

## OVER 100 YEARS OF EXPERIENCE

Serving the U.S. and the World.

Our leaders have experience in all facets of the industry including fabrication, erection & management. We offer bolted storage tanks for potable water, wastewater, fire protection, and dry bulk storage. Our innovative design gives you the comfort of knowing that your project will be on time and on budget.

### WHO WE ARE.

Back in the business with a new name, AST Storage is a global manufacturing company providing powder coated epoxy storage tanks. With 35 successful years in the industry, we manufacture bolted storage tanks for potable water, wastewater, fire suppression and protection water, as well as all types of dry storage.

All State Tank Manufacturing built a great reputation. Now under our new name, AST Storage is backed by an ownershipmanagement duo that no other team in the industry can match. We hold unparalleled professional qualifications, practical experience and industry credentials. Our goal is complete customer satisfaction-not just at the time of purchase, but before, through and after the sale.



1st to use straight seam, flat panel construction.



1st to produce powder on powder epoxy coated tanks & silos.



1st to employ 1/2" steel plate in AWWA designs.



1st to produce selfsupporting steel decks up to 60' diameter.

### INNOVATIVE. RELIABLE. RESPONSIBLE.



### 918.208.0100



Our partnership with some of the largest OEM's in the frac sand industry affords AST the ability to assist you with designing and procuring your next Frac Sand Storage Silo. We can assist you with:

## CUSTOM FRAC SAND STORAGE SILO SOLUTIONS

With the need to find more economical sources for fuel, comes the need for better storage solutions. AST's Frac Sand Storage Silo is the optimal choice and industry benchmark.

The silo's bolted flat panel construction offers unique characteristics that ease installation, reduces startup time, and increases safety on site – all while providing a superior quality storage product. The powder epoxy coating process is state-of-the-art, resulting in outstanding coverage, assuring longlasting service in the field. AST's Standard SherCoatTM powder coating is electrostatically applied and thermally cured, all within a factory-controlled climate, ensuring extremely low emissions for environmentally sound production.

#### WE OFFER SUPERIOR SAND STORAGE SILOS.

Here are some of the many features and benefits when choosing us as you shop for sand silos for sale:

- Fast construction with minimal amount of space required.
- Flexible designs.
- Bolted panels shipped on custom made pallets, which match the rise on cord for your tank, allowing AST to ship more per load than most other manufacturers.
- Project Managers, assigned to your project, work closely with Engineering, Drafting and Manufacturing to ensure constant and consistent communication throughout the project.
- Quick turn around.
- Economical pricing.
- First class customer service.
- Site Layout
- Conveyors and Elevators
- Foundation Design
- Material Handling
- Truck Drive Throughs
- Scales

- Electrical Systems
- Train Rails
- Control Systems
- Funnel Flow Designs
- Mass Flow Designs



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## CUSTOM LEACHATE STORAGE TANK SOLUTIONS

#### LEACHATE STORAGE TANKS BUILT TO FIT YOUR NEEDS.

Flat panel design, by AST Storage, produces an ideal solution for your Leachate Water Storage Tank needs.

Strict EPA guidelines necessitate improved storage and increased security to ensure uncontaminated drinking water. Allow us to design a superior chemical storage tank to meet industry requirements and your job site restrictions.

Most Leachate Hazardous Waste Tanks require secondary containment, and our powder coated epoxy panels work extremely well for this type of requirement.

AST Storage partners with one of the world's largest aluminum dome manufacturers for roofing needs. If your tank requires an aluminum dome, we are able to provide and install an extremely economical solution. If a roof is not required on your tank, we can finish the interior, top (2) two rings with exterior coating as an extra barrier for UV protection.

AST Storage will design your next Leachate Water and Waste Storage Tank to meet all the applicable loads of your job site, and requirements of the American Water Works Association (AWWA).

If your chemical tanks require an Aluminum Dome, we work with one of the world's largest Aluminum Dome manufacturers, which means we can not only provide an extremely economical solution, but install it as well.

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## FIRE PROTECTION STORAGE TANKS

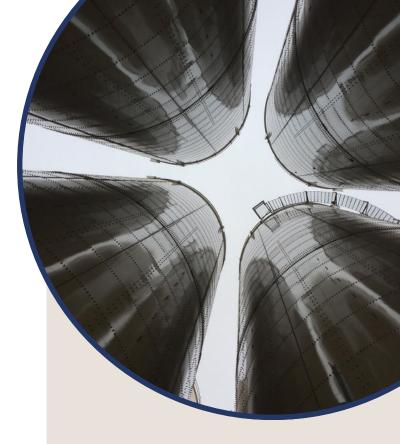
AST's Fire Protection Storage Tanks meet the demands for increased water storage and conservation. Stringent insurance regulations, and the construction of new facilities around the globe, allows us the opportunity to provide the industry benchmark in Fire Protection Storage Tanks.

Our flat panel design allows our tanks to be erected in tight spaces, close to existing structures and inside existing buildings, utilizing lifting jacks instead of scaffolding. This type of construction procedure is also safer for the erection crews. This method ensures our EMR Rating is one of the lowest in the industry.

Our state-of-the-art powder coating line, applied in our environmentally controlled facility, offers you the most optimal coating solution on the market. Our SherCoat finish covers 100% of the panels eliminating the need for cathodic protection. An additional safeguard is shrink wrapped pallets to ensure panels arrive in pristine condition.

AST Storage will design your next Fire Protection Tank to meet NFPA 22 and American Water Works Association (AWWA) regulations, and if requested, Factory Mutual (FM) requirements. Give us your fire protection water storage tank specification and our experts will craft the perfect one for your needs.

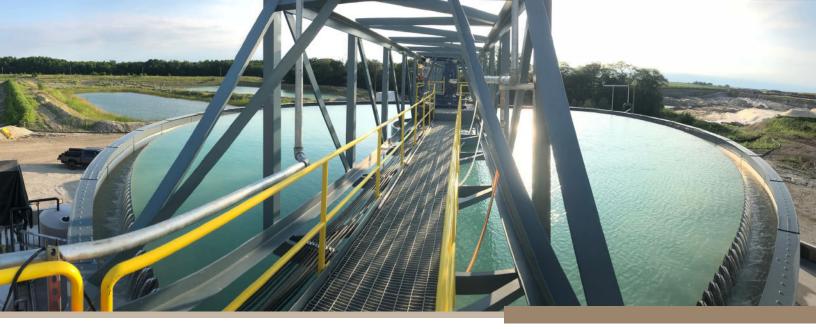




AST can provide the total package for your fire protection water tank needs, including:

- 2.0" Polyisocyanurate insulation board.
  - + Stucco Embossed 0.024 Aluminum Metal Jacketing
  - + Standard colors: Fawn or White
  - + Mil Finish: Black or Grey
  - + Transition Flashing
- + 0.015 Stainless Steel Strapping
- + Panels attached by ¼" Stainless Steel Cables
- + Urethane Caulking and Rivets
- High/ Low Level Switch
- Temperature Switch
- Interior Piping (Schedule 10 Stainless Steel or Schedule 80 PVC)
- Adequate heating to maintain a minimum temperature of 42° F per NFPA 22





### INNOVATE POTABLE WATER STORAGE TANKS

At AST Storage we pride ourselves on our ability to work with municipalities and rural water districts to provide Potable Water Storage Tanks. Our team of expert engineers, sales staff and project management personnel offers professional assistance with the design and budget.

No matter how large or small the project, we will go above and beyond to facilitate and provide the highest quality products and service.

Our Potable Water Tanks are coated with AST Standard DuraCoat©, which means you are getting a top of the line finish that will "outshine" the competition for years to come. Our coating is NSF 61 approved for drinking water, which gives you the satisfaction and comfort knowing that your Potable Water Storage Containers are the best in the industry.

#### INTERIOR COATING

• Akzo Nobel Interpon 100 which is NSF standard 61 approved, will be applied in accordance to AWWA D103 Section 12.6 to 5 mil DFT average.

#### EXTERIOR COATING

- Akzo Nobel Interpon 100 which is NSF standard 61 approved, will be applied in accordance to AWWA D103 Section 10.2 to 5 mil DFT average.
- The same thermoset epoxy powder coating as applied to the sheet surfaces is applied to the exposed edges.
- All exposed edges will be coated with primer including underside of floor.
- Coated sheets shall be inspected for mil thickness (Mikrotest or equal).
- An electrical leak detection test shall be performed on the inside surface after fabrication of the sheet. Sheets with excessive electrical leakers shall be rejected so as to minimize field touch up.

The flat panel design of our potable water containers affords us the ability to jack our tanks, in lieu of building with scaffolds, or the need for welding on site, which saves time-on-site and quickly puts the tank in operation. This also allows our tanks to be erected in remote locations with limited access for heavy equipment. All of our tanks are 100% coated, so the need for cathodic protection is minimal.



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## WASTE WATER STORAGE TANKS

AST Storage's superior flat panel design is the logical solution for wastewater storage tanks. With new EPA regulations and the demand for cleaner water, the requirements for waste water tanks are at an all-time high.

We can design your next waste water tank to exceed industry demands and meet any size or site requirements.

#### Anaerobic Digesters | Aeration Tanks | Aerobic Digesters Dewatering | Equalization | MBBR | SBR Biological Treatment | Sludge Storage | Flocculation Sedimentation | Thickeners | Clarifiers

AST Storage partners with one of the world's largest aluminum dome manufacturers for roofing needs. If your tank requires an aluminium dome, we are able to provide and install an extremely economical solution. If your tank does not require a roof, we can finish the interior, top (2) two rings with an exterior coating as an additional barrier for UV protection.

Your tank will meet all the applicable loads of your job site, and requirements of the American Water Works Association (AWWA).

## DRY BULK STORAGE SILOS

Bolted flat panel construction from AST Storage, an industry leader and storage tank manufacturer, offers unique characteristics to ease installation, reduces startup time, and increases onsite safety – all the while providing a superior quality storage product.

The epoxy powder coating process offered by AST Storage is state-of-the-art, resulting in outstanding coverage and assuring long-lasting service in the field. AST Standard SherCoatTM powder coating is electrostatically applied and thermally cured, all within a factory-controlled climate, ensuring extremely low emissions for environmentally sound production.

AST Dry Bulk Storage Silos can be utilized for a variety of products, including but not limited to:

#### Sand | Cement | Fly Ash | Plastic | Woodchips Coal | Carbon Black | Soda Ash | Urea Pellets | Coke Activated Carbon | Lime | Silica | Alumina

Our partnership with some of the largest OEM's in the dry bulk industry affords AST the ability to assist you with designing and procuring your next Dry Bulk Container.

We can assist you with:

- Site Layout
- Conveyors and Elevators
- Foundation Design
- Material Handling
- Truck Drive Throughs
- Scales
- Electrical Systems
- Train Rails
- Control systems
- Funnel Flow Designs
- Mass Flow Designs



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## AST'S PROPRIETARY DURACOAT PAINT SYSTEM

DuraCoat, an epoxy powder coating system, sets an industry benchmark standard for its exceptional durability at the most economical price. In 2003, AST became the tank manufacturing leader by developing this superior coating for our flat panel, bolted storage tanks. After almost 20 years, that finish is still performing like new on those tanks that are still in use. Some of the following statistics support DuraCoat's outstanding performance:

- AST's tightly controlled painting system monitors precise timing and temperature to ensure the best adhesion and curing of powder coating in the industry.
- DuraCoat can be applied at a range from 3 mils to 10 mils, to tanks 12 gauge to ½". Polyester TGIC is fuse-bonded to the exterior primer at 2-3 mils for outstanding UV protection.
- The maximum temperature fluctuation tolerated by DuraCoat is 20 degrees higher than any of our competitors: up to 300 degrees for dry storage tanks, up to 200 degrees for submerged liquid tanks.
- DuraCoat has the best abrasion and impact resistance of any coating in the industry.

- DuraCoat has an excellent range of pH tolerance, from 4 to 14 at ambient temperature. All prior coatings only tolerated a pH level of 10.
- More testing has been done and more data collected on DuraCoat than any other industry coating.

AST has always been committed to bringing you excellence by driving industry standards of quality forward. We're excited to be able to offer this incredible technology that ensures not only a durable and lasting finish to every tank we build, but also is the best value out there, for you, our customer.





### 918.208.0100

### LIQUID TANK CAPACITY CHART

#### 116" SHEETS | NO STARTER HEIGHT & VOLUME (FEET & U.S. GALLONS)

Sheets Per Ring	Diameter Feet	1 Ring 5' - 3 1/4"	<b>2</b> Rings 10' - 1 1/4" 1	<b>3</b> Rings 14' - 11 1/4"	<b>4</b> Rings 19' - 9 1/4"	<b>5</b> Rings 24' - 7 1/4"	6 Rings 29' - 5 1/4"	7 Rings 34' - 3 1/4"	<b>8</b> <b>Rings</b> 39' - 1 1/4" 4	9 Rings 3' - 11 1/4"	<b>10</b> Rings 48' - 9 1/4"	<b>11</b> <b>Rings</b> 53' - 7 1/4"	<b>12</b> Rings 58' - 5 1/4"	13 Rings 63' - 3 1/4"
3	9' - 2 3/4"	2,138	4,558	6,978	9,398	11,818	14,238	16,658	19,077	21,497	23,917	26,337	28,757	31,177
4	12' - 3 3/4"	3,801	8,103	12,405	16,707	21,009	25,311	29,614	33,916	38,218	42,520	46,822	51,124	55,426
5	15' - 4 5/8"	5,940	12,662	19,383	26,105	32,827	39,549	46,271	52,993	59,715	66,437	73,159	79,881	86,603
6	18' - 5 1/2"	8,553	18,233	27,912	37,592	47,271	56,951	66,630	76,310	85,990	95,669	105,349	115,028	124,708
7	21' - 6 1/2"	11,642	24,817	37,992	51,167	64,341	77,516	90,691	103,866	117,041	130,216	143,391	156,566	169,741
8	24' - 7 3/8"	15,205	32,414	49,622	66,830	84,038	101,246	118,454	135,662	152,870	170,078	187,286	204,495	221,703
9	27' - 8 3/8"	19,244	41,023	62,802	84,581	106,360	128,139	149,918	171,697	193,476	215,255	237,034	258,813	280,592
10	30' - 9 1/4"	23,758	50,646	77,534	104,421	131,309	158,197	185,084	211,972	238,860	265,747	292,635	319,523	346,410
11	33' - 10 1/8"	28,748	61,282	93,816	126,350	158,884	191,418	223,952	256,486	289,020	321,554	354,088	386,623	419,157
12	36' - 11 1/8"	34,212	72,930	111,649	150,367	189,085	227,803	266,522	305,240	343,958	382,676	421,395	460,113	498,831
13	40'	40,152	85,592	131,032	176,472	221,912	267,353	312,793	358,233	403,673	449,113	494,553	539,993	585,434
14	43' - 7/8"	46,567	99,266	151,966	204,666	257,366	310,066	362,766	415,465	468,165	520,865	573,565	626,265	678,964
15	46' - 1 7/8"	53,457	113,954	174,451	234,948	295,446	355,943	416,440	476,937	537,435	597,932	658,429	718,926	779,423
16	49' - 2 3/4"	60,822	129,654	198,487	267,319	336,151	404,984	473,816	542,649	611,481	680,313	749,146	817,978	886,811
17	52' - 3 3/4"	68,662	146,367	224,073	301,778	379,483	457,189	534,894	612,599	690,305	768,010	845,715	923,421	1,001,126
18	55' - 4 5/8"	76,978	164,094	251,210	338,326	425,442	512,558	599,674	686,790	773,906	861,022	948,138	1,035,254	1,122,370
19	58' - 5 1/2"	85,768	182,833	279,897	376,962	474,026	571,090	668,155	765,219	862,284	959,348	1,056,413	1,153,477	1,250,542
20	61' - 6 1/2"	95,034	202,585	310,135	417,686	525,237	632,787	740,338	847,889	955,439	1,062,990	1,170,540	1,278,091	1,385,642
21	64' - 7 3/8"	104,775	223,350	341,924	460,499	579,073	697,648	816,223	934,797	1,053,372	1,171,946	1,290,521	1,409,095	1,527,670
22	67' - 8 3/8"	114,991	245,127	375,264	505,400	635,536	765,673	895,809	1,025,945	1,156,081	1,286,218	1,416,354	1,546,490	1,676,627
23	70' - 9 1/4"	125,682	267,918	410,154	552,390	694,625	836,861	979,097	1,121,333	1,263,568	1,405,804	1,548,040	1,690,276	1,832,511
24	73' - 10 1/8"	136,849	291,722	446,595	601,468	756,341	911,214	1,066,087	1,220,959	1,375,832	1,530,705	1,685,578	1,840,451	
25	76' - 11 1/8"	148,491	316,538	484,586	652,634	820,682	988,730	1,156,778	1,324,826	1,492,874	1,660,922	1,828,969	1,997,017	
26	80'	160,607	342,368	524,129	705,889	887,650	1,069,410	1,251,171	1,432,932	1,614,692	1,796,453	1,978,213		
27	83' - 1"	173,199	369,210	565,222	761,233	957,244	1,153,255	1,349,266	1,545,277	1,741,288	1,937,299	2,133,310		
28	86' - 1 7/8"	186,267	397,066	607,865	818,664	1,029,464	1,240,263	1,451,062	1,661,861	1,872,661	2,083,460			
29	89' - 2 3/4"	199,809	425,934	652,059	878,185	1,104,310	1,330,435	1,556,560	1,782,686	2,008,811	2,234,936			
30	92' - 3 3/4"	213,826	455,815	697,804	939,793	1,181,782	1,423,771	1,665,760	1,907,749	2,149,738	2,391,727			
31 32	95' - 4 5/8"	228,319 243,287	486,710	745,100 793,946	1,003,490	1,261,881	1,520,271	1,778,662 1,895,265	2,037,052	2,295,443				
32	98' - 5 5/8" 101' - 6 1/2"	243,287	518,617 551,537	844,343	1,069,276	1,344,606	1,619,935 1,722,763	2,015,570	2,170,595	2,445,924				
33	101 - 8 1/2	258,730	551,537	896,291	1,137,150 1,207,112	1,429,937	1,722,763	2,013,570	2,308,376 2,450,398	2,601,183 2,761,219				
34	104 - 7 3/8	274,048	620,415	949,789	1,207,112	1,608,537	1,937,911	2,267,285	2,596,659	2,701,217				
36	110' - 9 1/4"	307,910	656,374	1,004,838	1,353,302	1,701,766	2,050,231	2,398,695	2,747,159					
37	113' - 10 1/8"	325,254	693,346	1,061,438	1,429,530	1,797,622	2,165,714	2,533,806	2,901,898					
38	116' - 11 1/8"	343,073	731,331	1,119,588	1,507,846	1,896,104	2,284,362	2,672,620	3,060,878					
39	120'	361,367	770,328	1,179,289	1,588,251	1,997,212	2,406,173	2,815,135	3,224,096					
40	123' - 1"	380,136	810,339	1,240,541	1,670,744	2,100,946	2,531,149	2,961,351	-, ,,					
41	126' - 1 7/8"	399,380	851,362	1,303,343	1,755,325	2,207,307	2,659,288	3,111,270						
42	129' - 2 3/4"	419,100	893,398	1,367,697	1,841,995	2,316,293	2,790,592	3,264,890						
43	132' - 3 3/4"	439,295	936,447	1,433,600	1,930,753	2,427,906	2,925,059	3,422,212						
44	135' - 4 5/8"	459,964	980,510	1,501,055	2,021,600	2,542,145	3,062,690	3,583,235						
45	138' - 5 5/8"	481,110	1,025,585	1,570,060	2,114,535	2,659,010	3,203,485	3,747,960						
46	141' - 6 1/2"	502,730	1,071,673	1,640,616	2,209,559	2,778,501	3,347,444							
47	144' - 7 3/8"	524,825	1,118,774	1,712,722	2,306,671	2,900,619	3,494,567							
48	147' - 8 3/8"	547,396	1,166,887	1,786,379	2,405,871	3,025,363	3,644,854							
49	150' - 9 1/4"	570,441	1,216,014	1,861,587	2,507,160	3,152,733	3,798,305							
50	153' - 10 1/4"	593,962	1,266,154	1,938,345	2,610,537	3,282,729	3,954,920							



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### LIQUID TANK CAPACITY CHART

#### 116" SHEETS | NO STARTER HEIGHT & VOLUME (FEET & U.S. GALLONS)

Sheets Per Ring	Diameter Feet	14 Rings	15 Rings 72' - 11 1 / 4"	16 Rings	17 Rings	18 Rings	19 Rings	20 Rings	21 Rings	22 Rings	23 Rings	24 Rings	<b>25</b> Rings 121' - 3 1/4" 12	26 Rings
3	9' - 2 3/4"	33,597	/2 - 11 1/4	// - / 1/4	02 - / 1/4	07 - 5 1/4 1	92 - 3 1/4	7/ - 1 1/4	101 - 11 1/4	100 - 7 1/4	111 - / 1/4	110 - 5 1/4	121 - 3 1/4 1.	20 - 1 1/4
4	12' - 3 3/4"	59,728												
5	15' - 4 5/8"	93,325	100,046	106,768	113,490	120,212	126,934	133,656	140,378	147,100	153,822	160,544	167,266	173,988
6	18' - 5 1/2"	134,387	144,067	153,746	163,426	173,106	182,785	192,465	202,144	211,824	221,503	231,183	240,862	250,542
7	21' - 6 1/2"	182,916	196,091	209,266	222,441	235,616	248,791	261,966	275,141	288,316	301,491	314,666	327,841	341,016
8	24' - 7 3/8"	238,911	256,119	273,327	290,535	307,743	324,951	342,159	359,368	376,576	393,784	410,992	428,200	445,408
9	27' - 8 3/8"	302,371	324,150	345,929	367,708	389,487	411,266	433,046	454,825	476,604	498,383	520,162	541,941	563,720
10	30' - 9 1/4"	373,298	400,186	427,073	453,961	480,849	507,736	534,624	561,512	588,399	615,287	642,175	669,062	695,950
11	33' - 10 1/8"	451,691	484,225	516,759	549,293	581,827	614,361	646,895	679,429	711,963	744,497	777,031	809,565	842,100
12	36' - 11 1/8"	537,549	576,268	614,986	653,704	692,422	731,140	769,859	808,577	847,295	886,013	924,732		
13	40'	630,874	676,314	721,754	767,194	812,634	858,075	903,515	948,955	994,395				
14	43' - 7/8"	731,664	784,364	837,064	889,764	942,464	995,163	1,047,863	1,100,563					
15	46' - 1 7/8"	839,921	900,418	960,915	1,021,412	1,081,910	1,142,407							
16	49' - 2 3/4"	955,643	1,024,476	1,093,308	1,162,140	1,230,973								
17	52' - 3 3/4"	1,078,832	1,156,537	1,234,242	1,311,948									
18	55' - 4 5/8"	1,209,486	1,296,602	1,383,718										
19	58' - 5 1/2"	1,347,606	1,444,671											
20	61' - 6 1/2"	1,493,192												
21	64' - 7 3/8"	1,646,245												

# HAVE QUESTIONS? READY TO GET STARTED?



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