

# TREWIPARK AUTOMATIC CAR PARKING SYSTEMS



TREVIPARK Ltd and Trevi S.p.A. offer the private and public sector a fully mechanised, secure and unmanned car park: TREVIPARK with varying sizes and features.

Trevi makes use of the experience and technical capabilities gained in more than 40 years of engineering works performed around the world.

The lift mechanism and computer software is designed, produced and installed by Trevi who are specialist engineers and a company with certified quality systems adhering to UNI-EN 29001 (CE) rules.

The main company aim is to convey its commitment and energies into producing and marketing a high quality product capable of achieving a competitive, economic price, as well as maintaining high efficiency and performance.



Execution of the retaining structure



Excavation and execution of the slabs (top-down)



#### WITHIN CONFINED SPACES

TREVIPARKs can be incorporated into almost all public or private new build and re-development schemes. The system can be introduced into already congested city locations without compromising the environment.

#### ENVIRONMENTAL IMPACT IN URBAN AREAS

The reduced sizes of the entry and exitbay (without entry ramps) makes TREVIPARK's environmental impact negligible, therefore the surrounding area is maintained in its original conditions. TREVIPARK enhances urban facilities, the surrounding architecture, gardens and features.

The system can be successfully introduced and integrated into all urban environments, both historical and modern; it can supplement the architectural elements with new ones.



Site area is reduced to the minimum during construction



Perfect integration with the environment

#### SAFETY

The possibility of leaving the car on the surface without having to go to underground levels makes TREVIPARK very safe and efficient to the user. Internal safety of the car is assured by the anti-intrusion, fire-fighting, antiflood and ventilation systems that are all computer-controlled. The computer is in turn connected to TREVIPARK's control centre that operates 24 hours a day 7 days a week.

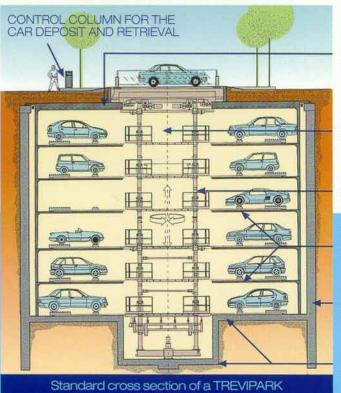


Urban improvement and renewal

## MAIN FEATURES

- · Vehicles are automatically parked without the driver and with the engine switched off
- The vehicles are moved vertically using an electro-mechanical 360° rotating lift and placed directly into a parking bay using a transfer trolley mechanism
- The average vehicle parking and retrieval time is 50 seconds
- The control centre operating the system uses 24/7 CCTV security to monitor activity
- The system is proven to be safe and reliable due to its innovative design and high quality components used in manufacture and installation
- Should it be required, the system has emergency repair and maintenance procedures which ensure continuous operation
- The TREVIPARK system can be designed above or below ground
- . Construction can take place above the TREVIPARK to ensure environmental sustainability





below ground

IN SITU REINFORCED CONCRETE TOP COVER SLAB

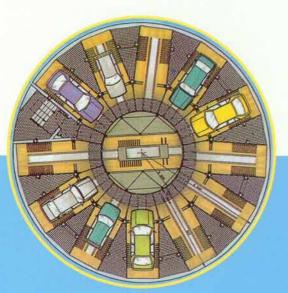
ROTATING TOWER WITH CAR LIFT

STEEL BEARING ELEMENTS

CAR BAY UNITS PRE-CAST REINFORCED CONCRETE

CONCRETE DIAPHRAGM STRUCTURE

IN SITU REINFORCED CONCRETE BASE SLAB



## INTEGRATED SYSTEM

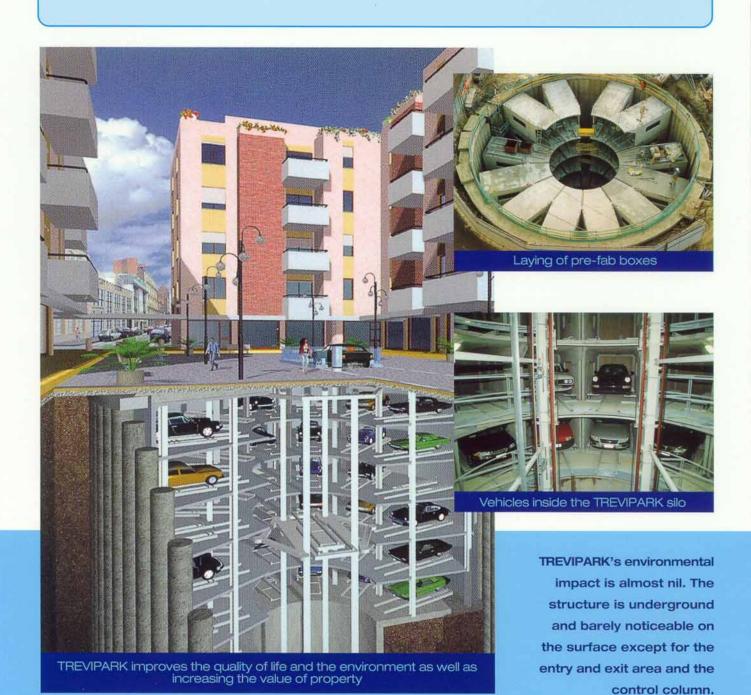
- Can be installed in close proximity to existing buildings
- Minimum area occupied at surface level
- High density parking
- Reduced emissions due to movements made with vehicle engine switched off
- No assistance required from driver when parking the vehicle
- Construction time on a clear site averages around six months
- Modern design of above ground structures ensures technological feel

- On site personnel not required. Control centre management monitors each TREVIPARK
- Flexible finance / lease options available for purchase
- Vehicle delivery system designed to minimise difficult manoeuvres
- Vehicles are totally secure due to the silo only being accessible to trained personnel
- Public parking payment can be made by cash, credit/debit cards or magnetic strip ticket



# CONSTRUCTION ELEMENTS

- The main standard bearing structure is made of:
  - · Continuous, circular concrete diaphragm wall
  - Pre-cast reinforced concrete modules for the car parking bays
- Steel rotating tower provided with car-lift
- · Automated trolley for car deposit and retrieval
- Electro-mechanical and electronic detection devices for the automatic movement of the cars
- Silo structure is watertight
- Silo is fully and mechanically ventilated
- . The surface design can be individually treated to blend with the surrounding environment



# SUPERVISION AND SAFETY

- A control centre constantly monitors all of the TREVIPARKs in order to ensure security and provide assistance and maintenance support should it be required. Working conditions in the car park are continually assessed and the emergency systems automatically activated should the need arise
- The control centre is active 24 hours a day 7 days a week and allows customers to easily access information or instructions

