staff to access the storage area. The doors require safety devices to ensure that the system is deactivated when the doors are opened (must be delivered on-site). The doors should be lockable to prevent unsupervised access to the storage area.

Lighting

Please provide electrical lighting with a nominal illumination strength of at least 120 lx for the transfer cabin. This lighting can be switched on by the parking system when a parking process is activated, and switched off when a parking process is completed. The storage area must be illuminated in such a way that all operations can be carried out safely. Please provide sockets with 230 volt for installation and service.

Ventilation of the storage area

We recommend installing a ventilation system to reduce humidity, prevent condensation, reduce vehicle moisture (rain, snow, ice, etc.) and comply with occupational safety regulations. Compliance with EN 60204-1, Point 4.4.3 is especially important.

Working temperature

Electrical control elements apply to EN 60204-1. Mechanic components are intended for a temperature range of +5 to +40 degrees. Customizations for other environmental conditions is possible by special order.



INNOVATION FOR THE FUTURE

We strive for new innovative solutions that will make your life easier.

Beginning with planning of a building through the installation of a parking system, we find new ways to give you the most. Higher security, higher efficiency and overall, the ultimate parking experience.

PARKING. SURPRISINGLY SIMPLE.

We at **DE-PARK** are a dynamic, highly motivated and experienced team, with extensive knowledge in the development, manufacturing and planning of car parking systems.

We strive to provide
PREMIUM PARKING SYSTEMS
for you.



Notification: All pictures and drawings in this brochure are for demonstration only.

DE PARK
Parking. Surprisingly simple.

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