Innovative Parking Solutions
Tailormade solutions for parking

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CARMEC is Italy’s leading designer and manufacturer of technologically advanced mechanized parking systems for cars and larger vehicles.

Founded in 1966, the company has always worked with civil and industrial lifting and handling equipment, but in 1990 decided to concentrate in particular on producing mechanized parking systems, building on the experience gained in creating Italy’s first car lifts, which were presented at the ’76 Torino Auto Show.

In more than 45 years of activity, this is a vocation that has taken shape in the installation of over 1000 parking systems, as well as in the acquisition of a solid base of design and manufacturing know-how, thanks to which CARMEC can now provide companies and private customers with innovative technological solutions for any parking needs.

**Space restrictions** that make it impossible to build conventional garages and parking areas.

**Congested city streets** where parking spaces are few and far between.

**Architectural and zoning constraints** to protect historic city centers and green areas that limit the space that can be used for parking.

These are only a few of the many reasons that can lead private citizens, companies and local governments to look for innovative solutions to parking problems.

And these are only a few of the many challenges that CARMEC can overcome, thanks to our continuous investments in research and innovation, our peoples’ skills and an extensive portfolio of tried and tested standard solutions, all of which can be customized to meet specific needs.
Our portfolio includes:

**Underground garage lifts | AS Series**
The ideal solution for optimizing indoor and outdoor space. Two or more cars can be stored on different levels, and moved independently. After the car is driven onto the access area, which doubles as a parking space, the latter is lowered and disappears completely from view, concealed by a roof flush with grade level.

**Floor to floor car lifts | MC Series**
and elevating platforms | MP Model for cars with or without driver
Designed to move vehicles to levels above or below the entrance area, CARMER floor to floor car lifts and elevating platforms are the perfect solution for all cases where it is not possible or economical to construct an access ramp to below-grade or elevated parking areas.

**Car stackers | ACo Series**
Fast and economical to install, car stackers make the best use of garage space by allowing two or more cars to be parked in the same footprint.

**Movement systems | PR, TL, TF Series**
Turntables and sliders designed by CARMER make it possible to park cars with minimum effort even in the most difficult situations, optimizing the use of available space.

A **full range of accessories** rounds out our lineup of parking systems: special security doors, REI rated fire doors, gates and popup safety barriers.

Bearing witness to the rigorous professionalism that in over 45 years of doing business has contributed to making CARMER a dependable, expert partner, the company also offers a series of **services** provided directly by our personnel and including:

- Complete, complementary customizing for all models on the basis of the customer’s specific needs.
- System installation and inspection to guarantee compliance and quality of all our parking solutions.
- Customer service for any type of problem or requirement throughout the products’ entire life cycle and around the entire country, thanks to our extensive service network.
- Ad hoc design and construction of special mechanized systems to provide the ideal solution for parking and moving vehicles, even in particularly tight spaces.
CARMEC is...

**Made-to-measure solutions**
All products can be customized to the customer’s needs.

CARMEC is a leading producer of “made-to-measure” mechanized parking systems: all models can be fully customized as needed and the design service, whose aim is to ensure that space available for parking can be put to optimum use, is offered free of charge.

In remodeling buildings located in historic city centers, CARMEC cooperates with the architectural offices and contractors involved, providing highly innovative solutions that can take any structural or zoning constraint into account.

**Total safety and warranty**
All systems are safe and reliable over time.

CARMEC produces “turnkey” installations, certifying the entire system, locks included, and guaranteeing that it can be used safely both in terms of accident prevention, and from the standpoint of efficiency and reliability.

Each installation is supplied with a 24-month warranty certificate, and optional maintenance contracts are available when the warranty expires.

The extreme importance that the company has always assigned to its systems’ safe design and use is underscored by the recent decision to have its car lifts certified for use with an occupant in the car (see the Machinery Directive 2006/42/EC). This certification – which is now in the process of being obtained – guarantees that CARMEC systems are fully compliant with the most stringent quality standards applying to safety-related issues.

**Green**
All systems are environmentally friendly.

CARMEC takes ecological questions to heart: for years, we have used raw materials with low environmental impact and all systems are designed to minimize electrical power consumption during operation.

In addition, the fact of using a mechanized parking system in itself contributes to safeguarding the ecosystem, since it reduces the time spend driving around looking for a parking space, and the resulting emissions of carbon dioxide.

**Made in Italy**
All systems are designed and built entirely in Italy.

CARMEC systems are the fruit of Italian creativity and are produced at our plant in Castiglione Torinese using high quality materials purchased only from domestic suppliers: a rigorous decision, thanks to which CARMEC contributes every day, with pride, to supporting Italy’s economy.
Custom installations

Elevating platform with popup safety barrier and eight parking places in the underground garage of a home in the historic center of Padova

The customer needed to create eight parking spaces in the basement of a home located in the midst of Padova’s most historic central district. CARMEC installed an elevating platform with popup safety barrier in a room on the ground floor of the house: the car is driven onto the platform, which is then lowered to bring the car to the basement. Before the platform begins its downstroke, the safety barrier is raised. A turntable installed in the basement facilitates parking manoeuvres, while two systems make it possible to park two vehicles at level -2.
Low-rise car/driver lift, for a private residence in Switzerland

The installation consists of an enclosed car lift which makes it possible to reach the two-level garage in the basement and sub-basement. To minimize visual and environmental impact, and considering the typical weather conditions in this mountain location, it was advisable to limit the height reached by the structure during its lift stroke. Accordingly, the system was designed so that the paved canopy roof is detached from the lift as it is lowered, and then re-attached during the upstroke, enabling the platform to reach the two underground parking levels and limiting the roof’s above-grade stroke to around two meters.

As envisaged by Swiss regulations, the lift can be used with the driver in the car. It is equipped with all necessary safety systems, which are certified by a leading Swiss consulting firm.
Car lift and underground parking garage with car stackers for a historic building in Torino

The project called for creating an underground parking garage beneath the internal courtyard of a historic building in the center of Torino, and was part of an extensive remodeling initiative.

The need to blend in with the surroundings, the limited space available in the courtyard, and the depth at which the underground garage was located all made it impossible to install an access ramp. CARMEC thus supplied a car lift featuring a paved canopy platform, so that the garage could be entered and exited without visible external structures. The lift is thus perfectly integrated with its surroundings in this elegant setting. In addition, the garage’s capacity was doubled by installing several type AS-1 and AS-1D systems capable of accommodating 14 cars, all of which can be removed independently.

The AS-1 system enables two cars to be parked in the same footprint and removed independently.
Two-level car lift in a private garden

The customer needed to be able to access a two-level underground garage with three parking spaces on each level. The entrance area was to be located in the garden of a private house, near the entry stairs, and thus had to be designed to minimize visual impact and guarantee safe conditions.

CARMEC installed a Model MC-2P car lift, with a top canopy infilled with turf and a two-level double platform for transporting cars to the underground garage. The car lift features a protective polycarbonate enclosure equipped with two automated doors giving access to the parking spaces located on both sides.
Custom installations

Three-level underground garage lifts with paved top canopy on Lake Garda

In a residence on the shores of Lake Garda, installing three 3-level underground garage lifts made it possible to provide nine independent parking spaces with no impact on their surroundings, as the lifts are entirely concealed when not in motion. The load-bearing top canopies are paved with the same material as the rest of the courtyard.

System at rest.

System in motion.

System fully raised.
Two-level underground garage lifts with paved top canopy in Verona

At a period home in the historic center of Verona, where it was necessary to provide as many parking spaces as possible, CARMEC created room for 12 cars beneath the courtyard by installing six 2-level underground garage lifts, thus leaving the entire courtyard free. The load-bearing top canopies are paved with the same material as the rest of the courtyard.
**Custom installations**

**Creating a parking space below the living room**

The customer needed to create a parking space in the only available area: a basement below the ground floor living room.

Our solution was to install an underground garage lift whose top canopy doubles as the living room floor (given that the ceiling was high enough to accommodate the lift stroke). The system can be raised and lowered without shifting the living room furniture.

In addition, the position of the house was such that local architectural regulations prohibited changes to the perimeter walls, making it impossible to install an access door. Consequently, the only option was to use the entire front wall of the living room (window included) as a motorized gate that retracts downwards.

System operation is as follows: the customer inserts the key in the control panel and activates the lift’s upstroke. When the system reaches ground floor level, the front wall is lowered and the car can be driven onto or off the lift platform. The wall is then raised and the lift moves down to basement level.

**Exterior: Front wall in closed position.**

**Lowering the wall.**

**Wall fully retracted.**

**Inside the house: the living room.**

**Raising the garage lift.**

**Garage lift at ground floor level.**
Two-level car lift in Torino

In a prestigious building complex dating from the mid-nineteenth century located in the very heart of Torino’s historic city center, two garages reached via two car lifts were constructed in the basement and sub-basement.

When the systems are in rest position, their paved top canopies match their surroundings. To reduce the canopy’s raised height when the lifts are moved up so that the cars can be driven out of the garage, the systems are provided with a detachable canopy roof. This makes it possible to detach the canopy roof when the lift is lowered and re-attach it during the upstroke. The lift can thus be raised to the minimum height needed to ensure that car and driver can exit comfortably.

In this way, the system’s above-grade stroke is only 2.5 meters, as it is not necessary to raise the structure by its entire height of around 6.5 meters, which would be unsightly.

In the basement and sub-basement, the car lift area is closed by means of a motorized REI 120 fire door which opens only when the platform reaches the correct level.

Car lift entrance and exit area with systems in rest position.

Systems in motion. Note that the two systems are fully independent.

Systems at grade level.

Systems at basement level.
**Custom installations**

**Car lift at a dealership**

At a car dealership in the province of Varese, a paved-roof elevating platform makes it possible to reach the below-grade showroom. It was not possible to use an access ramp for space reasons. When the system is in rest position, cars can be driven on all forecourt-level surfaces. To ensure safe operating conditions, the platform begins its downstroke only when the forecourt access gate is closed. An automatic timer raises the platform back to forecourt level after the system has been inactive for a few minutes.

Elevating platform in rest position at grade level with gate closed.

Elevating platform in rest position at grade level with gate open (system movement is not possible).

The platform has reached the basement and the car can be driven into the garage.
Suspended platform car stacker for a private garage

Stackers are designed to enable cars to be parked on two levels in a garage with a sufficiently high ceiling. Our patented suspended platform car stacker leaves the garage floor entirely free of obstacles.

In this private garage, it was possible to install four Model ACO-S systems whose load-bearing structure is anchored to the ceiling. As can be seen, when the system is raised, the area beneath is completely clear.
Custom installations

**Suspended platform car stackers for a double garage**

Taking advantage of the height of a tall but narrow double garage, we installed two suspended platform stackers that make it possible to park four cars. Our patented suspended platform car stacker leaves the garage floor entirely free of obstacles. As can be seen, when the system is raised, the area beneath is completely clear.

Suspended platform stackers lowered to enable cars to be driven onto the platforms.

Platforms raised to permit parking on the garage floor.
**Car lift for underground garage**

At an apartment block in the province of Torino, a paved-roof elevating platform provides access to the garage in the basement. The system was positioned next to the pedestrian entrance, and the platform is accessed through a motorized gate that opens only when the platform is at grade level. An automatic timer raises the platform back to grade level after the system has been inactive at basement level for a few minutes.
Underground garage lifts | AS Series

AS Series underground garage lifts are the perfect way to optimize the use of space: by going downwards. Thus, they involve excavating a pit which is equipped with a raising/lowering system and which hosts the vehicle when the system is at rest. The pit is entirely invisible from outside, as it is closed by a roof flush with the grade-level paving, thus ensuring that the system blends in perfectly with surrounding constructions.

If needed, the system can feature two or more levels, so that multiple vehicles can be parked in the same footprint.

AS Series underground garage lifts can be installed inside buildings or outdoors. In the latter case, special measures are taken to handle rainwater runoff.

Features
- Stroke established on the basis of available space
- Effective capacity 2,500 kg per car – Higher capacities available on request
- Four-cylinder hydraulic lift system with rack-type balancing, located away from car door opening area
- Mechanical safety locking at each level
- Can be installed in enclosed areas or outdoors
- Turnkey supply includes garage doors, which are also available in automatic versions

Advantages
- Two, three or four cars can be parked on different levels, and moved independently
- Total number of available parking spaces can be doubled or tripled
- Dimensions can be adapted to available space, and to non-rectangular areas

AS-1
Model AS-1 makes it possible to park two cars independently in the garage, one in the pit and one on the platform that serves as the roof of the pit.

AS-1P
For variant AS-1P, the pit is covered with a platform that can be infilled with the most appropriate paving material for the surroundings, and which is provided with a gutter to ensure it is watertight.

AS-2 / AS-3
Based on the same concept as model AS-1, models AS-2 and AS-3 make it possible to park two or three cars at different levels in the pit in addition to the vehicle on the roof platform when height is sufficient, thus providing a total of three or four parking spaces.

AS-2P / AS-3P
Models AS-2P and AS-3P also feature a roof platform that can be infilled to blend in with the surrounding pavement, and a gutter to ensure watertightness.

AS-1D
When sufficient space is available from side to side, model AS-1D makes it possible to park up to four cars, two parallel to each other in the pit, and two on the roof platform.

AS-1DP
Model AS-1DP also features a roof platform that can be infilled to blend in with the surrounding pavement, and a gutter to ensure watertightness.
Model AS-2P in the courtyard of a building in a historic city center. Six systems were installed to provide 12 concealed parking spaces.

Parking spaces were doubled by installing several model AS-1DP systems in this courtyard.

At this hilltop house, model AS-2P makes it possible to move and park multiple vehicles on terraces below street level.
Floor to floor car lifts are systems designed to move a car to a parking area located on one or more below-grade levels, and are the ideal solution where limited space or architectural and zoning restrictions make it impossible to construct an access ramp to the parking garage. The car platform is provided with a protective enclosure, which can be infilled with any kind of paving material to blend in perfectly with the surroundings. Enclosure structure and materials can be adapted to the architectural setting, and dimensions can be customized to the customer’s specific needs.

**Features**
- Stroke established on the basis of available space
- Effective capacity 2,500 kg per car – Higher capacities available on request
- Four-cylinder hydraulic lift system with rack-type balancing, located away from car door opening area
- Mechanical safety locking at each level
- Automated operation in full compliance with applicable regulations
- Turnkey supply includes garage doors, which are also available in automatic versions

**Advantages**
- Ideal where an access ramp cannot be constructed: for a basement garage, for example, the system occupies only 15 square meters, as opposed to the 60 to 70 square meters typically needed for a ramp. In addition, the grade-level area remains clear and can be put to other uses.
- Particularly suitable for historic city centers and residential units with few parking spaces, as these system are readily integrated in rebuilding and remodeling projects.
- Dimensions can be adapted to available space, and to non-rectangular areas.

**MC-1P**
Derived directly from the AS-1P underground garage lift, the MC-1P system can be used to move a car to a parking area located on a level below the entrance. Provided with a roof that can be infilled with the desired paving material, the car lift platform has a protective enclosure with automatic doors.

**MC-2P**
The MC-2P system also derives directly from the AS-1P underground garage lift, but has a longer stroke (5, 6 or even 7 meters) that enables it to reach sub-basement level. To limit roof height when the platform is raised so that the car can be driven away, a version with detachable roof is also available: the roof is detached when the lift is lowered and then re-attached during the upstroke. The lift can thus be raised to the minimum height needed to ensure that car and driver can exit comfortably.
MC-1P system in the courtyard of an apartment building; view from grade level and in basement

MC-1P system with turntable

MC-1P system in a public garage in Viareggio. The car lift is connected to an automated underground parking system.
Like floor to floor car lifts, elevating platforms are designed to move a car from grade level to a parking area located underground or on an upper floor, and are thus an ideal alternative to an access ramp in cases where a ramp cannot be constructed because of space limitations or architectural and zoning restrictions. CARMEC’s model MP elevating platforms can be installed inside buildings or outdoors, and are equipped with popup safety barriers which raise when the platform is lowered and then retract so that they are completely concealed when the system is at rest.

**Features**
- Stroke established on the basis of available space
- Effective capacity 2,500 kg per car – Higher capacities available on request
- Four-cylinder hydraulic lift system with rack-type balancing, located away from car door opening area
- Mechanical safety locking at each level
- Automated operation in full compliance with applicable regulations
- Popup safety barriers
- Turnkey supply includes garage doors, which are also available in automatic versions

**Advantages**
- Ideal where an access ramp cannot be constructed: for a basement garage, for example, the system occupies only 15 square meters, as opposed to the 60 to 70 square meters typically needed for a ramp. In addition, the grade-level area remains clear and can be put to other uses.
- Dimensions can be adapted to available space, and to non-rectangular areas.
- Can be installed in enclosed areas or outdoors
The system is accessed through a retractable motorized gate. The gate also serves as a safety barrier, as the platform begins its downstroke only if the gate is raised.
Car stackers take advantage of vertical space in high-ceilinged private or public garages, as they make it possible to park cars on two levels in the same footprint. However, the cars cannot be moved independently, as the car on the lower level must be removed before the car on top can be lowered to the ground. CARMÉC models are designed so that one to three cars can be parked on each level and two or more systems can be installed side by side.

**Features**
- Lift stroke up to 2 meters
- Effective capacity, Model ACO-2: 2,000 kg – Model ACO-4: 2,500 kg. Higher capacities available on request
- Hydraulic lift system featuring cylinders with rack-type balancing
- Mechanical safety locking
- Downstroke possible even in the event of a blackout
- Provision for opening platform

**Advantages**
- Where ceiling height permits, stackers are ideal for doubling the amount of parking space by taking advantage of the area located above existing parking slots
- Dimensions can be adapted to available space, and to non-rectangular areas

**ACO-2**
Model ACO-2 enables two cars to be stored in the same footprint and can be installed in a garage or outdoor parking area. Load-bearing structure consists of two forward-located posts that do not interfere with opening the car doors and entering or exiting the vehicle.

**ACO-2i**
The ideal solution for garages with low ceilings: the top car is inclined to take advantage of the fact that the bottom car’s hood is lower than its roof, thus reducing the total height occupied by the two stacked vehicles.

**ACO-4**
This model makes full use of the space between the four support posts, which are positioned against the garage walls to limit obstacles. Model ACO-4 is particularly suitable for vans, campers and armored cars. The entire platform can be occupied, often with enough space left over for motorcycles or other objects.

**ACO-4d**
In wide garages, Model ACO-4d makes it possible to house a total of four cars, two per level, making full use of the space between the posts. The entire platform can be occupied, thus facilitating parking manoeuvres.

**ACO-4t**
For large garages, this model makes it possible to park a total of six cars, three per level, making full use of the space between the posts.

**ACO-S**
With this model, a car is parked on a platform which is then lifted, leaving the area below completely clear. The system is suspended from above, anchored to special beams or support brackets.
Aco-ST stacker positioned to allow a car to be driven onto platform.
CARMEC movement systems make the best use of garage space, including those areas that are almost impossible to reach on normal parking manoeuvres, and facilitate all entry and exit operations. Turntables and longitudinal and transverse sliders can be adapted to garages of any size and shape.

**Features**
- Standard effective capacity 2,500 kg - Higher capacities available on request
- Can be combined with car lifts and elevating platforms
- Transverse and longitudinal strokes to customer specifications

**Advantages**
- Easy parking even in the tightest spaces
- Make it possible to use very narrow garages, or those that are wide but have a small entrance door
- Dimensions can be adapted to available space
- Also makes parking easier for disabled drivers

**Model TF**
When the garage or parking slot is too narrow to open the car door to enter or exit the vehicle, the longitudinal slider is the perfect solution. Outside the garage, the car is driven onto a platform, which then slides it inside simply by pushing a button or actuating a remote control unit.

**Model TL**
Where the garage is wide enough to park several cars but has a narrow door, cars can be moved from side to side using a transverse slider. Here again, the system is actuated by pushing a button or by a remote control unit.

**Model PR**
Turntables enable the car to be oriented in the most convenient position for parking, making it easier for the driver to get in and out of the vehicle. Made to measure, they are actuated electronically and can be stopped in any position.
Longitudinal slider in a garage

Transverse sliders

In this case, the turntable prevents having to back the car out of the garage
Special systems

**Five-stop elevating platform with transverse slider for transporting cars and goods**

The platform transports cars from the ground floor to the sub-basement, where a transverse slider moves them sideways by five meters, positioning them so that they can be parked in the garage. The basement and the second and third sub-basement levels are served by the platform for goods transport only.

Platform at ground level, moving down

Sub-basement with transverse slider, which moves cars in front of the garage entrance so that they can be driven into the parking slots

Transverse slider
Elevating platform for freight loading and unloading

The platform positions the trailer-mounted shipping container at yard level to facilitate loading and unloading with fork lift trucks, thus saving time.

After the trailer arrives and is uncoupled, the barriers close to ensure safe operating conditions. The barrier on the side facing the building is stationary, while that on the street side is motorized. The two entrance/exit sides are manually operated.

The operator lowers the shipping container to grade level, and can then proceed with loading or unloading.
Tilting ramp platform for accessing basement from street level

The tilting ramp platform enables cars to be driven from street level into the basement, a height difference of around 1.2 meters.
Car lift at a hotel on Lake Como

To reach the hotel parking lot located on an outdoor terrace, a special elevating platform was constructed whose stroke from grade level is around twelve meters. The entire system was located in an existing part of the building, and was adapted accordingly. Our system's structure was designed to support the entire weight of the hotel's fire escape.