

## Project Report

No: 21

**MANISA CITY** 



COMMERCIAL



# **Fully Automated Public Parking System**



Construction year: 2016

Employer : Manisa Metropolitan Municipality Main Contractor: Birtam İnşaat Taahhüt Ticaret A.Ş.

Subcontractor : Parkolay

(Fully Automated Parking Systems Manufacturing & Implementation)

Capacity : 560 cars

Parkule 144,7 systems System

: Steel structure Structure

CAPACITY OPERATION



## • Minimum personnel requirements

- Ventilation and lighting savings
- (No exhaust gas formation, no people inside the parking lot)
- High insurance availability thanks to high safety level
- Energy cost of only ¢ 4 (euro cent) per parking operation
- Ticketing system with license plate recognition
- Security cameras and tele diagnosis over the Internet

## PERFORMANCE ( )



• Number of parking floors: 7 above ground, 4 underground

• Construction volume per parking space: 44 m³

• Shortest parking time: 70 sec.

• Building elevation: H = 17.50 m

• Total parking capacity: 560

• Entry-Exit & Lobby: Ground floor

- · Longest parking time: 200 sec.
- Average parking time: 105 sec.
- Number of consecutive parking operations in one hour: 182

#### COMFORT

- Ease of finding parking space exactly at the desired location without having to drive in heavy city traffic.
- Suitable for the use of disabled people, easy parking at the large entry room.
- Parking without manoeuvring difficulties and without using inconvenient ramps and corridors for getting to/exiting from the parking floors and for parking.
- Safe and secure parking away from risks such as theft, accidents, etc.

#### **STANDARDS**

• EN 14010 - CE Certificate (CE: "European Conformity")



• 2006/42/EC Machinery Directive

### EN 14010 Safety of machinery - Equipment for power driven parking of motor vehicles

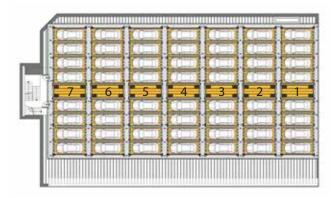
ty and EMC requirements for design, manufacturing, erection and commis











2016

With a capacity of 560 cars, Parkule 144 is the biggest fully automated parking system in Turkey. The system that allows parking for 7 cars at the same time and renders average parking operation time of 105 seconds has TÜV-SÜD approved CE and EN 14010 compliance certificates.

# Manisa, Fully Automated Public Parking System Manisa, Turkey

### **Technical Specifications**

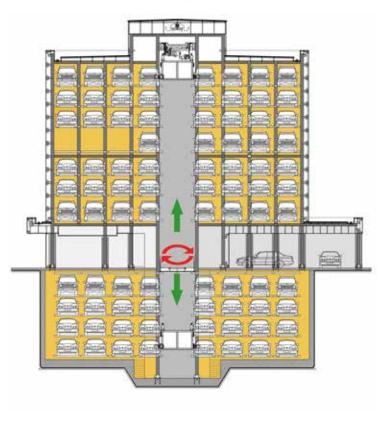
Construction year : 2016 : 560 Number of parking spaces Number of parking floors : 11 Parking floor area : 930 m² Parking area length : 44.50 m : 20.90 m Parking area width Parking system height : 17.50 m Parking system depth : 9.00 m : 24,645 m<sup>3</sup> Parking system structure volume Construction volume per parking space: 44 m³

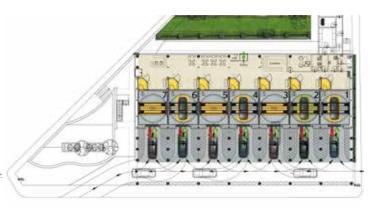
### Access Times (Approx.)

Times for consecutive parking operations in Automatic Operation mode:

(Time of vehicle delivery by driver is assumed as 45 sec.) Shortest parking time : 75 sec. Longest parking time : 200 sec. : 105 sec. Average parking time

Number of simultaneous parking operations : 7





\*(Options that suit different vehicle dimensions and construction conditions are available.)

#### **Vehicle dimensions** (Maximum)

Length : 5.25 m Width : 2.30 m

Height : 1.60 m (364 Parking Spaces)

: 2.00 m (196 Parking Spaces)

Weight : 2.5 t

System Type: Fully automated parking system

Model : Parkule 144

Technology: Dynamic position-controlled lift, quick pallet transfer conveyor system

Software: PCS 2.0

: TS EN 14010 Standart



**Parkolay**