**Hydraulic (Pit Puzzle) Parking System**

The **Hydraulic Pit Puzzle Parking System** is one of the most versatile and space-efficient parking solutions, designed to deliver maximum capacity within limited land availability. Suitable for **large commercial complexes, residential societies, office buildings, and standalone towers**, this system utilizes a pit structure to add multiple levels of parking both underground and above ground. By combining **hydraulic lifting** with **electromechanical sliding**, the system enables both vertical and horizontal movement of pallets, allowing cars to be parked and retrieved in a seamless, automated manner—much like solving a puzzle.

Its modular design offers **innumerable combinations**, making it adaptable to various site layouts and project requirements. Whether a developer is working on a high-density commercial site or a compact residential plot, the Pit Puzzle ensures the **highest parking efficiency every single time**, optimizing every inch of available space. With advanced hydraulic systems, robust steel structures, and automated safety mechanisms, the Pit Puzzle is engineered for long-term reliability, low maintenance, and smooth operation. It not only maximizes parking capacity but also enhances convenience, making it the **ideal choice for future-ready smart urban parking solutions**.

**General Specifications**

* **System Length:** 5600 mm
* **System Width:** 2400 mm per grid
* **Pallet Width:** 2000 mm – 2400 mm
* **Car Weight Capacity:** Up to 2000 – 2500 kg per car
* **Car Height Capacity:**
  + Lower Levels (Pit): 2000 mm – 2300 mm
  + Ground/Upper Levels: 1800 mm – 2000 mm
* **Operation:** Combination of hydraulic lift and electromechanical sliding system
* **Power Requirement:** 7.5 kW – 10 kW (depending on number of levels & configuration)
* **Structure:** Modular heavy-duty steel frame with powder-coated finish & anti-rust treatment
* **Drive Mechanism:** Hydraulic cylinders for vertical lift + motors/chains for horizontal sliding
* **Safety Features:**
  + Anti-fall safety locks
  + Automatic obstruction detection sensors
  + Overload protection system
  + Emergency stop button
  + PLC-based intelligent control system
* **Suitable For:** Sedans, hatchbacks, SUVs, and luxury vehicles