CUSTOMIZED CAR PARKING SOLUTIONS

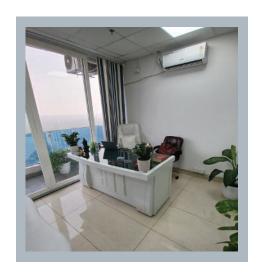




OUR OFFICE/FACTORY













COMPANY PROFILE

Shail International Group of Companies

(Shail Green Energy Power Private Limited). Trademark goes by the name of TAR Parking.

We are Shail International Group. Our group is majorly focused towards making people's daily life easy and convenient. Manufacturing of designing, innovating and installing various parking systems and solutions.

TAR PARKING is one of the leading manufacturers of car parking systems worldwide. We have been designing and installing parking systems for more than now. We aim to provide the best technology. The best convenience and a safe route. To make everyday life easier. With our focus squarely on Parking Systems, we are now the company with the most extensive product range in our domain. We do research on new technology. And We solve whatever problems are related to parking. The innovations we have brought to the market include Stack Parking, Puzzle Parking, Rotary Parking System & Tower Parking System.

We also manufacture parts for other machines (Good lift / Scissor / Car lift etc). We are steadfast in all our goals. To have quality in work, to make things better. To give quality epithets. Quality has always been our top priority. Today, this focus on quality means the additional registration and certification according to the international standard ISO 9001:2015, ISO 14001:2015, ISO 45001: 2018. We also have an efficient Customer Service department that provides quick service. It's important for Shail Group to continue focusing on the reliability, scalability, and adaptability of their smart parking solution. Additionally, collaboration with local governments, urban planners, and stakeholders can help ensure seamless integration into existing urban infrastructures. Regular updates to incorporate technological advancements and improvements in energy efficiency will also be crucial for the long-term success of the solution.

Smart Parking solutions designed by Shail Group are an ultimate solution which includes multilevel parking solution in compact areas, which will also give solution for Electric vehicle charging station. The solution for charging will be availed by use of solar panels which can be place securely on the top of the parking structure. This parking solution is best suitable for all metro polytan cities all across the globe.



OUR PRODUCTS

MULTI-LEVEL CAR PARKING SYSTEM

TOWER CAR PARKING SYSTEM

PUZZLE CAR PARKING SYSTEM

- OVER GROUND PUZZLE CAR PARKING SYSTEM
- PIT PUZZLE CAR PARKING SYSTEM

STACK PARKING SYSTEM

- ELECTROMECHANICAL CAR PARKING SYSTEM
- HYDRAULIC CAR PARKING SYSTEM

ROTARY CAR PARKING SYSTEM

- AXIS ROTARY CAR PARKING SYSTEM
- VERTICAL ROTATRY CAR PARKING SYSTEM

MULTI-LEVEL BIKE PARKING SYSTEM

BIKE PARKING SYSTEM (PUZZLE / ROTARY)

OTHER MANUFACTURING LIST

- · Goods Lift
- Flight Lift
- · Heavy Duty Lift
- · Sheet Metal Profile
- · All Types Structure
- · Fuel Oil Tank Heater
- · Tower Crane
- · Truss Girder
- · Ferris Wheel Structure
- Trolley & Material Handling Equipment

- · Cable Tray
- · Control Panel Structure
- · Parking Barriers
- · Passenger Lift
- · Water & Oil Tank
- · Bridge Structure
- · Bus Stop Shelter
- · Military Tower
- · Industrial Exterior Staircase
- EV Charging Station Structure

- · Solar Panel Structure
- · Commercial & Housing Container
- · Electricity Meter Box
- · Racking System
- · Transmission/Mobile Tower
- · Water Tower
- · Stadium Lights Structure
- · Industrial Building Structure
- ·Oil Petroleum Platform Structure
- · Aircraft Components & Structure

TOWER CAR PARKING SYSTEM

A **TOWER CAR PARKING SYSTEM**, also known as a tower parking garage or automated parking system, is an innovative and space-efficient solution for parking multiple vehicles in a compact vertical structure. It utilizes automated machinery and technology to store and retrieve cars in a safe and organized manner. Tower car parking systems offer an innovative and promising approach to address the challenges of urban parking.

OPERATING DEVICE:

Suitable operating device as per the requirement of the car Parking shall be provided in the control console with required push buttons, switches, and indicators. A maintenance board shall be provided in the control box, which can be accessed by opening the control lock by authorized servicing people.

Civil & Electrical requirements to suit above given Technical Specification of Tower Car Parking System.

Power Supply – 440 V, 3 phases, 50 Hz A.C. power supply

Earthing – Two earthling bus extended from earth pit terminated at main switch fuse unit for Car park control with specification as per the local code. All civil and preparatory site work such as levelling, foundation pits (approx. 1200 mm) and its waterproofing with necessary driveway in RCC.





TOWER PARKING - TECHNICAL SPECIFICATIONS

PARKING CAPICITY			18 to 40 Slots	42 to 60 Slots
ТҮРЕ			ELEVATOR (PALLET TYPE)	
MAX AVAILABLE CAR		Length(mm)	5100 mm	
		Width(mm)	2100 mm	
		Height(mm)	1650 mm (sedan) / 2000mm (SUV)	
		Weight(kg)	1900 (sedan) / 2400 (SUV)	
<u>.</u>		Motor	30 Kw x 4P & DC. Brake	37 Kw x 4P & DC. Brake
		Reducer	Helical i = 1/30	Helical i = 1/24
TRACTION UNIT		Speed	10m/min	10m/min
		Mechanism	Wire rope (8 wires), 2:1 Rope way	
		Motor	1.5 Kw x 4P & DC. Brake	
	PALLET	Reducer	Helical i = 1/25	
	PALLET	Speed	10m/min	
LIFT CAGE		Mechanism	Chain conveyor & Hook pin type	
LIFT CAGE	TURN TABLE	Motor	3.7 Kw x 4P & DC Brake	
		Reducer	Helical worm i = 1/25	
		Speed	2.5 rpm	
		Mechanism	Direct drive by Ring gear & Pinion	
		Controller	Vector inverter	
ELECTRIC CONTROL		Speed Control	Vector or PWM control (Inverter control)	
ELECTRIC CONTROL		Driving Control	PLC Control	
		Operation	Touch screen or computer(Optional)	
ELECTRIC CONTROL		Equipment	AC 415V, 3PH, 50Hz	
ELECTRIC CONTROL		Lamps	AC 220V, Single PH, 50 Hz	
SLIDING DOOR			2500(W) x 1800(H) (Sedan), 2000(H) (SUV)	
SAFETY DEVICE			Guide lamps at entrance and inside Guide mirror and instruction boards Photo sensors for positioning car on entry level Detector of traction wire breakage Protector for cage a pallet against over run Emergency stop switch	

PUZZLE CAR PARKING SYSTEM

Puzzle parking system provides independent parking spaces for cars depending upon the no. of rows & columns it can accommodate. The platforms at top floor (TF) are moved vertically only whereas the platforms at the ground floor (GF) are moved horizontally only. At approach level (GF) one parking space is kept vacant. This vacant space is used for shifting the parking spaces sideways, thus enabling a Top floor (TF) parking space to be lowered or lifted to approach level.

All necessary safety devices shall be installed for smooth functioning of the system. This consists mainly of a chain monitoring system, locking lever for platforms and electromagnetic door locks (optional). The parking bays are accessed horizontally.

It can be broadly classified into 2 categories :-

- 1. Over Ground Puzzle Car Parking System (Up to G+6 levels)
- 2. Pit Puzzle Car Carking System (2 pit + 6 levels)

Over Ground Puzzle Car Parking System

A combination of stacking and moving cars closer together.

- Compact parking on 2-6 levels above ground with just one driving lane.
- Various Permutation & Combinations of levels in an above the ground possible.
- Variable arrangement of 2 to 8 grids beside one another.
- Low parking and retrieval times average of 40 - 60 seconds per car depending upon configuration.

Models

- Fully motorized,2 level above ground & 2 to 8 grid.
- Fully motorized,3 level above ground & 2 to 8 grid.
- Fully motorized,4 level above ground & 2 to 8 grid.
- Fully motorized,5 level above ground & 2 to 8 grid.





TECHNICAL SPECIFICATIONS

Model Over Ground P	uzzle Car Parking System	TP20/30/40/50/60/70 (STANDARD)/3 GRID	TP20/30/40/50/60/70 (OPTIONAL)/3 GRID	
	Space Required-Length	5600	5700	
	Space Required-Width	6800	8300	
	Pallet Length (GF/UF)	4600	5200	
Machine Specification	Pallet Width (GF/UF)	2000	2500	
	Total System Height	3900/5700/ 7500/9300/ 11100/12900	3900/5700/ 7500/9300/ 11100/12900	
	Length (GF/UF)	4200/3800	4600/4200	
A	Width (GF/UF)	1950/1900	2050/2000	
Available Car	Height (GF/UF)	2000/1700	2000/1700	
	Weight (GF/UF)	2200/1700	2000/1500	
	Mechanism	Traction/Motor Chain Drive		
	Motor lifting	3HP		
1.00.1	Motor Sliding	0.25 HP		
Lifting	Lifting Speed	0.1 M/sec		
	Sliding Speed	0.125 M/sec		
	'		Helical Brake Geared Motor / Limit Switch	
Safety Devices		Phase Reversal/PLC/ Burger		
		Wheel Stopper / Pallet Guide / Barrier		
		Electromechanical Lock		
		Safety Guard		
		Emergency Stopper		
Electric Power		3ph, AC 415V, 50Hz		

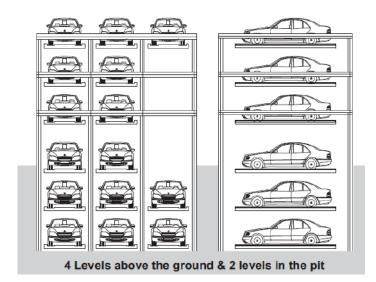
^{*} Available Pallet width Ranges from 2000mm to 2500mm according to Customer requirements and space constraints

⁻ Dimensions indicated above are in mm

Pit Puzzle Car Parking System

A combination of stacking and moving cars closer together.

- Compact parking on 2 to 4 levels above ground & 1 to 2 level in below ground with just one driving lane.
- Various Permutation and Combinations of levels in an underground pit and above the ground possible.
- Variable arrangement of 2 to 6 grids beside one another.
- Low parking and retrieval times average of 40 - 60 seconds per car depending upon configuration.



Models

- Fully motorized,2 level above ground with 1 level in pit & 2 to 8 grid.
- Fully motorized,3 level above ground with 1 to 2 level in pit & 2 to 8 grid.
- Fully motorized,4 level above ground with 1 to 2 level in pit & 2 to 8 grid.
- Fully motorized,5 level above ground with 1 to 2 level in pit & 2 to 8 grid.





TECHNICAL SPECIFICATIONS

Model Pit Puzzle Car Parking System		TP20/30/40/50/60/70 (STANDARD)/3 GRID	TP20/30/40/50/60/70 (OPTIONAL)/3 GRID	
	Space Required-Width	7500	7800	
	Pallet Length (B1-B2/GF/UF)	3800/4200/3800	4200/4600/4200	
	Pallet Width (B1-B2/GF/UF)	1950	2050	
Machine Specification	Pit Depth(B1-B2)	3900/2350	3900/2350	
	Total System Height (2L/3L/4L/5L/6L/7L)	3900/5700/ 7500/9300/ 11100/12900	3900/5700/ 7500/9300/ 11100/12900	
	Length (B1-B2/GF/UF)	3800/4200/3800	4200/4600/4200	
Assatlable Con	Width (B1-B2/GF/UF)	1900/1950/1900	2000/2050/2000	
Available Car	Height (B1-B2/GF/UF)	1700/2000/1700	1700/2000/1700	
	Weight (B1-B2/GF/UF)	1700/2200/1700	1700/2000/1500	
	Mechanism	Traction/Motor Chain Drive		
	Motor lifting UF/B1-B2	3HP/5 HP		
l :fti	Motor Sliding	0.25 HP		
Lifting	Lifting Speed	0.1 M/sec		
	Sliding Speed	0.125 M/sec		
			Helical Brake Geared Motor / Limit Switch	
Safety Devices		Phase Reversal/PLC/ Burger		
		Wheel Stopper / Pallet Guide / Barrier		
		Electromechanical Lock		
		Safety Guard		
		Emergency Stopper		
Electric Power		3ph, AC 415V, 50Hz		

^{*} Available Pallet width Ranges from 2000mm to 2500mm according to Customer requirements and space constraints

⁻ Dimensions indicated above are in mm

STACK PARKING SYSTEM

A STACK PARKING SYSTEM, is a parking for two passenger cars on top of each other. It has one horizontal platform on the upper parking bay. The lower parking bay is accessible directly on the floor. The platform has one wedge for car positioning. Operation in accordance with the "hold-to-run" principle (control device shall automatically return to the "off" position after release) by means of series of keys. The operation buttons are typically located at supports or outside the system.

It is of two type

- 1. Electro Mechanical Stack Parking
- 2. Hydraulic Car Parking System

Electro Mechanical Stack Parking

Consists of four lateral supports rigidly grouted to the floor with anchor bolts on a levelled Concrete floor. Motor & Chain move via a common hoisting slider – which are guided on the Supports – the platform. The synchronism of the Motor during rising and lowering is equalized Via a change torsion wave. An automatic electromagnet lowering blocking to prevent unintentionally lowering as well as a catch hook acts as a safety device.





STACK PARKING - Electromechanical

Model		EM-2000		
Parking Capacity		2 Cars		
	Required Height	Lower Height	Upper Height	Car type
	3600	1800	1550	Tallboy + Sedan
Car Data	3900	2100	1550	SUV + Sedan
	4200	2100	1850	SUV + Tallboy
	4400	2100	2050	SUV + SUV
Width of Car	2000 with Open Mirror			
Weight	Max. 2000kg			
	Pallet Length	3850		
Machine Specification	Pallet Width	2000	2100	2200
	Total Height of System	2900		
	Lifting Mechanism	Geared Motor with Chain sprocket mechanism		
Lifting	Geared Motor power	1.5Kw		
	Up/Down Speed	50 Sec		
	vitch			
Safety Devices	Electromagnetic brake			
	Bottom car Sensor			
	Emergency stopper			
	Wheel Stopper			
Electric Power	3ph, AC 415V, 50Hz			

^{*} Available Pallet width Ranges from 2000mm to 2500mm according to Customer requirements and space constraints

⁻ The Open area parking system should have a weather covering over the installation to prevent Malfunctioning of the Electronics/Mechanics

⁻ Dimensions indicated above are in mm

Hydraulic Car Parking System

Consists of two lateral supports rigidly grouted to the floor with anchor bolts on a levelled Concrete floor. Two Hydraulic cylinders move via a common hoisting slider — which are guided on the supports — the platform. The synchronism of the Hydraulic cylinder during rising and lowering is equalized via a change and torsion wave. An automatic hydraulic lowering blocking to prevent unintentionally lowering as well as a catch hook acts as a safety device.





HYDRAULIC - SPECIFICATION

Operation:	Electro – Hydraulic
Drive:	3 hp Motor with chain lift mechanism
Power:	3 Phase, 415V, AC, 50Hz
Platform Capacity:	2000/2200 Kgs
Lift Height:	Up to 1700/ 1800/ 1900/ 2000 MM
Platform Width:	2000MM standard (Different Optional)
Platform Length:	4500MM with ramps (Different Optional)
Power Pack:	All enclosed power pack with pressure relief 24V DC solenoid valve, Capacity-16 litres (1 unit), 40 litres (2 to 4 units), 60 litres (6 units)
Mechanical Safety:	Electro-magnetic lock, Car stopper, Barrier, Ramp, Anti-skid surface.
Hydraulic Safety:	Hose failure safety valve, pressure relief valve, Solenoid coil 24V DC for lowering if power failure.
Electrical Safety:	Phrase reversal, limit switch, key switch, emergency stopper.
Parking time:	40 to 60 second
Unit Weight:	1000 Kgs (Approx)

ROTARY CAR PARKING SYSTEM

A **ROTARY CAR PARKING** system, also known as a rotary parking garage or rotary car stacker, is an automated parking system that utilizes a rotating mechanism to stack and store vehicles in a compact and efficient manner. These systems are designed to optimize parking space usage and make the most of limited land available in urban areas.





ROTARY - SALIENT FEATURES

- 1 driving level = 2 parking levels = cost savings
- Cars possible in the space required for 3 Bay.
- Easy maintenance & reliable operation.
- Bottom, middle & top entrance possible.
- In built & stand-alone options available
- Human oriented design
- Computerized control systems

ROTARY - SPECIFICATION

- Car Size- Length=5050mm, Width-2000mm, Height= 1700 mm
- Motor- 22/30 Kw
- Lifting Capacity-1800/2000 Kg.
- System Dimensions Required-Length-6800mm, Width=7250mm
- Speed- 7M/Min
- Operation /Control-Touch screen, PLC with Parking Guidance
- Safety Devices-Emergency stop, sensors, Anti fall, guide rail.

BIKE PARKING SYSTEM

A **BIKE PARKING SYSTEM** is a facility designed to efficiently accommodate and manage the parking of motorcycles and scooters in various locations, such as residential buildings, commercial complexes, public spaces, and parking lots. The system aims to provide organized and secure parking for two-wheelers while optimizing the available space and improving overall traffic flow.

TAR PARKING has developed parking systems to help ease Bike parking problems and reduce clutter and free the expensive real estate for a better use. These systems can cater to any requirement from 10 to 1000 two wheelers.



Bike Parking in Rotary/Puzzle Parking System



BIKE PARKING - SPECIFICATION

Туре	Bike Puzzle Parking System
Mode of operation	Electric Drive
Loading Capacity (Kgs) Up to 900 Kg / Platform	
Speed Details	Lifting Speed: Up to 30 m/min, Traverse Speed: Up to 15 m/min.
Motors & Drives	Motors: SWE Motor with SEW Gear Box Drives: Siemens / Mitsubishi
Sped of Motor (RPM)	1140 RPM
Interface	PLC with HMI Interface
Structural Materials	IS2062 (Mild Steel). Brand: Tata Structural / Jindal / SAIL
Lifting Guide Rope 6x36 Construction FMC Wire Rope. Brand M/s. Usha Mart	
Lifting Guide Rollers	EN9 as per BIS Standard

	DESCRIPTION	Dimension
BW	Clear Bike Width	1350
PL	Pallet Length	2500
PW	Pallet Width	2500
ВН	Bay Height	1950
GFH	Ground Floor Height	2200
МС	NO. COLUMNS	UP TO5
MR	NO. ROWS	UP TO 7
Bike Type	All Bikes allowed, except Imported & Sports bike	

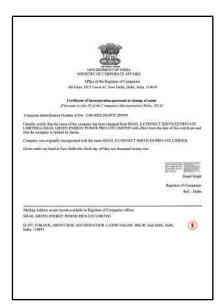
CERTIFICATES















Registered With



















Backed By







CUSTOMIZED CAR PARKING SOLUTIONS

TAR PARKING

Park with Ease, Leave with Peace

- International Address: 87 North Road, Poole, Dorset, England, BH14 OLT (England) Bulevard Bucuresti 17 Ap.9 Baia Mare (Romania) Amman- Jordan, Wadi Saqra st., Kalboneh Commercial Center, 4th Floor, Office #7
- Corporate Office: OC 827-830, 8th floor, Gaur City centre, Greater Noida West, Uttar Pradesh 201301
- Plant Address: D-5, Site-B, UPSIDC Industrial Area, Surajpur, Greater Noida, Uttar Pradesh 201306
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