

**stolzer**  
Automatic Parking. Quite simple.

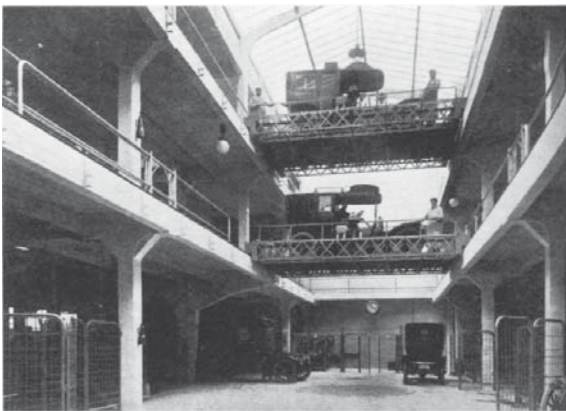


**Automatic parking.  
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The shelf principle – improved intelligently.

## Automatic parking. Quite simple.

People who commute by car spend an average of 1.5 hours behind the wheel. For the remaining 22.5 hours vehicles must be parked – somewhere. Parking is a pivotal challenge in many cities because demand outstrips supply. City planners, architects and investors must provide intelligent solutions.



In 1906 the Büro AG Perret, Architects and Engineers, built a parking system that went down in history in the Garage du Rue Ponthieu in Paris. This parking system used a storage and retrieval unit.

One intelligent solution: automatic parking systems that double the capacity of an average garage.

Stolzer automatic parking technology is well-engineered and absolutely reliable. It is used in thousands of installations in an environment which is extremely dependent on the reliability of the technology – automatic storage systems in the manufacturing industry. Tons of sheet metal and other heavy raw materials are fed in seconds and to precise locations on factory floors. It was only natural for these handling specialists to extend their technology to the fast and safe movement of vehicles.

In terms of cost, there is no real alternative to automatic parking systems. Comparing with conventional garages based on ramps, automatic parking systems perform much better whether used in new projects or fitted to an existing structure.



Investors and developers frequently scrap plans to redevelop a property because a lack of parking spaces makes the entire project unprofitable. However, there is an approach that often solves this problem and makes these projects profitable: automatic parking systems.

Using this technology in a historical building, 60 parking places can be created on a footage of 190 m<sup>2</sup>. This means less than 3.2 m<sup>2</sup> of footage per parking place. Compared with conventional parking garages with space-consuming ramps and driveways (which frequently cannot be built at all in narrow city centers) automatic parking systems can save up to 50 % of the building volume.

But beyond reliability and economy, there are more facts which make automatic parking systems attractive. Automatic parking is not only simple due to its basic principle. It's also aesthetic, safe and ecologically sustainable. You'll find proof on the following pages.



People love their cars. Compare the footage used for a ramp garage and human living space. A parking place approaches to the footage that in average a human needs for living: 40,9 m<sup>2</sup>.

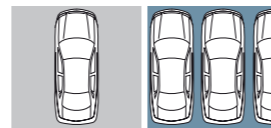


## Automatic parking. Simply economic.

Cities are hubs for living, socializing and working. In every developed culture around the world. However, many older cities were built at a time when traffic applied to horse-drawn carts. Planners never envisioned a need for parking. It's the same in city centers and suburbs. An increasing number of cars and trucks strains municipal infrastructure. Drivers looking for a place to park put further strain on the system.

Automatic parking systems are able to solve these basic problems more economically than conventional parking garages. Since these systems are modular, they can be adapted to many different spaces. Automatic parking uses height, width and depth more efficiently than conventional garages. Simply put, they create more parking space from less footage.

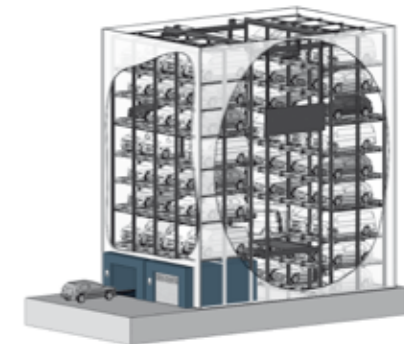
Architects, city planners, developers and investors can calculate the costs of planning, construction and operating expenses. Investors in particular must be able to minimize their investment risk, considering the many variables involved in real estate development. Because of their modular approach, it's easy to calculate the cost of an automatic parking system. In fact, it's much easier to calculate than the cost of a conventional garage.



Twice as many cars can be parked in an automated garage as opposed to a conventional garage.

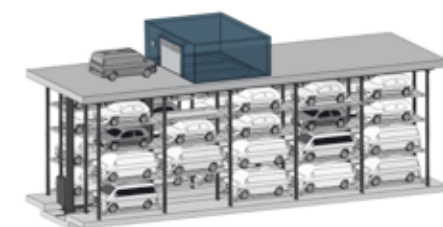
space saving, more parking places  
better energy efficiency reduced lighting needs no emergency exits or staircases  
reduced ventilation and services no need for ramps  
reduced redevelopment costs eliminates vandalism  
cost optimized building in existing environments  
more profitable per square meter

Whether underground, above ground or in a mixed structure: compared with a conventional parking solution, the automatic parking system is convincing due to its compact use of footage and space. In short, automatic parking systems double the number of parking places (or cut required space in half). These attributes make automatic parking systems the ideal solution for city centers and their parking demands.



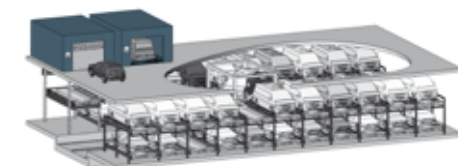
### Parking system auto- TP

For small surface areas, for parking up to 100 vehicles with one storage and retrieval unit in a height of up to 50 m above ground, underground or in a mixed solution.



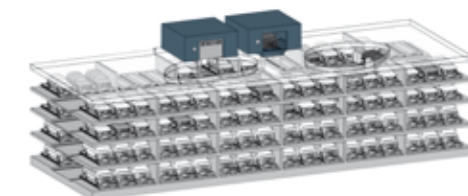
### Parking system auto- LP

For narrow spaces, for parking up to 60 vehicles with one storage and retrieval unit in a maximum height of up to 16 m in an underground, above ground or mixed structure.



### Parking system auto- UP

Universal parking system for parking up to 100 vehicles with one Storage and retrieval unit in a maximum height of 20 m, as an underground, above ground or mixed situation.



### Parking system auto- SP

Universal parking system for high throughput capacity and a high number of parking places in an underground, above ground or mixed solution.



Urban neighborhoods reflect traditional and modern influences. City planners have learned that preserving and adapting old structures gives urban centers much of their appeal.

## Automatic parking. Simply aesthetic.

Sustainable development means responsible energy use and solutions that will last. These criteria apply to both new construction and conservation and redevelopment of historic buildings and districts. While cost and function are paramount, what a building looks like counts too.

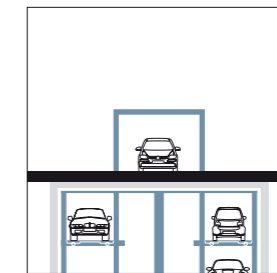
An automatic parking system simplifies the aesthetics of a building. These parking systems offer architects and city planners more options and variations than to simply integrate a closed facade in an existing streetscape. In addition, there will be a series of effects for the surrounding blocks when deciding on a parking system, which has an impact on the quality of the area.

Automatic parking has advantages over conventional parking solutions on nearly all aesthetic premises. As it can be concealed to make (or maintain) interesting streetscapes.

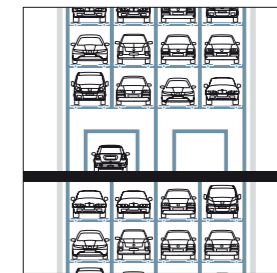
Since space is at a premium in most urban areas, the space-saving qualities of automatic parking makes it a virtue.



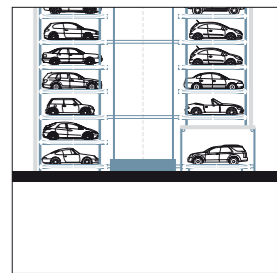
**high-density parking** no covered perspectives  
more design flexibility for architects  
clear streetscape no jammed roads  
less traffic, because vehicles are not circling the block in search of parking  
**modernizing of historic buildings**  
additional potentials for added value



An underground version of the automatic parking garage. It is suitable for preserving the look of historic neighborhoods. The underground solution, which just leaves the transfer room visible, is the most suitable solution for traffic reduction in residential areas with a large number of long-term customers.



The automatic parking system as a mixed underground and above ground variant. The visible structure is partially open, technically sensitive areas are glazed. No facade is also an option.



The automatic parking system as an above ground variant – there is no limit for the facade design. The functional housing made of metal, wood, glass, or growth supports may not clad but dress the system. This way it will be integrated in the ensemble, even it consciously puts an architectural counterpoint.



An automatic parking system may lower the cost of your car insurance.

## Automatic parking. Simply safe.

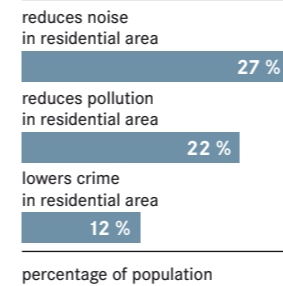
Wherever they live, people have a personal stake when it comes to the subject of safety. And nowhere is that more apparent than in large cities.

We've all see cars with broken windows – or handwritten signs that say “Nothing of value inside.”

The automatic parking system securely protects drivers, vehicles and all items inside the vehicle. Accessible areas such as the entrance and exit area and the transfer room are designed to be open, well-lit and secure. The parking place inside the parking system is not accessible. Only cars go into the storage area.

The surrounding residential or business area also benefits from the decision to install an automatic parking system. Potential burglars or vandals stay away, because desirable vehicles are no longer parked on the street.

These days, a subjective feeling can often be measured. Quality-of-life indicators include noise, pollution of the environment, crime and vandalism. Automatic parking can contribute to life quality in many areas including the value of a real estate investment.



**anxiety-free parking** no access for unauthorized persons  
 protection from damage, vandalism and theft women friendly parking  
 no walking on dark staircases and corridors no driving on narrow ramps and alleys  
 no damage from ruthless parking neighbors  
 valuable items may remain in the vehicle **disability friendly parking**  
 more safety for the entire neighborhood



The vehicle is dropped off and picked up in a bright, friendly transfer room. The transfer room is accessible free from any barriers and can be monitored.



Automatic parking doesn't necessarily mean anonymous parking. For monitoring there may be an attendant booth, which is staffed daily. A remote message system detects and communicates any technical malfunction.



Green spaces are more conducive to work and social interaction. The quality of worklife in this office building is better when occupants look out on to bright lawns rather than parked cars.

## Automatic parking. Simply ecological.

In 2007 the population passed a demographic tipping point – for the first time in history more people were living in cities than in the countryside. In 2030, urban dwellers will number more than 60 %.

This shift requires cities to offer people more in terms of quality of life. Cities will remain engines for growth, providing the opportunity for work and prosperity. At the same time, cities use three-quarters of all energy and they produce 80 percent of greenhouse gases. The green factors will more and more define whether or not city life is worth the trouble.

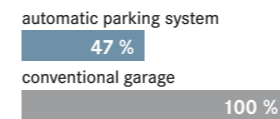
Carbon must be reduced by reducing traffic volume, part of this is the individual search traffic for parking places. According to city planner Karl Martens, this can represent 20 percent of the total traffic at certain times.

Not only does the use of an automated parking garage reduce emissions, also the emissions caused by the automatic parking itself are much lower than in a conventional garage. An automatic system uses less energy. It saves on light, heat, overall monitoring, cleaning, elevators, ventilation, automatic doors and installed electronics. Compared with a conventional garage only a fraction of the energy will be spent.

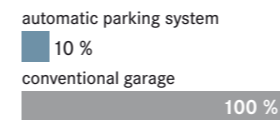
City greens attract positive attention. Finally, in case of an underground garage, the saved area can be greened and contribute to making the environment a little more green.



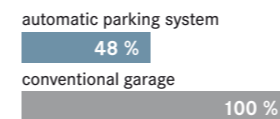
Average power consumption compared directly



Average carbon production compared directly



Average footage consumption compared directly



less traffic less exhaust fumes  
much less electricity and energy consumption better energy efficiency  
less services and ventilation equipment  
carbon reduction by less emissions  
more green area, by less footage consumption



Automatic parking systems allow for new perspectives. They allow for investors, architects and planners to really think in all directions. Just by this, they gain advantage in economic, aesthetic and safety relevant regards, when controlling the parking and quieting traffic. And if you think about it, also ecologically far ahead. If you would like more information about our parking systems, call us, send us an email or ask for our system brochure.

