

DAIRY MANURE HANDLING SOLUTIONS



 ***Vaughan***[®]
Unmatched Reliability

PRODUCT BROCHURE



THE VAUGHAN SOLUTION

WHERE IT ALL BEGAN

Solving Dairy Challenges Since the 1950's

Vaughan Company has been solving manure handling problems since Jim Vaughan built the first Chopper Pump for local dairy farmers in the late 1950's. While working in his repair shop in Elma, Washington, Jim helped dairy producers battle clogging manure systems and recognized the need for a better solution. That solution became the original Vaughan Chopper Pump. Today, the invention is protected by multiple patents and recognized worldwide across agricultural, municipal, and industrial markets as the pump of choice for reliability in heavy-solids pumping.



Jim Vaughan and his son Larry in the original Vaughan fabrication shop, Elma, Washington, late 1950s.



THE CHOPPER PUMP CONCEPT

The Vaughan Chopper Pump uses a unique cutter bar and impeller design to chop solids before they can cause clogging. Combined with heavy-duty seals, bearings, and wear components, the Chopper Pump is built to deliver reliable performance and long service life in demanding dairy applications.

- Upper cutter keeps the mechanical seal area clean
- Solids are chopped by the sharpened edges of the impeller cutting against the cutter bar
- The chopped solids are easily pumped through the system without clogging
- Optional disintegrator tools break up large solids before entering the pump

KEEPING DAIRY OPERATIONS RUNNING

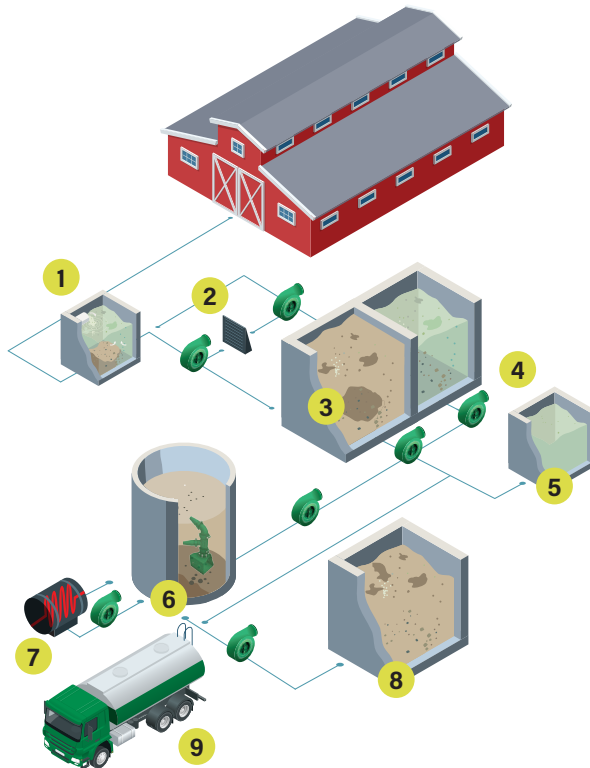
When manure handling systems are down, every hour matters. That's why Vaughan maintains more than \$15 million in inventory of components and replacement parts to support expedited options, repairs, and service — providing the support dairy operations need when quick turnaround is critical.

- Over \$15 million in Parts & Component Inventory
- Expedited Options Available
- Quick Access to Critical Parts
- Responsive Customer Service



WHERE VAUGHAN WORKS ON YOUR DAIRY

From reception pits and separator feed systems to digesters, lagoons, and truck loadout operations, Vaughan solutions help support manure handling throughout the dairy process.



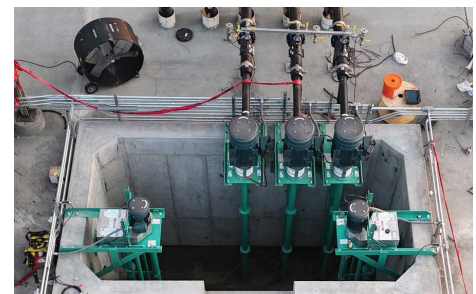
- 1 Reception Pit
- 2 Manure Separation
- 3 Manure Solids or Recycled Sand
- 4 Liquid for Flushing Water
- 5 Long-Term Storage Lagoon
- 6 Digester
- 7 Heat Exchanger
- 8 Long-Term Storage Lagoon
- 9 Truck Loadout



Pumps and Turbo mixers



Unmanned Floating Platform



Pumps and Turbo Mixers

BIOGAS APPLICATIONS

Built on decades of manure handling experience, Vaughan solutions help dairies move, mix, and manage manure throughout the entire biogas process.

- Digester Feed Systems
- Transfer Pumping
- Digester Mixing
- Storage Basins & Lagoons





THE RIGHT SOLUTION FOR EVERY APPLICATION

Every dairy operation has unique manure handling challenges. Vaughan's pumping, agitation, and mixing solutions are built around the proven Vaughan Chopper Pump, which reduces solids before they cause clogging and is engineered for reliable performance in demanding dairy applications. Vaughan equipment helps keep manure moving. Explore our complete line of products at ChopperPumps.com.

PUMPING

VERTICAL WET WELL

Common Applications

- Reception pits
- Separator & digester feed systems
- Storage basin pumpout

Advantages

- Compact footprint
- Direct-drive design
- Prevents clogging
- Ideal for continuous-duty operation



HORIZONTAL DRY-WELL

Common Applications

- Digester feed
- Transfer pumping
- Reception pits

Advantages

- Installed outside the pit
- Easy access for maintenance
- Handles fibrous and heavy solids
- Reliable continuous-duty operation



SELF-PRIMER

Common Applications

- Truck loadout
- Lagoon pumpout
- Transfer pumping

Advantages

- No submerged equipment required
- Easy access for maintenance
- Above ground installation
- Handles heavy solids and fibrous materials



UNMANNED FLOATING PLATFORM

Common Applications

- Lagoons
- Storage tanks
- Reception pits

Advantages

- Multiple pump and motor options
- Available in multiple platform sizes
- Portable and easy to relocate
- Easy maintenance access



PUMP AGITATION & MIXING

VWV RECIRCULATOR

Common Applications

- Equalization tanks
- Scraped manure systems
- Sludge holding tanks

Advantages

- Simple hydraulic mixing and recirculation
- Improves solids suspension
- Maximizes nutrient recovery
- Manual or auto options for valve control



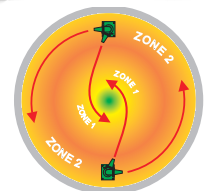
ROTAMIX MIXING SYSTEM

Common Applications

- Anaerobic digesters
- Storage basins and lagoons
- Equalization tanks

Advantages

- CFD-proven design for effective hydraulic mixing
- Dual zone mixing
- Keeps solids suspended reducing settling and buildup
- Improves mixing throughout the basin
- No mechanical mixers in the tank



PUMP AGITATION & MIXING (CONTINUED)

TURBO MIXER

The Vaughan Turbo Mixer utilizes a large-diameter propeller mounted on a vertical shaft to generate high-energy mixing throughout the basin. The Turbo operates effectively in shallow liquid depths while maintaining solids suspension and reducing buildup.



The Concept

- Large-diameter propeller delivers high-energy mixing
- Upper cutter helps prevent wrapping and material buildup
- Adjustable direction allows targeted mixing where needed
- Keeps solids suspended for improved manure management

Common Applications

- Sand lanes
- Reception Pits
- Storage basins and lagoons

Advantages

- 5,950—9,300 GPM mixing
- 7.5—30 HP motor options
- High-energy mixing performance
- Handles fibrous dairy materials
- Reduces settling and buildup
- Adjustable mixing direction



DAIRY SUCCESS STORY

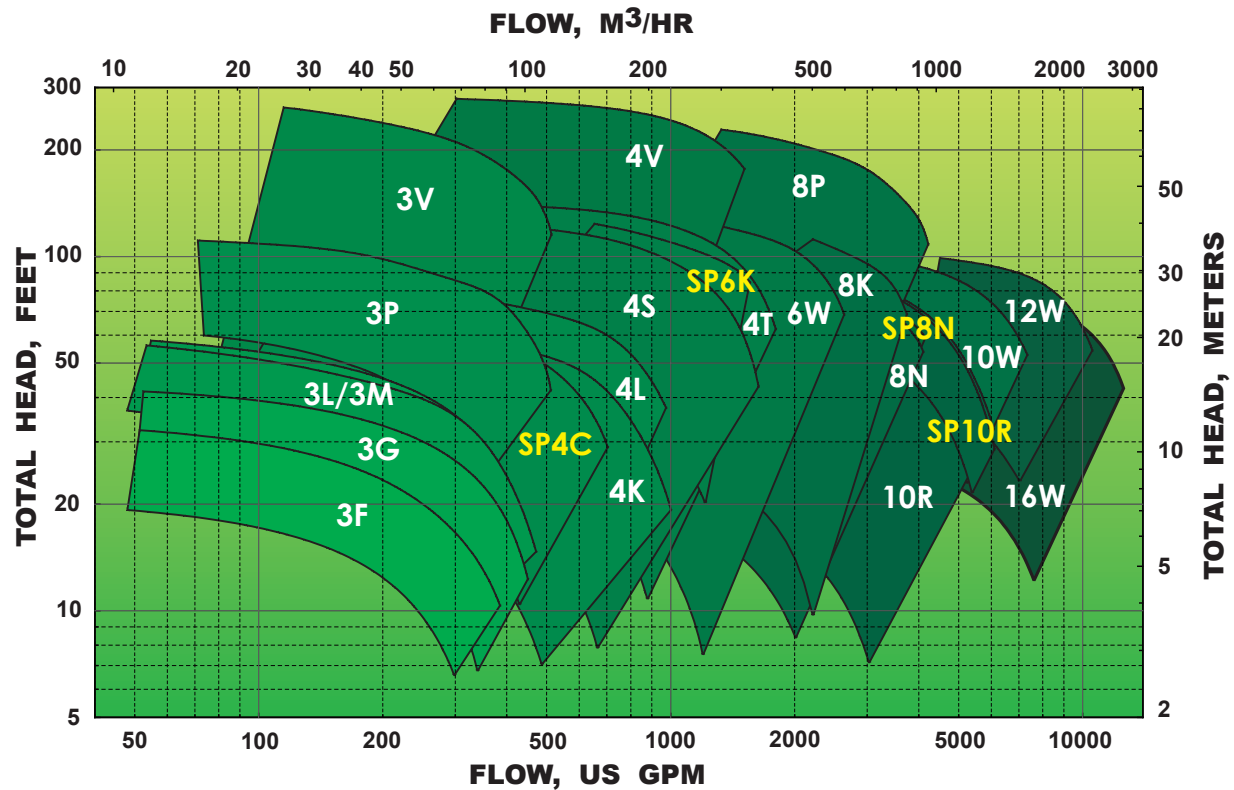
23 Billion Gallons of Manure and Counting

Settling solids and difficult mixing conditions can challenge even the best manure management systems. Learn how Cottonwood Dairy uses Vaughan TurboMixers to keep material moving in a high-volume sand lane application.

SCAN TO READ THE
FULL CASE STUDY



CHOPPER PUMP PERFORMANCE RANGE



LEARN MORE ABOUT EACH OF OUR PRODUCTS AT CHOPPERPUMPS.COM



Vaughan Chopper Pumps
Wet Wells, Dry Wells, Submersibles,
Self-Primers, Recirculators



Vaughan Portable Bypass Trailer
Trailer or skid mounted pumps



Rotamix® Process Mixing System
Tank and Digester Mixing

Also Available

Floating Pumps, Mixers, Auger Choppers,
Vortex Choppers, Produce Disposal Choppers



Triton® Screw Centrifugal Pumps
Wet Wells, Dry Wells, Submersibles



**GET STARTED ON
YOUR PROJECT AT
CHOPPERPUMPS.COM**