

Sump Water Tank Procurement & Producer Guide

This reference guide details industrial and residential underground sump water tank solutions, categorised by material composition, technical configurations, and top regional manufacturing partners.

1. Primary Core Technologies & Materials

Polymer & Plastic (Linear Low-Density Polyethylene - LLDPE): Best for regular residential and commercial potable water configurations. Completely food-grade, lightweight, and seamless due to rotational moulding.

Precast Reinforced Cement Concrete (RCC): Heavy-duty infrastructure built with high-grade (M30/M40) cement. Ideal for high external load zones like driveways, fire hydrant reserves, and mass rainwater storage.

FRP (Fiber-Reinforced Plastic): Excellent structural integrity with high chemical and heat resistance, often used in tailored commercial or industrial setups.

2. Sump Tank Technical Comparison Matrix

Tank Material	Top Producers / Brands	Key Structural Advantages	Optimal Application
LLDPE Polymer	Ocean Sump, Sintex, Supreme, Plasto	100% leak-proof, anti-bacterial lining, easy manual installation	Residential domestic drinking water
Precast RCC	Mass Precast, Sri Bhuvaneshwari Eng.	50+ year service life, withstands vehicular load, quick 48hr deployment	Commercial yards, Fire storage, Stormwater drainage
FRP Composite	Sintex, Local Specialized Fabricators	Excellent chemical/corrosion safety, premium structural rigidity	Industrial manufacturing, Rainwater harvesting setups

3. Vital Engineering & Procurement Parameters

- **Load Constraints:** Ensure precast RCC models are clearly selected if your project requires vehicular override access over the top structural slab.
- **Seepage Prevention:** Polymer systems require clean multi-layered soil compacting to avoid shifting, while concrete variants need high-grade internal waterproofing coatings.
- **Accessories:** Confirm with your producer if the module bundle comes with automatic level controllers, anti-suction piping, and heavy-duty manhole covers.