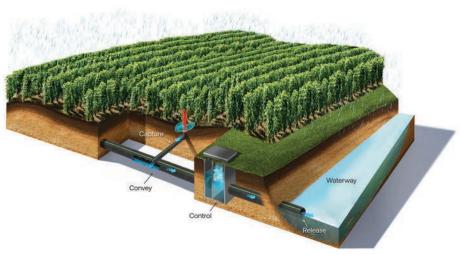


# Water Control Structures



Effectively manages the water table in fields, wetlands, ponds and other applications by setting stoplogs within the structure to the desired water level height. Active management allows for controlled release of outlet flow, retention of valuable nutrients and effective flood mitigation.

#### **Product Features:**

- Constructed of rugged ½ PVC with lockable plastic lid
- PVC stoplogs with metal hooks in 5" and 7" heights for adjustability (included in structures with 15" through 24" pipe sizes)
- Rugged injection-molded stoplogs in 5" and 7" heights for adjustability (included in structures with 4" through 12" pipe sizes)
- Stainless steel screws and custom anodized aluminum corner extrusions used for strength and durability

- Improves water quality and reduces nutrient runoff into waterways
- Applicable within various nutrient-reduction systems
- Increases profitability of land with limited productivity
- Enables management of changing climate conditions
- Increases yield by controlling root zone water availability



### Saturated Buffer Strips

A saturated buffer strip with a water control structure enables better collection and control of water while also improving water quality by reducing the number of minerals escaping into waterways.

#### **Product Features:**

- Automated control valve
- Power actuator to open and close the slide-gate valve

Convey

Control

- PVC slide-gate valve
- Solar panel and battery provide power to the system
- Programmable controller with cellular/cloud-based communications
- Water-level sensor to monitor the water level in the structure
- Weather-proof enclosure

#### **Operational Benefits:**

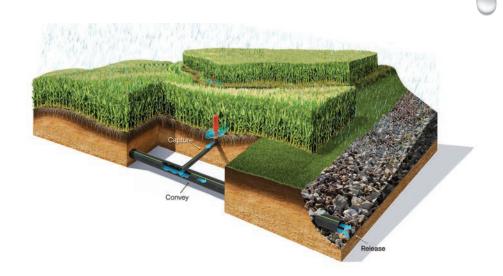
Waterway

- Prevents the reduction of drainage
- Allows the drainage water to bypass the saturated buffer strip and exit the tile outlet
- Effectively removes nitrates from the water
- The nitrates contained in the water are removed by denitrification or are taken up by the vegetation
- Customizable along different outlet sources: streams, wooded areas and open ditches
- No negative impact on crop yield



# Terrace Tiling

Terraces are man-made earthen structures that intercept runoff on slopes. They change long slopes into a series of shorter pitches that provide the water a chance to slow down. The soil has a chance to settle out, which keeps it on the field.



#### **Product Features:**

- Surface inlets
- Usage of single wall pipe (8",10", or 12") or dual wall pipe (6" through 12")
- Option to use flex dual wall pipe

- Improves crop yields by 30% on average
- Supports high return on investment
- Tiling has one of the highest returns on your investment in the ag industry



# Grain-Aire Pipe

Grain aeration keeps stored grain drier, longer — creating less waste. Our most costeffective grain aeration system won't rust or corrode, delivers more air, installs faster, and is more durable and resistant to damage than metal pipe.

#### **Product Features:**

- Complete layout and design offered by ADS
- Easy cutting and handling lengths
- Maximizes airflow with screens available on pipe or in rolls
- Offers more airflow than metal pipe
- Resistant to rust and corrosion

- Allows unrestricted airflow
- Keeps grain drier, longer
- Prevents grain from entering the pipe
- Our most cost-effective grain aeration system



### Manure Transfer

Manure transfers move animal manure through a hopper or reception pit, a pump or other dosing devices. All structures that provide a work area around pumps withstand the anticipated static and dynamic loading per standard wastestorage facility. All structures and components that contain or convey manure or wastewater shall be liquid-tight.

#### **Product Features:**

Convey

- Watertight joints
- Fabrication flexibility building down flumes
- Corrosion and abrasion resistance
- Value vs. other competing large diameter sanitary products
- Impact-resistant even in cold temperatures
- Ease of installation

#### **Operational Benefits:**

Treat

- Nationwide availability
- Ease of cleaning

Capture



# Subsurface Irrigation

The Inline Water Level Control Structure<sup>™</sup> is designed to be installed in the pipe. The water then flows into the control box, over the stoplogs and out the downstream side of the structure. Structures are available in either manual or automated.

#### **Product Features:**

Water Source

- 5-year warranty on all standard structures
- Adjustable stoplogs in 5" and 7"
- Available in 4" to 24" diameter pipe

Convey

Contro

- Flexible couplers allow PVC, plastic pipe or other materials to be easily attached
- Incline available in 2', 3', 4', 5', 6', 8', 10' and 12' heights
- Rugged 1/1" PVC structures
- Stainless steel screws and custom anodized aluminum corner extrusions are used for strength and durability

- Efficiently delivers water to your crop's root system
- Improves yields and plant health
- Manages and removes excess water
- Recycles water
- Limits nutrient removal
- Ability to retrofit existing tile plans



# Agricultural Lift Stations

Created with farmers and landowners in mind, lift stations come equipped with user-friendly technology to create one system to manage water-flow rates, field-water table levels and power consumption. Our lift station's remote monitoring system is satellite-based and can be accessed via any web-enabled device, allowing you to control your water management from anywhere.

#### **Product Features:**

Variable Frequency Drive controlled

Conve

Contro

- 1800 rpm means longer bearing/ motor lifetime and less vibration
- Complete electrical schematic stickers on all enclosure doors show electrical connections
- Electronic panel is completely enclosed and protected from harsh environmental conditions
- Remote Monitoring System is satellitebased and can be accessed anywhere in the world
- Unique impeller design creates optimal gallon-per-minute-per-watt performance

- Variable Frequency Drive allows for "soft" start-up and shutdown
- Allows historical comparison through cloud-based data
- Provides 24/7 factory-trained support from pump manufacture
- Control your system from the comforts of your couch
- Increases yield by controlling root zone water availability
- Reduces standard on/off cycles





# **Bioreactors**

Bioreactors use wood chips with microorganisms that eat away nitrogen and carbon as the water passes through, while the saturated buffer uses plants to absorb nitrates. Bioreactors work to eliminate nitrates from the water before they reach a watershed.

#### **Product Features:**

- Automated Control Valve
- Power actuator to open and close the slide-gate valve
- PVC slide-gate valve
- Programmable controller with cellular/ cloud-based communications
- Water-level sensor to monitor the water level in the structure
- Solar panel and battery provide power to the system
- Weather-proof enclosure

- Reduces nitrates in water from 20% to 90% depending on water flow
- Design life is 10-15 years
- Fits well in edge-of-field areas; no land needs to be removed from agricultural production