

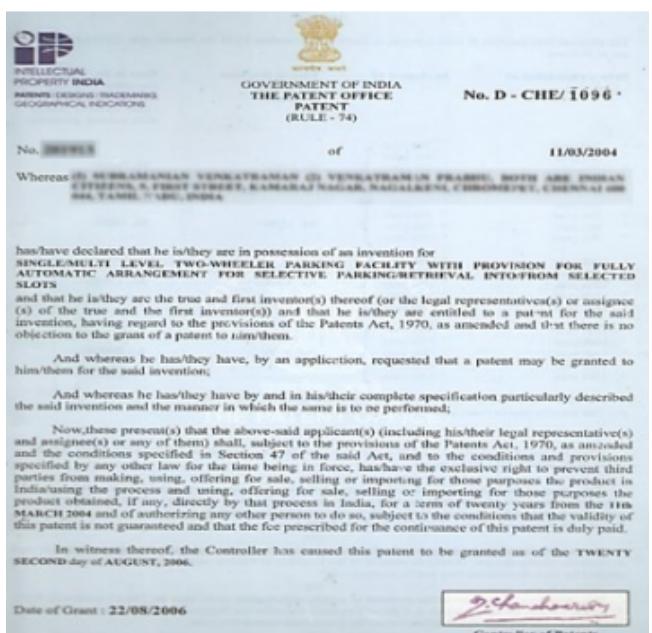
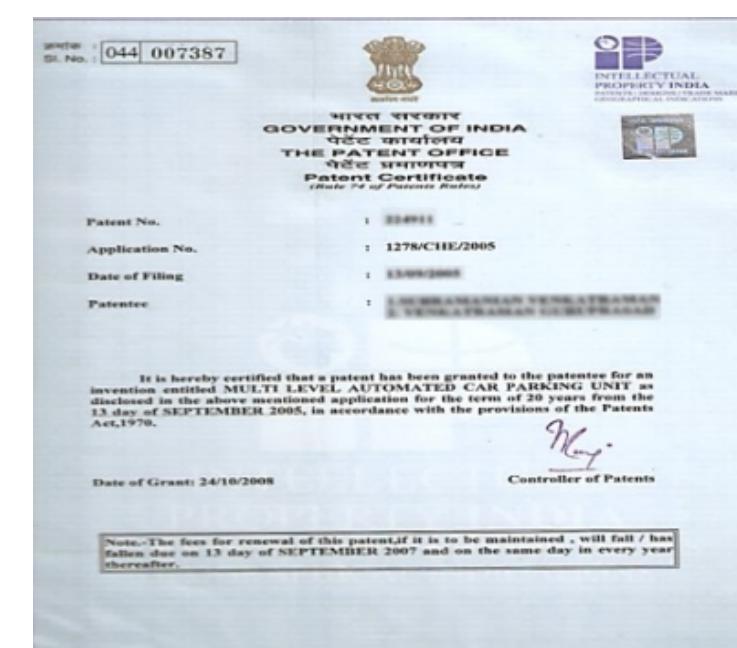
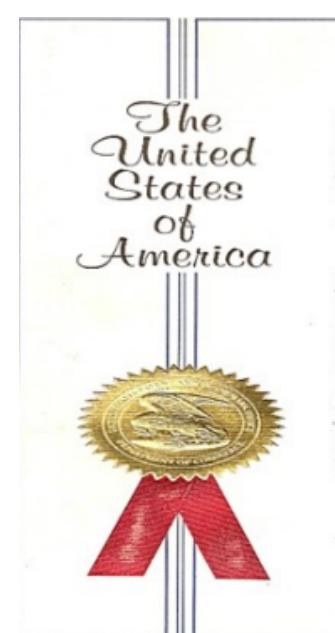
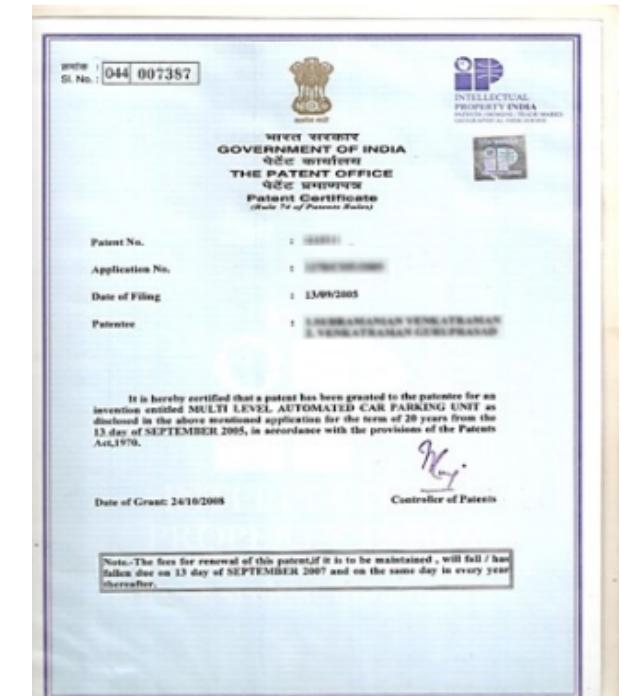


MECHCI Group
Since 1995

PUZZLE CARPARKING SYSTEM



OUR PATENTS

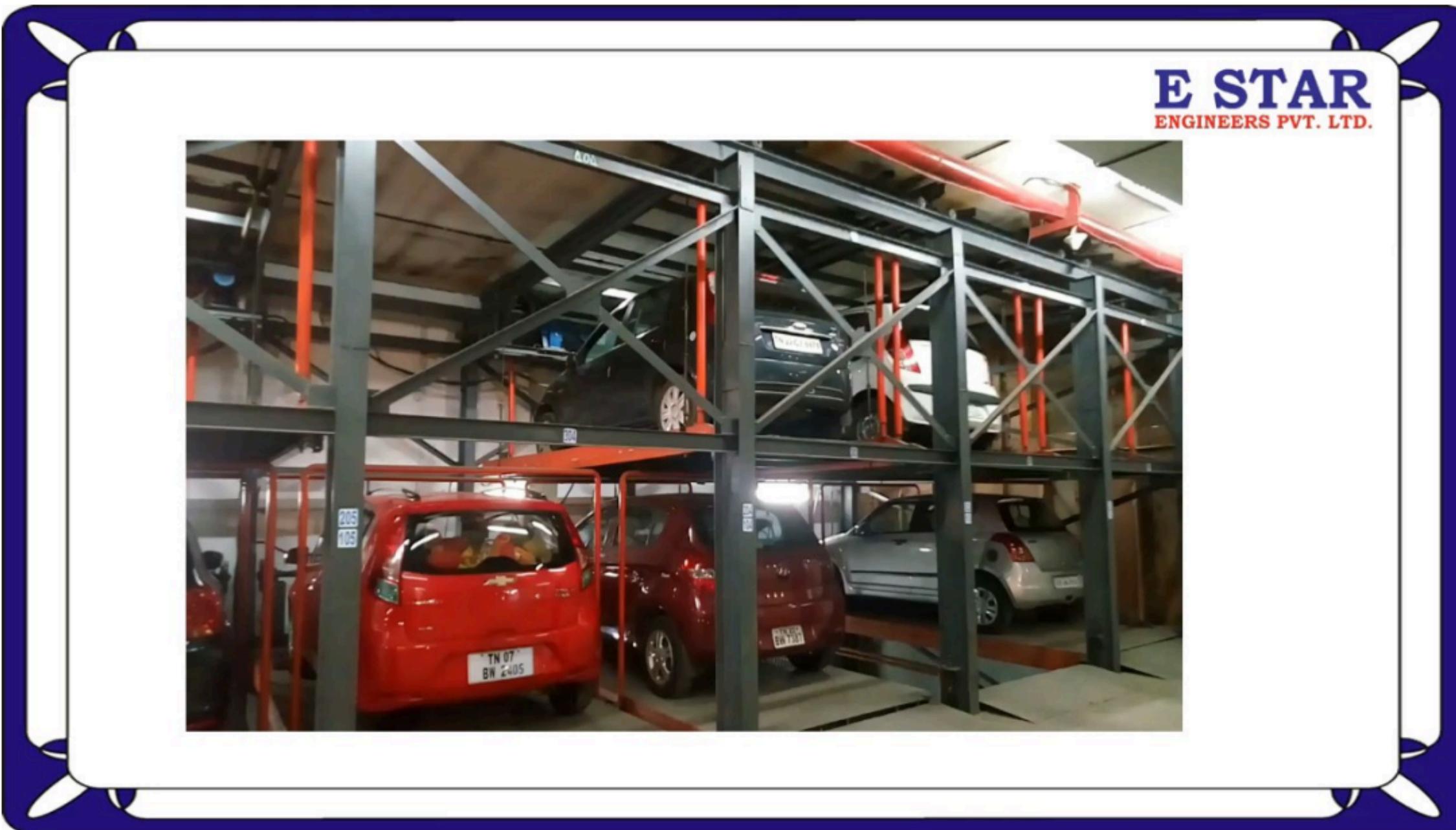


Need of Multi Level Car Parking

-  **Scarcity of parking space.**
-  **Higher cost of Land ownership.**
-  **Increase in demand of cars in metros.**
-  **Congested car parking spaces.**
-  **High Traffic causing higher parking & retrieval time.**
-  **Less parking space at public spaces such as theatres, malls, Parks etc.**



PUZZLE CAR PARKING SYSTEM



Puzzle Car Parking System

PUZZLE PARKING SYSTEM



PUZZLE PARKING IS A WELL KNOWN PARKING SYSTEM IN THE CAR PARKING ARENA. IT IS DEFINED IN TERMS OF ROW X COLUMN MATRIX. THE CARS IN THE ROWS ARE SHUFFLED IN THE SHORTEST MOVEMENT LOGIC TO PARK / UNPARK THE CARS IN THE PLATFORM. THIS SYSTEM CAN ALSO BE INCORPORATED IN PIT AND OVER THE GROUND.

ADVANTAGES

1. UP TO 34 CARS CAN BE PARKED IN THE SPACE OF 5 CARS .
2. VERY WIDELY USED PARKING OPTION .
3. RECOMMENDED FOR APARTMENTS

LIMITATIONS

1. CARS ARE SHUFFLED.
2. REQUIRES MORE POWER CONSUMPTION.
3. FREQUENT MAINTENANCE.
4. MORE MAINTENANCE COST

SPECIFICATION

1. LIFTING CAPACITY : UP TO 2500 KG.
2. LIFTING HEIGHT : UP TO 16 M IN OGP.
3. LIFTING SPEED : UP TO 10 M/MIN.
4. TRAVERSE SPEED : UP TO 15 M/MIN.
5. POWER REQUIRED : 25 - 80 KW
6. DRIVE : MOTOR + CHAIN / ROPE
7. VARIANT : ALL SUV + PARTIAL SUV
8. LOCATION : PIT / OVER THE GROUND (OGP)



GENERAL TECHNICAL SPECIFICATION - OGP



Type	Puzzle Parking – Over the Ground Puzzle (OGP)
No. Levels	2 to 7 Levels(First 3 Levels SUV rest Levels Sedan)
Mode of Operation	Electrical
Motor & Motor RPM	Lifting: Up to 3 Levels – 3.5 Kw / lifting platform 4 TO 7 Levels – 5.5 Kw / lifting platform Sliding – 0.75 KW for all sliding platforms Motor RPM : 3 Phase Motor with 1440 RPM
Loading Capacity	Up to 2500 Kg.
Dimensions - OGP	Ground Floor Bay Height : 2100 mm – All Cars Intermediate Bay Height : 2100 mm for SUV & 1800 mm for Sedan Top Bay Height : 2000 mm for SUV & 1700 mm for Sedan Total Width per System : 6200 mm for SUV & 5750 mm for Sedan Total Length of System : (No. Columns x 2500 mm) + 200 mm End Gap Total Height of System : 2100mm +[(No. Intermediate Bay) x (Intermediate Bay Height)]+ Top Bay Height
No. Lifting Motors	
3.5 Kw to 5.5 Kw	(No. Rows x No. Columns) – (No. Rows -1) – No. Cars in Ground Floor Bays
No. Sliding Motors	
0.75 Kw	(No. Rows x No. Columns) – (No. Rows -1) –No. Cars in Top Bay
Working Speed (m/min)	Lifting : Up to 8 m/min, Sliding Up to 15 m/min
Car Pallet Size (L x B x H)	Small Cars: 4350 mm x 2200 mm x 225 mm SUV Cars : 5100 mm x 2200 mm x 225 mm



GENERAL TECHNICAL SPECIFICATION - OGP



Type	Puzzle Parking – Over the Ground Puzzle (OGP)
PLC	7" PLC with Any standard Industry Brand / ABB / Siemens
Limit Switches	To suit Project requirement - Any Standard Industry Brand / Honeywell / Jai Blaji
Control Panel Contact	To suit Project requirement - Standard / SEIMENS / ABB
Power Cables	Fire Retardant Cables - Panel Incoming 120 Sq. mm – Any class1 industry Brand
Distribution Cables	To suit Project requirement - RR Kabel / Polycab / any Standard Brand
Optical Sensors	To suit Project requirement - P&F Brand
Wire Rope	14MM DIA 6X36X CONSTRUCTION FMC WIRE ROPE
All Steel Structures	As per IS 2602
System Backup UPS	Up to 5KVA

GENERAL TECHNICAL SPECIFICATION - PIT PUZZLE



Type	Puzzle Parking – Pit Puzzle
No. Levels in Pit	2 Level To 4 Levels
Mode of Operation	Electrical
Motor & Motor RPM	<p>Lifting:</p> <p>Up to 3 Levels – 3.5 Kw / lifting platform</p> <p>4 TO 7 Levels – 5.5 Kw / lifting platform</p> <p>Sliding – 0.75 KW for all sliding platforms</p> <p>Motor RPM : 3 Phase Motor with 1440 RPM</p>
Loading Capacity	Up to 2500 Kg.
Dimensions – Pit Puzzle	<p>Pit Depth Per Car : 2150 mm for SUV & 1950 for Sedan</p> <p>Pit Width per System : 6200 mm for SUV & 5750 for Sedan</p> <p>Pit Length : No. Columns x 2500 mm)+ 150 mm End Gap</p> <p>1 Level Height : 2150 mm for SUV & 1950 mm for Sedan</p> <p>Default Pit Puzzle : 1 car in Pit + 2 Cars in Stilt (1 in Ground Level + 1 Level)</p> <p>Option-1 Pit Puzzle : 1 Car in Pit + 1 Car in Stilt (Max Ht. 2.5 m Stilt Height)</p> <p>Other Pit Option : "X" Levels in Pit + "X" Levels in Stilt +200 mm</p> <p>System Length : (No. Columns) + 250 mm End Gap</p> <p>System Width : 6200 mm for SUV & 5750 for Sedan</p> <p>System Height : (Pit Depth per car x "X". Levels in Pit) + "X" Levels in stilt + 200 mm</p>
No. Lifting Motors 3.5 Kw to 5.5 Kw	<p>"X" Levels in Pit x 3.5 KW / Car Pallet (Up to 2 Levels)</p> <p>"X" Levels in Pit x 5.5 Kw / Car Pallet (3 To 4 Levels)</p>



GENERAL TECHNICAL SPECIFICATION - PIT PUZZLE



Type	Puzzle Parking – Pit Puzzle
No. Sliding Motors (0.75 Kw)	(No. Columns -1) – Only for Ground Level Cars
Working Speed (m/min)	Lifting : Up to 8 m/min, Sliding Up to 15 m/min
Car Pallet Size (L x B x H)	Small Cars: 4350 mm x 2200 mm x 225 mm SUV Cars : 5100 mm x 2200 mm x 225 mm
Working Speed (m/min)	Lifting : Up to 8 m/min, Sliding Up to 15 m/min
Car Pallet Size (L x B x H)	Small Cars: 4350 mm x 2200 mm x 225 mm SUV Cars : 5100 mm x 2200 mm x 225 mm
PLC	7" PLC with Any standard Industry Brand / ABB / Siemens
Limit Switches	To suit Project requirement - Any Standard Industry Brand / Honeywell / Jai Blaji
Control Panel Contact	To suit Project requirement - Standard / SEIMENS / ABB
Power Cables	Fire Retardant Cables - Panel Incoming 120 Sq. mm – Any class1 industry Brand
Distribution Cables	To suit Project requirement - RR Kabel / Polycab / any Standard Brand
Optical Sensors	To suit Project requirement - P&F Brand
Wire Rope	14MM DIA 6X36X CONSTRUCTION FMC WIRE ROPE
All Steel Structures	As per IS 2602
System Backup UPS	Up to 5KVA



CONTACT US

 **+919340012200,**
+919340012202, +91 75500 44048

 **carparking@estar.in**

 **Address: Railway Border Rd,
Akbarabad, Kodambakkam,
Chennai, Tamil Nadu 600024**



OUR CLIENTS





GALLERY

