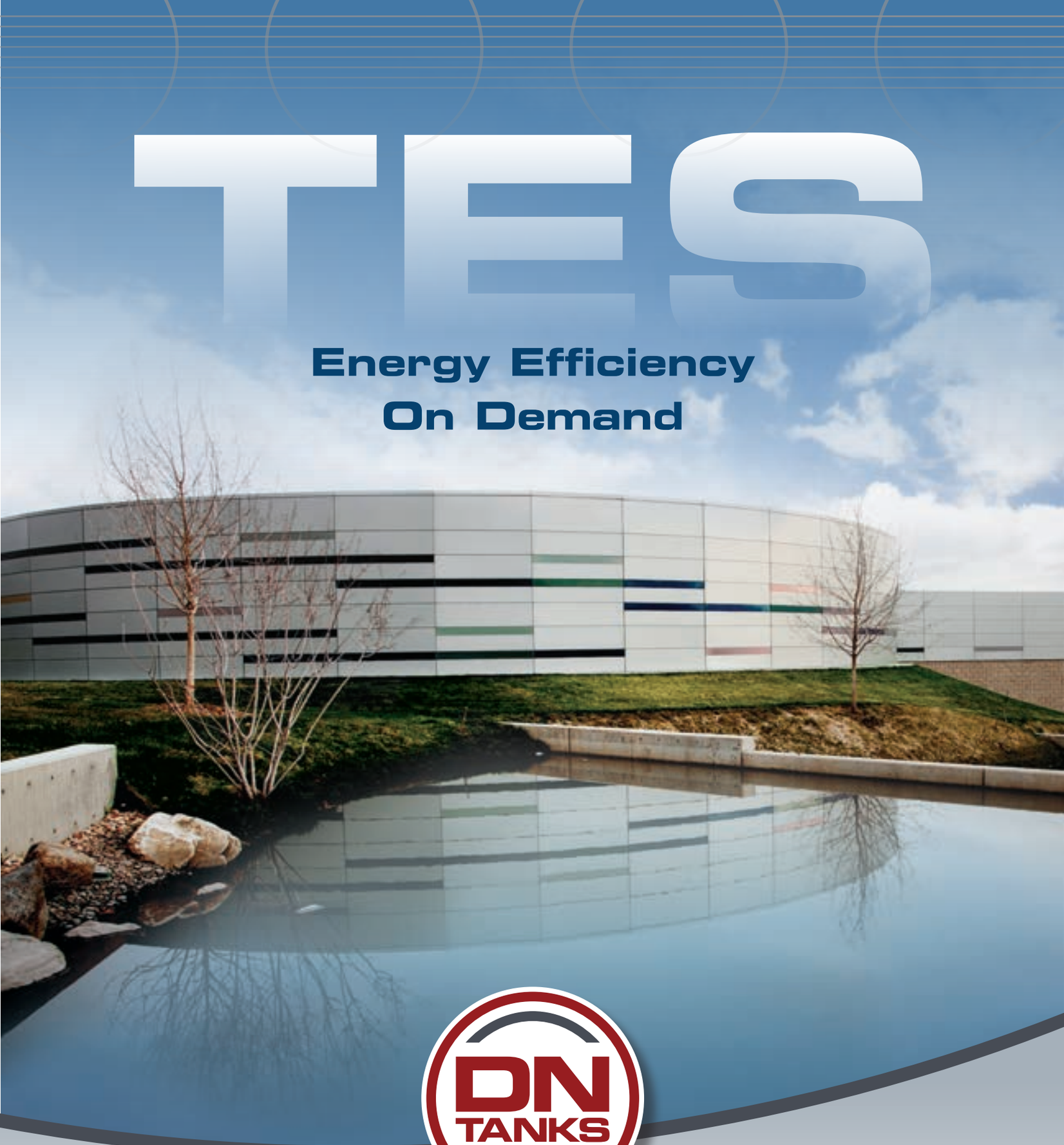
TES

Energy Efficiency On Demand



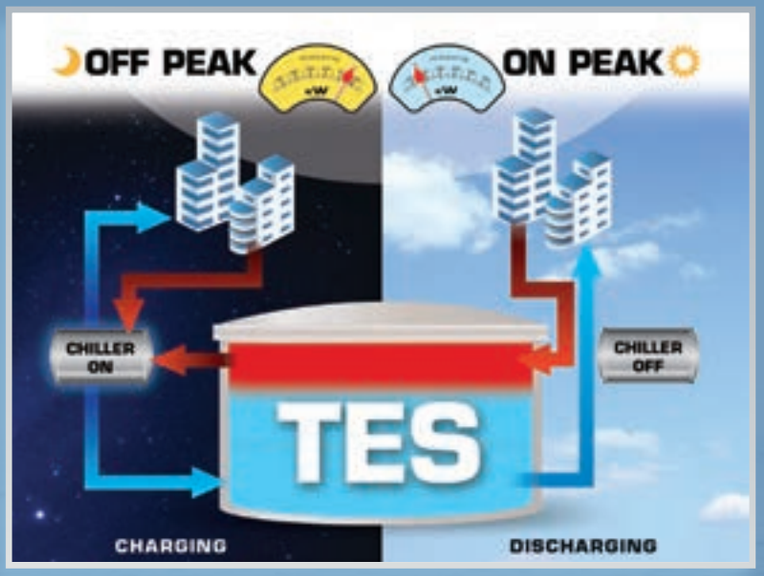
DN TANKS

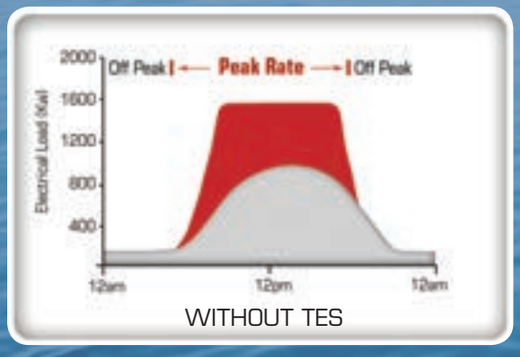
THERMAL ENERGY STORAGE TANKS

HOW TES WORKS

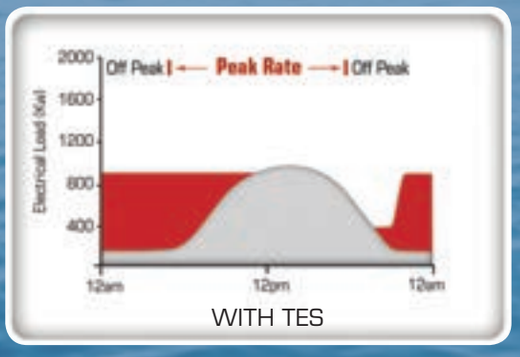
Why and when it's used

A Thermal Energy Storage tank integrates seamlessly into any chilled water district cooling system. Because of the specially designed internal diffuser system, the chilled water remains stratified within the tank throughout the charging and discharging process.





WITHOUT TES



WITH TES

By producing chilled water during off-peak hours, and then utilizing the stored water during peak periods, the peak electrical load is permanently reduced. This lowers energy cost by reducing peak electric demand and energy consumption, saving owners thousands of dollars each year. For expansion projects, owners can avoid the capital cost of adding a chiller by instead utilizing a TES tank.

THERMAL ENERGY STORAGE (TES) is a proven component of district energy company strategies. For 30 years, DN Tanks has designed and built pre-stressed concrete tanks — throughout the world — for storing the chilled water integral to the Thermal Energy Storage process. Every single one of these tanks is watertight and operational today.

24/7

Owners rely on TES to reduce energy costs and increase efficiency

DN Tanks constructs pre-stressed concrete tanks for Thermal Energy Storage. Typical owners include: airports, schools and universities, hospitals, government and military bases, power plants and private industries. TES is also used as a backup for chilled water systems that require 24/7 cooling — such as mission critical data centers.

Industrial & Commercial
Brooks, CA ▸ 1.37 MG TES Tank

Data Centers
Ashburn, VA ▸ (3) 0.50 MG TES Tanks

Hospitals & Airports
Danville, PA ▸ 1.07 MG TES Tank

Government & Military
Lackland AFB ▸ 0.80 MG TES Tank

Schools & Universities
Orlando, FL ▸ 3.00 MG TES Tank

Power Plants
Cleburne, TX ▸ 1.74 MG TES Tank

DID YOU KNOW?

- A kilowatt-hour of electricity used to charge a TES tank at night can be produced at a much lower cost than one produced during the day.
- TES tanks are compatible with any large, chilled water cooling system.
- TES is the most cost-effective method to store energy produced by unpredictable renewable power generation sources like wind and solar.
- The electric grid is more reliable due to cost-effective energy storage systems like TES.

Flexible, cost-effective and customizable

- LOWEST LIFE CYCLE COST (NO REPAINTING THE INTERIOR)
- WATERTIGHT & MAINTENANCE-FREE
- PARTIALLY OR FULLY BURIED
- SIGNIFICANT INVESTMENT IN THE LOCAL ECONOMY
- NUMEROUS ARCHITECTURAL ENHANCEMENTS
- NO LONG LEAD MATERIALS

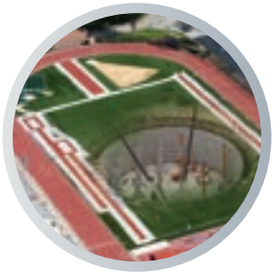
ADVANTAGE: DN TANKS

- **Maximum Storage Capacity:** DN Tanks' specially designed diffuser minimizes turbulence and creates a stable thermocline — ensuring a separation between the incoming warm water and chilled water. This narrow thermocline is key to optimizing the tank's capacity and efficiency.
- **Unparalleled Reliability:** DN Tanks' pre-stressed concrete tanks perform reliably for decades. In fact, every one of the TES tanks we've ever built is still in service today.
- **Lower Cost of Ownership:** A DN Tanks pre-stressed concrete tank will last for generations — with no scheduled maintenance. This makes it a superior choice for long-term value and cost of ownership.
- **Construction Flexibility:** Because of inherent characteristics of concrete, the TES tank can be partially or fully buried underground.

Numerous architectural enhancements

Custom Logo

Faux Brick



Partially or Fully Buried

Customized Finish

Matches Buildings

The exterior of a DN Tanks pre-stressed concrete TES tank can be customized to blend in with its environment, match the surrounding buildings, or become an iconic landmark.

The right decision for all the right reasons

Visit our website to view project profiles of our TES tanks. If you have any questions, or would like to discuss your TES system, visit our website at www.DNTanksTES.com or contact us at 800.837.6133.

800.837.6133

DN TANKS

"Throughout the entire construction and commissioning phases, we were very happy with DN Tanks. They met all of our required schedule dates while upholding very high safety precautions due to the close proximity of the TES tank to plant equipment and personnel."

– JOE STUPARICH, TAS ENERGY

www.DNTANKSTES.com

DYK and Natgun
Generations Strong

About DN Tanks

DN Tanks designs and constructs pre-stressed concrete liquid storage tanks. The hallmarks of our work are long-term performance, durability, reliability, no scheduled maintenance requirements, and lowest cost of ownership.

Although we have constructed literally thousands of tanks, the ultimate measure of our success is our commitment to quality and safety while providing the absolute best service to our customers.

DNTANKS.COM

COVER PHOTO:
Salt Lake City, UT
3.42 MG TES Tank

BACK COVER PHOTO:
Bakersfield, CA
0.68 MG TES Tank

INSIDE POCKET PHOTO:
Orlando, FL
3.00 MG TES Tank

INSIDE LEFT PHOTO:
Raleigh, NC
2.68 MG TES Tank

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