



# TRIVANTA EDGE

## Parking, Perfected

Revolutionizing Urban Parking with Smart, Space-Efficient, and Sustainable Solutions

ADVANCED TECHNOLOGY | MAXIMUM EFFICIENCY | PREMIUM QUALITY

[email protected] | [email protected] | +91 9373015503

Kalyan, Maharashtra | [www.trivantaedge.com](http://www.trivantaedge.com)

# About Trivanta Edge

Leading Innovation in Automated Parking Solutions

## Welcome to the Future of Parking

Trivanta Edge is at the forefront of revolutionizing urban parking infrastructure with cutting-edge automated parking systems. With years of expertise in mechanical engineering and automation technology, we deliver world-class solutions that maximize space utilization while minimizing environmental impact.

### Our Mission

To transform urban landscapes by providing intelligent, space-efficient, and eco-friendly automated parking solutions that enhance property value and improve quality of life.

### Why Choose Trivanta Edge?

- ✓ Industry-leading technology and engineering excellence
- ✓ Customized solutions tailored to your specific requirements
- ✓ Comprehensive after-sales support and maintenance services

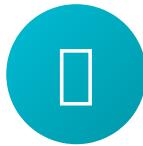
# Key Features & Benefits

Advanced Technology for Modern Parking Needs



## Space Optimization

Maximize parking capacity by 60-80% compared to conventional parking. Perfect for high-density urban areas where space is at a premium.



## Enhanced Security

Fully automated system with no human access to parking areas. Advanced security features protect vehicles from theft, vandalism, and damage.



## Rapid Operation

Quick retrieval times averaging 60-90 seconds. High-speed motors and optimized algorithms ensure minimal waiting time for users.



## Eco-Friendly

Zero emissions in parking area, reduced carbon footprint with no vehicle circulation. Energy-efficient motors with regenerative systems.

# Technical Specifications

Precision Engineering for Optimal Performance

# System Specifications

Specification	Details
System Type	Fully Automated Puzzle/Tower/Pit/Stack Based
Vehicle Weight Capacity	2000 - 2500 kg per platform
Platform Dimensions	5500mm (L) x 2000mm (W) x 1800mm (H)
Retrieval Time	60-90 seconds (average)
Operating Speed	Vertical: 15-25 m/min   Horizontal: 30-40 m/min
Power Supply	415V, 3 Phase, 50 Hz
Drive System	AC/DC Variable Frequency Drive with regenerative capability
Safety Systems	Multiple sensors, emergency brakes, UPS backup
Control System	PLC-based with HMI touchscreen interface
Material	Hot-dip galvanized steel structure
Noise Level	< 70 dB during operation
Operating Temperature	-10°C to +45°C
Standards Compliance	IS, CE, ISO 9001:2015 certified

## **Warranty**

1 year comprehensive, extendable AMC  
available

---

# Puzzle Parking System

Vertical & Horizontal Movement for Maximum Density

## Multi-Level Puzzle Parking

The Puzzle Parking System is an innovative solution that combines vertical and horizontal movements to achieve maximum parking density. Ideal for medium to large-scale parking requirements in residential complexes, commercial buildings, and mixed-use developments.

- ✓ 2 to 8 levels parking capacity
- ✓ Modular design for easy expansion
- ✓ Space efficiency up to 2.5x conventional
- ✓ Minimal pit and overhead requirements
- ✓ Semi-automatic to fully automatic operation
- ✓ Simultaneous multi-car retrieval
- ✓ Independent platform movement
- ✓ Quick installation and commissioning

### Ideal Applications:

- ✓ Residential apartments and condominiums
- ✓ Commercial office buildings
- ✓ Shopping malls and retail centers
- ✓ Hotels and hospitality projects



### Technical Highlights

**Capacity:** 20-100 cars per system

**Parking Height:** 1800mm per level

**Operation:** Card/RFID based access control

**Structure:** Hot-dip galvanized steel frame

**Installation Time:** 4-8 weeks depending on capacity

# Tower Parking System

Vertical High-Rise Parking Solution

## Vertical Tower Parking

The Tower Parking System is a fully automated, high-capacity vertical parking solution designed for premium properties with limited ground space. This system can accommodate 20-80 vehicles in a compact footprint, making it the ultimate space-saving solution.

- ✓ Up to 20 levels of vertical parking
- ✓ Smallest footprint requirement
- ✓ 360-degree vehicle rotation
- ✓ Energy-efficient LED lighting
- ✓ Fully automated robotic operation
- ✓ High-speed vertical lifts
- ✓ Weather-proof enclosure options
- ✓ Seismic-resistant structure

### Ideal Applications:

- ✓ Premium residential towers
- ✓ Corporate headquarters
- ✓ High-end commercial complexes
- ✓ Smart city projects



### Technical Highlights

**Capacity:** 20-80 cars

**Height:** Up to 30m

**Ground:** 40 sq.m

**Operation:** Fully automated

**Features:** Car wash integration

# Bike Stackers System

Efficient Two-Wheeler Parking Solutions

## Single & Double Bike Stackers

Our Bike Stacker Systems provide innovative vertical parking solutions for two-wheelers, maximizing space utilization in residential and commercial complexes. Available in both single and double-tier configurations to suit various capacity requirements.

### Single Bike Stacker

- ✓ Ground level parking
- ✓ Capacity: 6-12 bikes
- ✓ Ideal for smaller spaces
- ✓ Easy access for all users
- ✓ Manual operation
- ✓ Weather-resistant

### Double Bike Stacker

- ✓ Two-tier vertical parking
- ✓ Capacity: 12-24 bikes
- ✓ Safety locks on upper tier
- ✓ Hydraulic lifting
- ✓ 50% space savings
- ✓ Anti-slip platform

### Key Benefits:

- ✓ Maximize parking capacity in limited space
- ✓ Organized and secure bike parking
- ✓ Reduced vandalism and theft
- ✓ Low maintenance requirements
- ✓ Suitable for all two-wheeler types



### Technical Specifications

**Material:** Galvanized steel

**Load:** 200kg/slot

**Install:** Modular bolt-down

**Operation:** Manual/Semi-auto

**Warranty:** 5 years



# Car Stack Parking System

Multi-Level Vehicle Stacking Solutions

## Hydraulic Car Stacking Systems

Car Stack Parking Systems offer an economical solution for doubling or tripling parking capacity using vertical stacking technology. Perfect for residential buildings, offices, and commercial establishments with space constraints.

- ✓ 2-4 level stacking configurations
- ✓ Hydraulic lifting mechanism
- ✓ Suitable for SUVs and sedans
- ✓ Pit and pit-less options
- ✓ Independent platform operation
- ✓ Safety sensors and interlocks
- ✓ Emergency manual override
- ✓ CE certified components

### System Variants:

**2-Post:** Traditional design

**Dependent:** Lower empty to access

**4-Post:** Enhanced stability

**Independent:** Direct access

### Ideal Applications:

- ✓ Residential complexes
- ✓ Shopping centers
- ✓ Hospitals
- ✓ Office buildings
- ✓ Hotels and resorts
- ✓ Car showrooms



### Technical Details

**Capacity:** 2-4 cars/stack

**Platform:** 5.5m x 2.4m

**Load:** 2500kg

**Speed:** 4-8 m/min

**Power:** 2.2-3.7 kW

# Pit Parking System

Underground Space Optimization

## Underground Pit Parking Solutions

Pit Parking Systems utilize underground space to create invisible parking solutions. By excavating below ground level, these systems provide multiple parking levels while maintaining the ground surface for other uses.

- ✓ 2-3 underground parking levels
- ✓ Preserves ground space
- ✓ Waterproof construction
- ✓ LED lighting in pit
- ✓ Invisible from ground level
- ✓ Hydraulic platform system
- ✓ Automatic drainage
- ✓ Safety barriers & sensors

### Key Advantages & Safety:

- ✓ Hidden parking solution • Emergency stop buttons
- ✓ Maximum land use • Anti-fall protection
- ✓ Weather protection • Overload sensors
- ✓ Enhanced security • Backup power
- ✓ Increased property value • Manual override



### Installation Requirements:

- ✓ Excavation depth: 3-6 meters
- ✓ Waterproofing essential
- ✓ Drainage connection required
- ✓ Ventilation recommended

### Technical Specifications

**Pit Depth:** 3-6 meters

**Platform Load:** 2500kg

**Operation:** 60-90 sec

**Power:** 415V, 3-phase

**Control:** PLC with HMI

# No Post Parking System

Clear Access Vehicle Parking

## Post-Free Parking Innovation

The No Post Parking System eliminates front posts for unobstructed vehicle access. Using cantilever technology and side-mounted lifting mechanisms, this system provides hassle-free parking with maximum convenience.

- ✓ No front posts - clear access
- ✓ Side hydraulic lifting
- ✓ Easy door opening on platform
- ✓ Anti-slip platform surface
- ✓ Cantilever platform design
- ✓ Suitable for wide vehicles
- ✓ 2-3 level configurations
- ✓ Synchronized lifting system

### Why Choose No Post System?

#### User Benefits

- Easier parking and retrieval
- No damage risk from posts
- Comfortable door access
- Suitable for all driver skills

#### Technical Benefits

- Robust cantilever design
- Lower maintenance needs
- Better weight distribution
- Enhanced stability

#### Perfect For:

- ✓ Premium residential projects
- ✓ Luxury car parking
- ✓ Valet parking services
- ✓ Showroom display parking
- ✓ Hotel premium parking



#### System Specifications

**Levels:** 2-3 tiers

**Width:** 2.5-3.0m

**Weight:** Up to 3000kg

**Lifting:** Twin hydraulic

**Safety:** Dual locks

# Benefits & Advantages

Why Automated Parking Makes Business Sense

1

## Maximum Space Utilization

Increase parking capacity by 60-80% compared to conventional parking. No need for driving lanes, ramps, or circulation space means more cars in less area.

2

## Enhanced Property Value

Premium parking solutions significantly increase property appeal and market value. Attract high-end buyers and tenants with modern amenities.

3

## Reduced Construction Costs

Eliminate need for expensive ventilation systems, extensive lighting, and fire safety measures. Lower excavation and structural requirements reduce building costs.

4

## Zero Vehicle Emissions Inside

Cars are turned off before entering the system, eliminating exhaust fumes and carbon monoxide in parking areas. Healthier and cleaner environment.

5

## Complete Vehicle Security

No human access to parking area eliminates risk of theft, vandalism, or damage. Vehicles are protected in secure, climate-controlled environments.

**6**

## Minimal Operational Costs

Automated systems require minimal staff and maintenance. Energy-efficient motors and regenerative systems reduce electricity consumption significantly.

# Installation Process

Seamless Implementation from Concept to Completion

1

## Site Assessment

Detailed evaluation of site conditions, space availability, and technical requirements

2

## Custom Design

Tailored system design based on capacity needs, building architecture, and budget

3

## Installation

On-site installation by certified technicians with minimal disruption

4

## Support

24/7 technical support and preventive maintenance services

# Safety & Security Features

Multiple Layers of Protection

## Safety Systems

- **Emergency Stop Buttons:** Strategically placed at all entry/exit points
- **Overload Sensors:** Prevent operation if weight limits are exceeded
- **Position Sensors:** Ensure accurate platform alignment
- **Safety Interlocks:** Prevent movement when doors are open
- **Anti-Fall Devices:** Multiple redundant catching mechanisms
- **Fire Detection:** Integrated smoke and heat sensors
- **Emergency Lowering:** Manual emergency descent system
- **UPS Backup:** Uninterrupted power for emergency operations

## Security Features

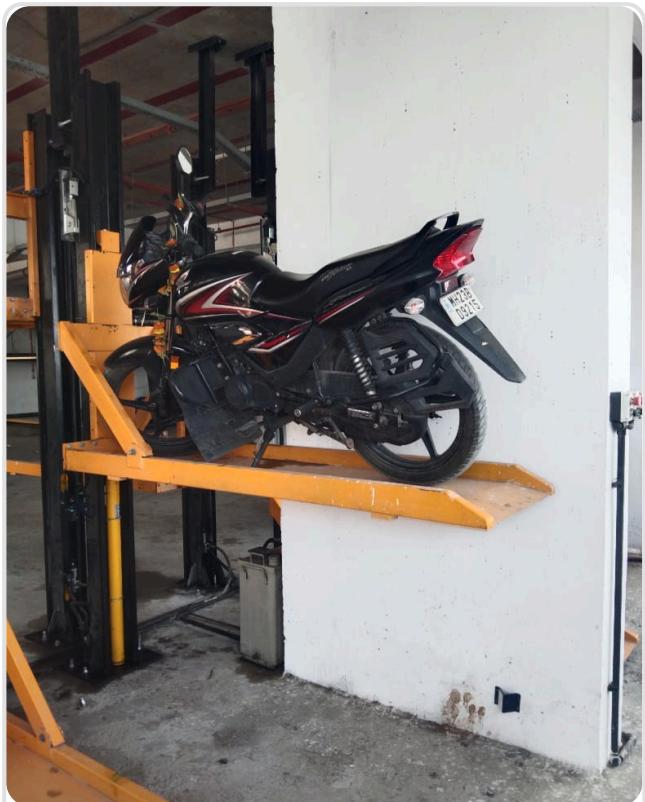
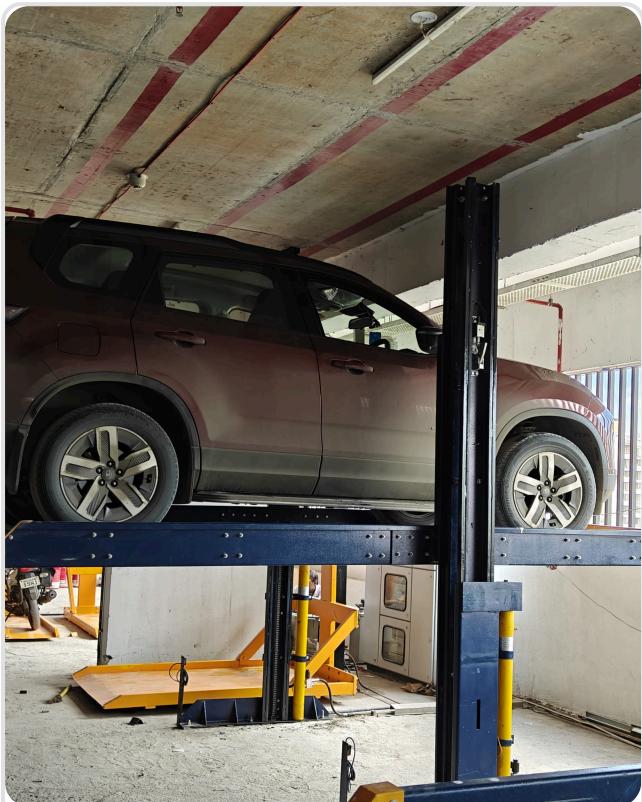
- **Access Control:** RFID card/mobile app authentication
- **CCTV Monitoring:** 24/7 video surveillance
- **User Identification:** Personal code/biometric options
- **Audit Trail:** Complete log of all transactions
- **Intrusion Alarms:** Unauthorized access detection
- **Remote Monitoring:** Cloud-based system status tracking
- **Vehicle Tracking:** Real-time location of each vehicle
- **Secure Enclosure:** Climate-controlled, locked environment

## Compliance & Certifications

- ✓ IS Standards for mechanical parking systems
- ✓ CE Marking for European safety standards
- ✓ ISO 9001:2015 Quality Management Certification
- ✓ IGBC Green Building compliance ready
- ✓ Fire safety NOC from local authorities
- ✓ Structural stability certification

# Project Gallery

Our Successful Installations



# Project Gallery

More Success Stories





**TRIVANTA EDGE**  
Automated Parking Systems  
[www.trivantaedge.com](http://www.trivantaedge.com)

# Our Valued Clients

Trusted by leading developers, builders, and facility managers across India



## What Our Clients Say

*"The automated parking system from Trivanta Edge has transformed our property value. The space efficiency and modern technology appeal greatly to our premium buyers."*

**- Leading Real Estate Developer, Mumbai**

*"Excellent engineering quality and professional installation. The system has been running flawlessly for over 2 years with minimal maintenance."*

**- Facility Manager, Commercial Complex, Bangalore**

*"The best decision we made for our project. Saved significant construction costs and increased parking capacity by 70%. Highly recommended!"*

**- Project Head, Luxury Residences, Delhi NCR**



TRIVANTA EDGE

Automated Parking Systems

[www.trivantaedge.com](http://www.trivantaedge.com)

# Maintenance & Support

Comprehensive After-Sales Service

## Our Commitment to Service Excellence

At Trivanta Edge, our relationship with clients extends far beyond installation. We provide comprehensive maintenance and support services to ensure optimal system performance and longevity.

### Preventive Maintenance

- Scheduled monthly inspections
- Lubrication and cleaning services
- Component wear monitoring
- Software updates and optimization
- Safety system verification
- Performance testing and calibration
- Detailed service reports

### Support Services

- 24/7 technical helpline
- Remote diagnostic capabilities
- On-site emergency response
- Spare parts availability
- Annual maintenance contracts (AMC)
- System upgrades and modernization
- Operator training programs

### AMC Packages

**Silver Package:** Bi-annual maintenance with emergency support

**Gold Package:** Quarterly maintenance with priority support

**Platinum Package:** Monthly maintenance with 24/7 dedicated support

## **Warranty Coverage**

- ✓ 1 year comprehensive warranty on all equipment
- ✓ 3 years warranty on structural components
- ✓ Extended warranty options available
- ✓ Free replacement of defective parts during warranty period
- ✓ No-questions-asked service commitment

# Recent Projects 2024-25

Successful Installations Across India

## Suraj Estate Developers Ltd - Dadar

**Tower Parking:** 1x1 System

**Capacity:** 46 Cars | 61 Mtrs Height

**Status:** Ongoing

## AYG Realty Pvt Ltd - Dadar

**Tower Parking:** 0x1 System

**Capacity:** 25 Cars | 62 Mtrs Height

**Status:** Ongoing

## Avishkar - Arista Platinum Towers - Pune

**Puzzle Parking:** 30 Nos | **G+1 Hyd:** 12 Nos

**Bike Stackers:** 212 Nos | **G+1**

**Stacker:** 40 Nos

**Status:** Ongoing

## IKON Trezza - Pune

**G+1 Hyd Stack:** 16 Nos

**Pit Puzzle G-1+1:** 101 Nos

**Status:** Ongoing

## Archit Group - Sope Estate - Nasik

**Mech 3L OG Puzzle G+2:** 19 Nos

**G+1 Hyd Stack:** 04 Nos

**Status:** Ongoing

## Sukhwani Skylines - Pune

**G-1+1 Stacker:** 191 Nos

**System Type:** Pit & Ground Level

**Status:** Ongoing

## EKA Buildcon LLP - Pune

**G+1 Hyd Stack:** 136 Nos

**System Type:** Hydraulic Stack Parking

**Status:** Ongoing

## Gauri Vinayak Builders - Mumbai

**G+1 Hyd Stack:** 55 Nos

**System Type:** Hydraulic Stack Parking

**Status:** Ongoing

## **ACE Capitol - Noida Delhi**

**G+1 Stacker:** 186 Nos

**System Type:** Commercial Office Space

**Status:** Completed ✓

## **SCON HD Emerald - Pune**

**G+1 Hyd Stack:** 22 Nos | **G-1+1**

**Stacker:** 02 Nos

**Mixed System:** Hydraulic & Stack Parking

**Status:** Completed ✓

# Get in Touch

Let's Transform Your Parking Infrastructure Together



Let's discuss how our automated parking solutions can transform your project

## Head Office

### Trivanta Edge

Kalyan

Maharashtra, India

## Contact

Phone: +91 9373015503

[email protected]

[email protected]

[www.trivantaedge.com](http://www.trivantaedge.com)

## Email & Web

Sales: [email protected]

Support: [email protected]

Web: [www.trivantaedge.com](http://www.trivantaedge.com)