A Grand Storage Solution: No Monkeying Around with Aquastore and CST

Who doesn’t want to be thriving well into their 70s? At 74, Grand Lake in northeast Oklahoma is getting better with age – like an eternal Fountain of Youth. The idea for a lake was hatched in the 1930s when local leaders set out to dam the Grand River to supply water and control flooding. Legend has it they secured federal funding by getting the attention of none other than the President of the United States, Franklin D. Roosevelt. A law was passed requiring the presidential train to stop in nearby Vinita, and stop it did, where the President was met by a raucous crowd.

Today, Grand Lake is a glittering example of the power of determination to build something for the public good. It’s Oklahoma’s #1 tourist attraction – 43,000 acres of water surface and 1,300 miles of shoreline – a destination for fun-seekers who love boating, fishing, golfing and the good life in general.

Water is central to the livelihood of the area – and not just for recreation. For more than 20 years the local water supply was pumped from the lake, but steady growth put a strain on the water treatment plant as it struggled to meet demand and new federal regulations.

So, the Grand Lakes Public Works Authority commissioned a newer, more efficient system that would pump water from six fresh-water wells. Determined to get the best storage solution for the best price, the PWA launched a competitive bidding process and awarded the project to Aquastore and CST Storage, based on the merits of CST’s HydroTec® tank.

“We’re really pleased with our tank and our partnership with Aquastore and CST,” says Jim Anderson, Manager of Grand Lakes Public Works Authority. “They built what they said they would build, on time and on budget.”

The 500,000-gallon tank is constructed of panels which are overlapped and bolted into place to prevent leakage. CST HydroTec® systems are designed by CST engineers, manufactured under the strictest of quality process controls in ISO 9001:2008 certified facilities and supported by CST’s seasoned project management teams.

To ensure no leakage, each panel is dry powder epoxy coated using CST’s Opti-Bond Coating System™ and a performance urethane is applied to the exterior to extend gloss and color retention. It’s the strongest corrosion and abrasion resistance on the epoxy coated market.

“I had bad experiences with bolted tanks in the past because they leak,” says Anderson, “but it’s amazing what they’ve done with this bolted tank, and it’s less expensive than the welded variety.”

The tank was installed from the top down using jacks so no high scaffolding was required. Anderson was impressed.
“When they said ‘your tank’s here’ I went out and looked and saw these boxes,” says Anderson. “I was amazed at how they assembled the tank from the individual panels. There was no hassle and the crew did a great job.”

Installation took less two weeks. In fact, a HydroTec® tank system can be manufactured, erected and put in operation up to three times faster than field welded or concrete applications. It’s also the green choice in liquid storage because there’s no in-field painting or repainting, and the minimized construction footprint protects the surrounding environment.

Today, the Grand Lakes PWA serves 1,400 residential and 200 commercial customers, primarily on the Monkey Island peninsula. Anderson says the cutover to the new water treatment plant will be completed by the spring.

“Aquastore is proud to partner with CST to deliver forward-thinking solutions to a broad variety of industries,” says John Pappalardo, Regional Manager-North Texas, Oklahoma and Arkansas, Aquastore.

With more than 150,000 tanks in 125 countries performing in thousands of applications, no other company can match CST’s design, manufacturing and construction experience.

HydroTec® tank systems deliver high quality at the lowest cost per gallon and low installation costs. With their high quality, durable coatings they’re built to last longer than welded tanks, which mean reduced maintenance costs delivering a faster ROI.

Harnessing the power of water to nurture economic growth, sustain life and promote recreation – made possible with the HydroTec® tank system from CST and Aquastore.

**Benefits of CST’s Bolted Tank Technology:**

- All tank parts are factory coated for maximum protection and are easily transported to the job site.
- Bolted tanks can be erected in 1/3 of the time required to build a field-welded or concrete tank on-site.
- Tanks can be assembled in even the most remote sites, without large staging areas, and in every season of the year.
- Bolted tank construction is very conservation-friendly with little disturbance to the surrounding environment.
- CST bolted tanks are factory coated, so there is no in-field painting required which can expose the environment to harmful silica from sand blasting or paint overspray.
- Tanks are assembled at ground level using a unique jacking system that progressively elevates the structure to install the panels without the need for expensive cranes or staged scaffolding.

**CST Contact Information:**

**CST Industries, Inc.**

Kim Mathis
Global Marketing Director
713.351.3769
kmathis@cstindustries.com

**CST Industries, Inc.**

Pat Howell
Global Business Development Director - BioEnergy
913.815.1274
phowell@cstindustries.com