LIQUID STORAGE SOLUTIONS

Metal Circular and Rectangular Liner Storage Tanks

Allied Pumps liquid storage tanks are manufactured from heavy gauge steel and engineered in capacities from 10kL to 2ML across a range of configurations. Rectangular and circular tanks are built to relevant Australian Standards, with in-house design, production, site installation and commissioning, and the capability to reach remote locations where access is difficult.



KEY FEATURES

- Complete Packaged Solution
- Ladders and Platforms to AS1657
- Capacities From 10kL to 2ML
- Galvanised or Zincalume Sheeting for Long Service Life
- Customised Pipe Connection Sizes, Types and Locations
- Full Maintenance Support, AS1851 Compliant Servicing
- Heavy Duty Reinforced PVC Liner Welded to Internal Wall
- Rectangular or Circular, Engineered to the Application

PRODUCT APPLICATIONS

- Fire Protection Storage
- Potable Water Storage
- Rainwater and Town Water Storage
- Stormwater Detention
- Mining, Commercial and Agricultural Process Water



Circular steel liner panel tank in galvanised sheeting, configured for fire water storage.

STANDARDS COMPLIANCE

Every tank is designed and manufactured to the relevant Australian Standards, covering fire protection, structural design, access and materials in contact with drinking water:

- AS2304, AS2419.1 and AS2118 for fire protection storage, hydrants and sprinklers
- AS4100 and AS4600 for steel and cold form steel structures
- AS1170.1, 1170.2 and 1170.4 for structural, wind and earthquake loads
- AS1657 for platforms, walkways, stairways and ladders
- AS/NZS4020 for products in contact with drinking water
- AS2239 for galvanic anodes and cathodic protection

Compliance is designed in from the outset rather than certified after the fact, so the tank meets its obligations on the day it is commissioned and holds them for the life of the installation.

Circular Liner Storage Tanks

Model No.	Diameter (m)	Panels in Circumference	Tank Height (m)							
			1.70	2.30	2.85	3.45	4.00	4.60	5.15	5.75
			Gross Capacity (kL)							
APCST 293	2.93	4	11.5	15.5	19.2	23.2	26.9	31.0	34.7	38.7
APCST 366	3.66	5	17.9	24.2	30.0	36.3	42.1	48.4	54.2	60.5
APCST 439	4.39	6	25.8	34.9	43.2	52.3	60.6	69.7	78.1	87.2
APCST 512	5.12	7	35.1	47.4	58.8	71.2	82.5	94.9	106.2	118.6
APCST 586	5.86	8	45.8	62.0	76.8	93.0	107.8	123.9	138.8	154.9
APCST 659	6.59	9	58.0	78.4	97.2	117.7	136.4	156.9	175.6	196.1
APCST 732	7.32	10	71.6	96.8	120.0	145.3	168.4	193.7	216.8	242.1
APCST 805	8.05	11	86.6	117.2	145.2	175.8	203.8	234.3	262.4	292.9
APCST 879	8.79	12	103.1	139.4	172.8	209.2	242.5	278.9	312.2	348.6
APCST 952	9.52	13	121.0	163.7	202.8	245.5	284.6	327.3	366.4	409.1
APCST 1025	10.25	14	140.3	189.8	235.2	284.7	330.1	379.6	425.0	474.5
APCST 1098	10.98	15	161.0	217.9	270.0	326.8	378.9	435.8	487.9	544.7
APCST 1171	11.71	16	183.2	247.9	307.2	371.8	431.1	495.8	555.1	619.7
APCST 1245	12.45	17	206.8	279.9	346.8	419.8	486.7	559.7	626.6	699.6
APCST 1318	13.18	18	231.9	313.7	388.8	470.6	545.6	627.5	702.5	784.4
APCST 1391	13.91	19	258.4	349.6	433.2	524.4	608.0	699.1	782.7	873.9
APCST 1464	14.64	20	286.3	387.3	480.0	581.0	673.6	774.7	867.3	968.3
APCST 1537	15.37	21	315.6	427.0	529.2	640.6	742.7	854.1	956.2	1,067.6
APCST 1611	16.11	22	346.4	468.7	580.8	703.0	815.1	937.4	1,049.4	1,171.7
APCST 1684	16.84	23	378.6	512.3	634.7	768.4	890.9	1,024.5	1,147.0	1,280.6
APCST 1757	17.57	24	412.3	557.8	691.1	836.6	970.0	1,115.5	1,248.9	1,394.4
APCST 1830	18.30	25	447.3	605.2	749.9	907.8	1,052.5	1,210.4	1,355.2	1,513.0
APCST 1903	19.03	26	483.8	654.6	811.1	981.9	1,138.4	1,309.2	1,465.7	1,636.5
APCST 1977	19.77	27	521.8	705.9	874.7	1,058.9	1,227.7	1,411.8	1,580.7	1,764.8
APCST 2050	20.50	28	561.1	759.2	940.7	1,138.8	1,320.3	1,518.4	1,699.9	1,898.0
APCST 2123	21.23	29	601.9	814.4	1,009.1	1,221.6	1,416.3	1,628.8	1,823.5	2,035.9
APCST 2196	21.96	30	644.2	871.5	1,079.9	1,307.3	1,515.7	1,743.0	1,951.4	2,178.8

Model No.	Tank Height (m)									
	6.30	6.90	7.45	8.05	8.60	9.20	9.75	10.35	10.90	11.50
	Gross Capacity (kL)									
APCST 293	42.4	46.5	50.2	54.2	57.9	62.0	65.7	69.7	73.4	77.5
APCST 366	66.3	72.6	78.4	84.7	90.5	96.8	102.6	108.9	114.7	121.0
APCST 439	95.5	104.6	112.9	122.0	130.3	139.4	147.8	156.9	165.2	174.3
APCST 512	130.0	142.3	153.7	166.1	177.4	189.8	201.1	213.5	224.9	237.2
APCST 586	169.8	185.9	200.7	216.9	231.7	247.9	262.7	278.9	293.7	309.9
APCST 659	214.8	235.3	254.1	274.5	293.3	313.7	332.5	353.0	371.7	392.2
APCST 732	265.2	290.5	313.7	338.9	362.1	387.3	410.5	435.8	458.9	484.2
APCST 805	320.9	351.5	379.5	410.1	438.1	468.7	496.7	527.3	555.3	585.8
APCST 879	381.9	418.3	451.7	488.0	521.4	557.8	591.1	627.5	660.8	697.2
APCST 952	448.3	491.0	530.1	572.8	611.9	654.6	693.7	736.4	775.6	818.3
APCST 1025	519.9	569.4	614.8	664.3	709.7	759.2	804.6	854.1	899.5	949.0
APCST 1098	596.8	653.6	705.7	762.6	814.7	871.5	923.6	980.4	1,032.6	1,089.4
APCST 1171	679.0	743.7	803.0	867.6	926.9	991.6	1,050.9	1,115.5	1,174.8	1,239.5
APCST 1245	766.6	839.6	906.5	979.5	1,046.4	1,119.4	1,186.3	1,259.3	1,326.3	1,399.3
APCST 1318	859.4	941.2	1,016.3	1,098.1	1,173.1	1,255.0	1,330.0	1,411.8	1,486.9	1,568.7
APCST 1391	957.5	1,048.7	1,132.3	1,223.5	1,307.1	1,398.3	1,481.9	1,573.1	1,656.7	1,747.9
APCST 1464	1,061.0	1,162.0	1,254.6	1,355.7	1,448.3	1,549.4	1,642.0	1,743.0	1,835.6	1,936.7
APCST 1537	1,169.7	1,281.1	1,383.2	1,494.6	1,596.8	1,708.2	1,810.3	1,921.7	2,023.8	2,135.2
APCST 1611	1,283.8	1,406.0	1,518.1	1,640.4	1,752.5	1,874.7	1,986.8	2,109.1	2,221.1	2,343.4
APCST 1684	1,403.1	1,536.8	1,659.3	1,792.9	1,915.4	2,049.0	2,171.5	2,305.1	2,427.6	2,561.3
APCST 1757	1,527.8	1,673.3	1,806.7	1,952.2	2,085.6	2,231.1	2,364.4	2,509.9	2,643.3	2,788.8
APCST 1830	1,657.8	1,815.6	1,960.4	2,118.3	2,263.0	2,420.9	2,565.6	2,723.5	2,868.2	3,026.1
APCST 1903	1,793.0	1,963.8	2,120.3	2,291.1	2,447.6	2,618.4	2,774.9	2,945.7	3,102.2	3,273.0
APCST 1977	1,933.6	2,117.8	2,286.6	2,470.7	2,639.5	2,823.7	2,992.5	3,176.7	3,345.5	3,529.6
APCST 2050	2,079.5	2,277.5	2,459.1	2,657.1	2,838.7	3,036.7	3,218.3	3,416.3	3,597.9	3,795.9
APCST 2123	2,230.7	2,443.1	2,637.9	2,850.3	3,045.1	3,257.5	3,452.3	3,664.7	3,859.4	4,071.9
APCST 2196	2,387.2	2,614.5	2,822.9	3,050.3	3,258.7	3,486.0	3,694.4	3,921.8	4,130.2	4,357.6



RECTANGULAR TANK SPECIFICATION

Parameter	Range
Height (H)	1m to 8m in 0.5m increments
Length (L)	1m to 30m in 0.5m increments
Width (W)	1m to 30m in 0.5m increments
Capacity Range	1m^3 to 1,600m^3
Baffle	Available
Triangular	Available



Rectangular steel liner panel tank showing panel construction, side wall access and ladder arrangement.

CONSTRUCTION DETAIL

Tank longevity comes down to the detail. Roof vents and a wall mounted condensation strip control condensation in the roof void, bolt cover strips protect bolt heads, and vermin proofing keeps out insects and dust. Corrosion is controlled by magnesium anodes around the circumference and a plastic membrane between the tank wall and the concrete foundation. Access hatches are available in 600mm, 750mm and 900mm.

POTABLE WATER

Designed and constructed for harsh Australian conditions, Allied Pumps potable tanks are proven in mining, commercial and agricultural applications covering rainwater, town water storage, stormwater detention and water treatment. Food grade, BPA free liners made from reinforced PVC deliver safe, clean drinking water, with geofabric reinforcement not found in standard liners available elsewhere.

FIRE PROTECTION

A fire suppression system is only as good as the water behind it. Storage tanks for active fire protection are a critical component in protecting lives and equipment across residential, commercial and industrial sites. Thirty years in the fire industry underpins full compliance with AS2419 and AS2304, with detailed attention to air gaps, overflow sizing, overflow crest height and the Australian Standard margin over vortex plate.

Guidance extends beyond the tank. Allied Pumps can advise on the fire protection equipment best suited to a specific site and supply the complete package, so storage and pumping are engineered together rather than procured separately.