



Specifications for Pioneer Flat Panel (PFP) Tank series

Description	<p>Cylindrical-shaped, Modular-built, Bolted Steel Water storage tanks with internal liner.</p> <p>Tanks are fitted with a Dome Roof structure to protect the stored liquids or kept with no roof (open-top) for special applications.</p>
Wall Panels	<p>Tank wall panels are made of high-grade flat steel plates, curved and shaped to tank diameter. Holes for bolted connections are done with CNC laser-cutting machine for high accuracy.</p>
Corrosion Treatment	<p>Steel Flat panels are protected with a factory applied Hot-Dip Galvanized treatment to min 450 gr/m².</p> <p>Further application of Epoxy & Polyurethane paint coats is also available for high-corrosive storage applications.</p>
Bolting Specification	<p>Hot-Dip Galvanized, high tensile steel bolts, Grade 8.8, are used for the tank wall panels and tank fittings.</p> <p>Bolts are placed inside fully enclosed covers.</p>
Roof Trusses	<p>Made of welded- steel tubular sections with Hot-Dip galvanized coating Grade AZ 200.</p> <p>Roof trusses shall be bolted to tank wall and shall be self-supporting without any ground columns.</p>
Roof Panels	<p>Aluzinc corrugated steel sheets, 0.50mm thick, are deployed over the roof trusses and joined using HDG Tek-screws.</p>
Tank Liner	<p>A high tear resistant, one-piece heavy duty, Reinforced PVC-Polyester liner shall be installed inside the tank to contain the stored liquid.</p> <p>The liner shall have an internal woven scrim for reinforcement, with a tensile strength of 4300N per 5cm in the Warp direction and a coated weight of 930gr/m².</p> <p>The Liner is suitable for liquid storage with a pH range of 3-11 and is also rated for the storage of potable water with a relevant test certificate to "DIN EN 12873-1: 20" European Standard.</p>
Nozzles	<p>Tank nozzles and fittings shall be of Hot Dip Galvanized (HDG) steel with an outer flange connection to external piping systems. Tanks shall be supplied with an overflow with downpipe and a scour drain.</p>



<p>Accessories</p>	<ul style="list-style-type: none"> -All tanks are fitted with External Ladders (HDG). A safety cage is added for tanks above 4.0m in height. -Lockable Roof Access Hatch with platform and handrail (HDG). -Full-Length Level Indicator with HDG column. -Roof Ventilator to be of Dynamic type (Whirlybird or similar).
<p>Foundation</p>	<p>Tanks shall be designed for installation onto a reinforced concrete ring beam foundation encasing a clean compacted sand base.</p> <p>Steel Hold-down brackets shall be bolted to the tank walls and fixed to the ring beam using expansion bolts.</p> <p>Tanks up to 2.2m in height may be positioned on a compacted sand pad with gravel protection outside the tank wall.</p>