1. General Specifications

* **Capacity:** 50,000 Litres (Nominal), with "safe fill" capacities often around 48,000 litres to allow for expansion.
* **Dimensions:** 9.5 to 10.8 meters in length and 2.4 to 2.8 meters in diameter.
* **Material:** High-grade carbon steel (e.g., S235JR, S355, or similar).
* **Configuration:** Double-walled (self-bunded) to provide secondary containment.
* **Weight:** 5.4 to 10.4 tonnes (dry weight).

2. Design and Construction

* **Shape:** Horizontal cylinder with domed or dished ends.
* **Internal Protection:** Coated to withstand modern fuel additives, alcohols, and ethanol blends.
* **Exterior Coating:** Polyurethane anti-corrosion coating (often >800μmu 𝜇m), grit-blasted to Sa 2.5.
* **Working Pressure:** Max 0.5 bar.
* **Support:** Mounted on steel cradles or saddles.

3. Safety and Standard Equipment

* **Access:** 600mm diameter manway for inspection.
* **Fill Point:** 3” or 4” fill point with camlock fitting, dust cap, and non-return valve.
* **Overfill Protection:** Mechanical overfill prevention valve and electronic alarm.
* **Venting:** Free air vent with flame arrestor.
* **Monitoring:** Interstitial space dipstick for monitoring leaks in the outer shell.
* **Instrumentation:** Calibrated dipstick for fuel level measurement.
* **Dispensing:** includes a pump bay or cabinet with lockable doors, pump, hose, and nozzle.

4. Regulatory Standards

* **Aboveground:** built to UL-142, AS1940, or EN 12285-2.
* **Testing:** Welds are subjected to X-ray and pressure testing.

5. Common Applications

* Commercial and industrial fuel storage.
* Refuelling facilities
* Petrol stations.