

# Slurrystore®

Engineered Agricultural Nutrient Management System

# CST



» BEST STORAGE FOR MAXIMUM NUTRIENT VALUE

## ➤ Optimized and Secure Agricultural Nutrient Management

A byproduct of every dairy, beef, hog and poultry operation is animal waste. Its proper containment and management are two important issues facing today's producers. Secure storage means a protected environment. Optimized management means turning this byproduct into a valuable nutrient resource that can add to a bottom line.

A Slurrystore® System is a fully engineered storage and agitation system for optimized and secure agricultural nutrient management.

## ➤ Consistent Nutrient Value – Agitation Makes the Difference

The ability to agitate its full contents makes a Slurrystore System much different from lagoons or concrete pits. Neither of these storage options is better at achieving consistent nutrient balance than Slurrystore. Using its superior center agitation system, a Slurrystore evenly blends and homogenizes ag nutrients to maximize overall value for crop production needs. This full blending and homogenizing allows better plant nutrient management to help maximize yields while lowering fertilizer costs.

Research shows that on average about 30 tons of dairy cow manure – the amount produced by 1.5 mature cows consuming a balanced ration over a year's time – can provide the total nitrogen needed to grow 150 bushels of corn. Depending on market conditions, 1,000 gallons of manure can range in price from \$40 to \$60.

## ➤ Environmentally Sound

A Slurrystore is an above-ground, positive containment structure engineered to the highest standards. With greater environmental concern and stricter governmental regulations on the horizon, Slurrystore is clearly the best choice for environmentally sound manure management.

- A Slurrystore is designed and constructed using bolted glass-fused-to-steel panels for secure storage and high corrosion resistance.
- As above-ground, positive containment, a Slurrystore minimizes the danger of run-off, leaching and ground water contamination compared to earthen lagoons, concrete pits or other storage methods.
- Odor control also makes Slurrystore environmentally friendly. Since a Slurrystore is above ground, a “chimney effect” is created, releasing any odors above ground level into higher air currents. When unagitated, it will often form a crust on the top layer sealing odors in while bottom filling reduces the amount of surface disturbance.

## ➤ Regulation Ready

Slurrystore Systems are ready for existing and new regulations.

- NRCS approved
- EQIP qualified
- Designed for North American climate range
- Can be engineered for specific locations
- Solution for seasonal application restrictions

## ➤ Odor Management

Slurrystore Systems offer engineered solutions to help reduce odor problems compared to other storage methods.

- Less exposed surface area
- Above ground design creates “chimney effect” to lift odors above ground level
- Bottom filling reduces surface disturbance
- A roof or cover can be incorporated into design

## ➤ A Lifetime of Value

Not all tanks are created equal! CST's glass-fused-to-steel (porcelain enamel) features Vitrium™ coating enhanced with titanium dioxide (TiO<sub>2</sub>) and Edgecoat II™ technology to ensure maximum corrosion resistance and the longest life span available.

All Slurrystore tanks are manufactured exclusively in the USA with only USA steel and supported by the world's most experienced local authorized dealer network.

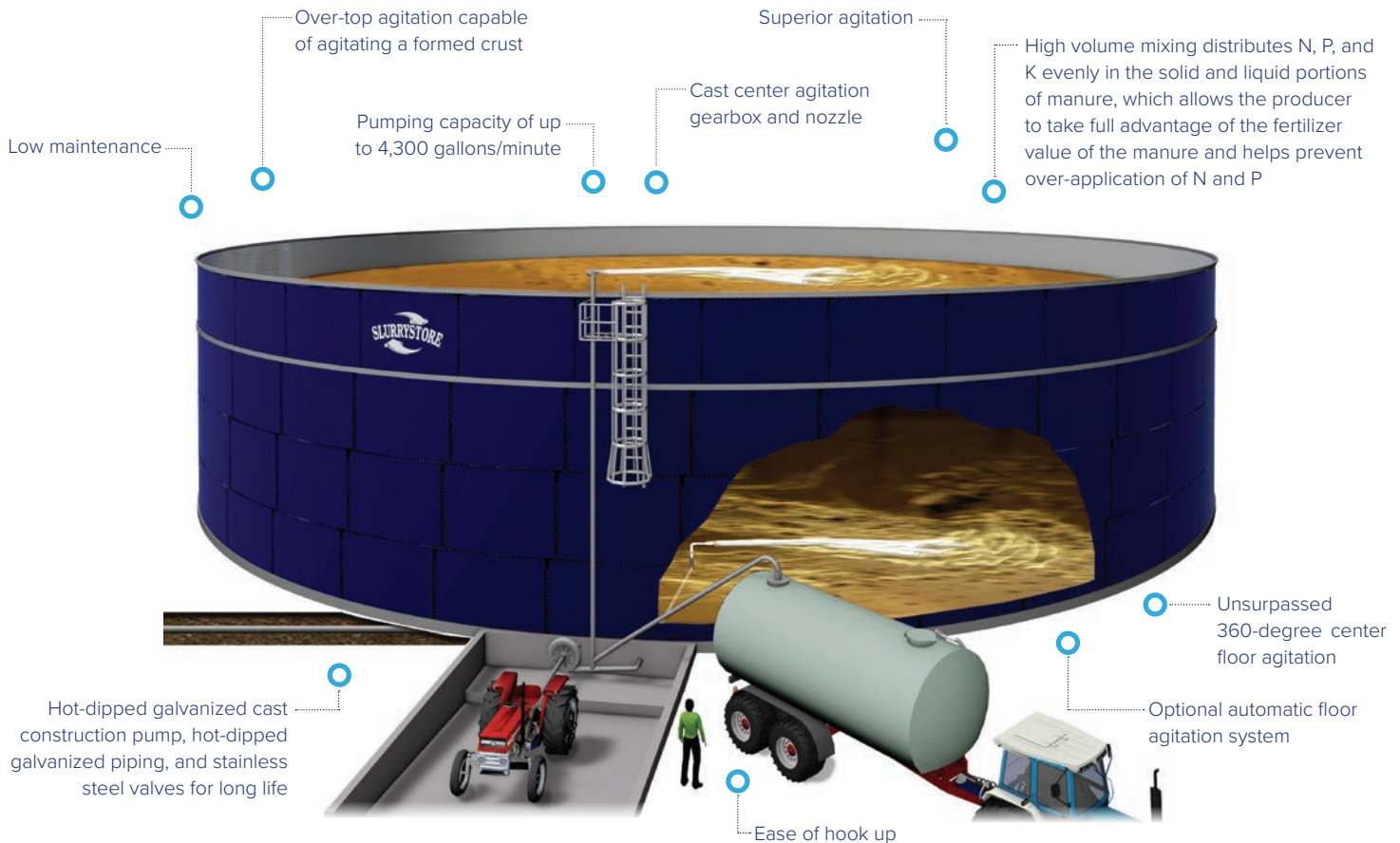
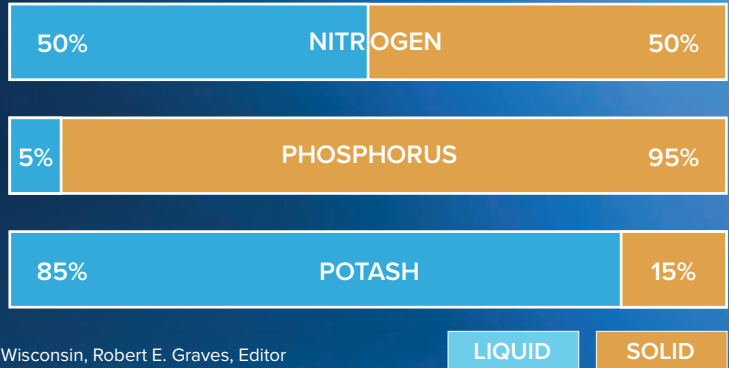
# ➤ Why bother with excellent agitation?

*This is why*

## Distribution of Nutrients in Solid and Liquid Portions of Manure\*

Manure is excreted in two forms, either liquid or solid, both of which contain a considerable amount of nutrients. The bar charts show the distribution of the three major nutrients in liquid and solid portions.

\* Farm Animal Manure Management Workshops Proceedings, University of Wisconsin, Robert E. Graves, Editor



**360-degree Bottom Center Agitation with capacities up to 4,300 gallons per minute**





*Now with our Slurrystore, the waste is out of sight and out of mind of the neighbors and with the Side-mount Pump's fast agitation, less odor.*

Ar-Les Town View Farm

## Slurrystore Evaluation and Selection

A Slurrystore System is specified and customized to meet your operational needs and storage requirements. This includes analysis of:

- Current storage requirements
- Future expansion requirements
- Available space to construct
- Regulation compliance - state and local
- Site specific limitations and considerations
- Funding protocol
- Odor control
- Filling and emptying requirements

## Site Preparation and Construction

Slurrystore Systems typically require a smaller footprint than other above-ground storage options. That means less dirt to move with more of the surrounding environment undisturbed and available for other expansion needs or maximized productivity of limited space.

Authorized Slurrystore dealers provide turnkey solutions from specification of the right Slurrystore System to fulfill your needs to its final construction and service. Slurrystore construction is done in strict accordance with the procedures and policies of CST. All dealer construction crews are factory-trained to utilize the jack-build process and ensure the highest quality finished product.

## Research Proven

A 2011 study by Purdue University examined the solids and nutrient retention in a Slurrystore and evaluated the ability of its agitation system to mix the manure prior to removal. The study concluded that "The tank agitation system adequately mixed the manure in the tank during the cleanout process, resulting in little variation in manure nutrient concentrations during two separate cleanout periods.\*"

\*T.D. Nennich, et al, Purdue University, 2011

## StoragePro® Economic Analysis

The Storage Pro manure management planning program uses a producer's unique costs and inputs to assign realistic values to livestock manure. The program then creates a thorough economic analysis for storing and managing these nutrients using a Slurrystore System. Contact your local authorized Slurrystore dealer for personalized analysis for your operation and identify the value and savings.

## Agitation Selection

	HOG APPLICATIONS	DAIRY APPLICATIONS
Model 1400 Side Mount With Single Nozzle System	Up to 101 Foot Diameter (30 Meters)	Up to 120 Foot Diameter (36 Meters)
High Flow Model 2400 Pump With 2 Nozzle System	101 to 140 Foot Diameter (30 to 42 Meters)	120 to 151 Foot Diameter (36 to 46 Meters)
2 High Flow Model 2400 Pump Systems (4 Nozzles Total)	Up to 204 Foot Diameter (62 Meters)	Up to 204 Foot Diameter (62 Meters)

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*Agitation, proper and complete, and hauling are a simple, quick, one-man operation compared to my in-ground concrete pit; and it's more important than ever with current fertilizer prices.*

Ry-Nan Farm

# CST

## System Flexibility

A Slurrystore is designed to meet individual owner needs. Each system has flexibility to address specific situations that any farm might experience. These include:

- **Expandability** – A Slurrystore can grow with you to accommodate increases in future ag nutrient volume or new regulations.
- **Cover Options** – A roof or cover can be incorporated into a Slurrystore System's design, if needed.
- **Smaller Footprint** – A smaller footprint and the ability to build vertically minimize the effect of rainfall accumulation compared to the surface area of a lagoon. That means lower volume to haul and minimized dilution of nutrients.
- **Relocation** – A Slurrystore can be dismantled and moved or sold.
- **Digester Applications** – A Slurrystore may be used in anaerobic digester applications. CST has been designing and manufacturing digester tanks and covers for over 35 years with applications around the world. CST works with process engineers to construct low maintenance structures that provide longevity and return on investment.

## Now's the Time for Slurrystore

When it comes to agricultural nutrient storage, you get the highest engineered quality, best service, longest product life and greatest value from Slurrystore Systems. Producers are getting more than just storage, they are investing in a nutrient tank. For today's dairy and livestock operations, there simply is no better storage choice than Slurrystore for long-term storage, environmental stewardship and nutrient value.

**To learn more contact your local authorized Slurrystore dealer for an on-farm analysis and quote, visit [cstindustries.com](http://cstindustries.com) or call 844-44-TANKS.**

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