

CLARUS[®]



ENVIRONMENTAL

A Division Of Zoeller Company

Products Brochure

Pump Systems

Effluent Filters

Distribution Components

Accessories & Controls



Trusted. Tested. Tough.[®]



Clarus® Environmental Overview

Clarus® Environmental is a division of the Zoeller Company. Our objective is to meet the growing demand for solutions, products, and services in the fields of environmental protection and wastewater treatment. We seek to provide our customers with environmentally friendly solutions by offering high quality products and proven technology. When it comes to wastewater treatment systems and products, Clarus® Environmental has the solutions for you.

Durability in Design

Clarus® Environmental offers sustainable environmental products, solutions, and services for the collection, treatment, and dispersal of residential and community wastewater. With expertise in pumps, pressure sewers, biological and mechanical treatment processes, disinfection, and soils, Clarus® Environmental offers the experience to design, implement, and configure a wide range of projects.

When thinking about water treatment, it all comes down to one word—trust. You need to be able to inherently trust that the treated water you receive is appropriate for its intended use. Clarus® understands the crucial nature of this trust and never takes it for granted.

Wide breadth of Product Line

From simple needs such as effluent filtration to complex solutions for complete, onsite wastewater management, Clarus® has the appropriate tools and the real-world understanding to meet and exceed our customers' needs.

While Clarus® has strong roots in product manufacturing, we are capable of providing much more than a mere list of components. The Clarus® team brings to the table not only quality products, but also an impressive array of technical knowledge, practical experience, and time-savers like drawings and specifications. Clarus® Environmental does not subscribe to the "one size fits all" mentality. Each project bears unique circumstances that no single cookie-cutter answer can meet.

Let Clarus® assist you with the perfect solution to your onsite project.

Pump Systems

TURBINE EFFLUENT PUMPS

APPLICATION:

STEP applications
 Effluent sewer force mains
 Treatment systems
 Drip field dosing

FEATURES:

- 1/2 HP up to 3 HP
- 115 and 230 Volt, 1 Ph
- Inlet screens
- Franklin Electric submersible motors pass 3/32" spherical solids
- Corrosion-resistant stainless steel motor, pump casings, and hex drive pump shaft
- High-efficiency floating stack impeller design
- 10' of jacketed SO type power cord (1/2 HP - 1-1/2 HP)
- Additional cord lengths of 25', 50' and 100' also available
- Consult factory for design points not covered by the performance listed
 - = best efficiency points indicated per model
- 1-year warranty from date of purchase
- 5-year warranties also available

ACCESSORIES:

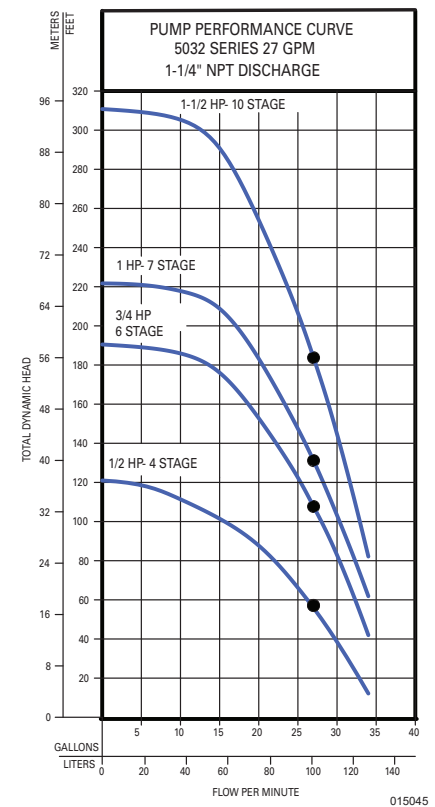
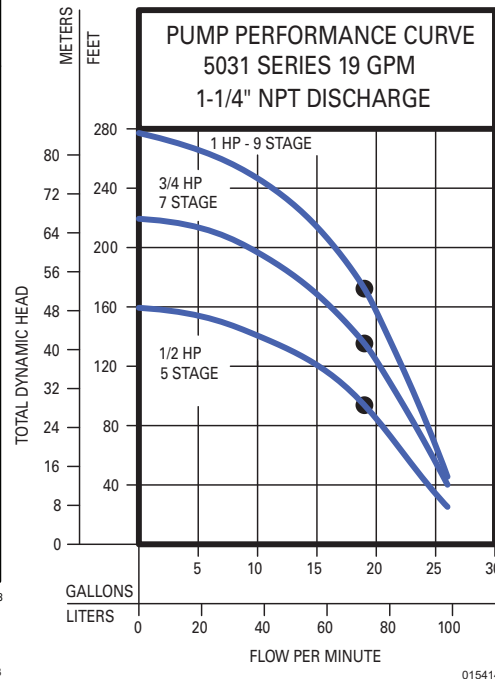
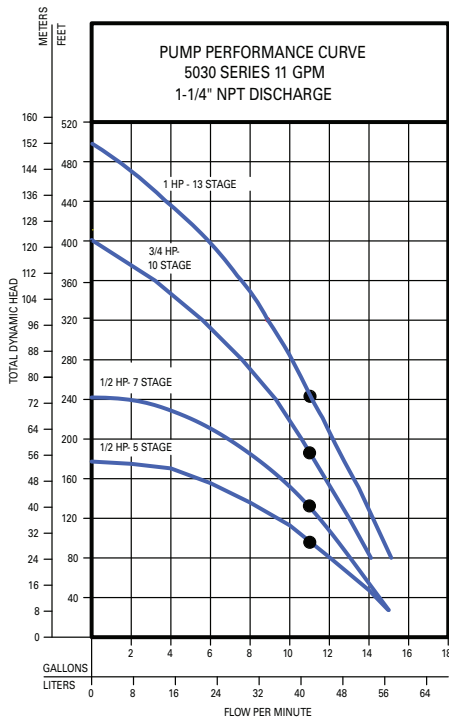
Check valves
 1-1/4" (p/n 30-0187)
 2" (p/n 30-0189)



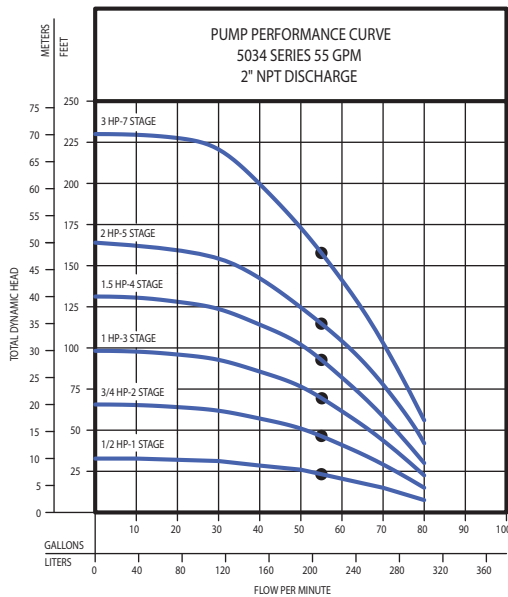
11, 19, 27 GPM Models



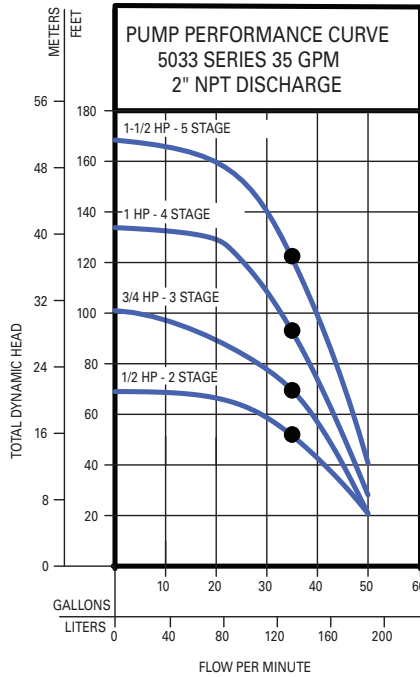
35, 55, 85 GPM Models



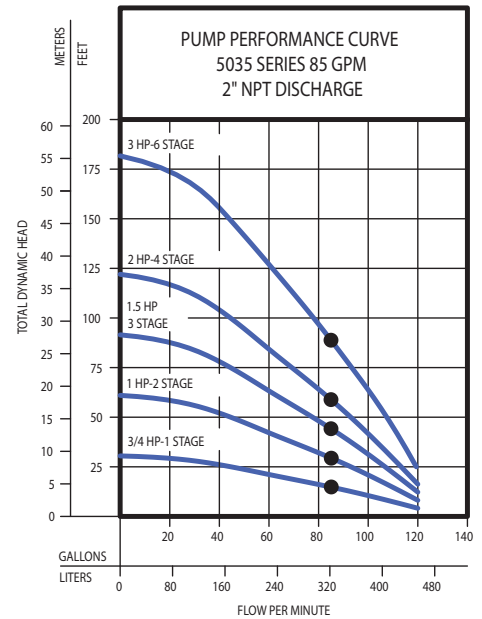
Pump Systems



015649



015044



015845

TURBINE STEP SYSTEM

APPLICATION:

Onsite enhanced/pumped septic systems, or repairs to failed septic systems where gravity flow is not an option, sand filters, pressure pipe dosing systems or other alternatives that require high head.

FLOW RATE:

Systems up to 85 GPM available

ACCESSORIES:

Float Tree (see CL0024 for options)

FEATURES:

- Tank made from durable polyethylene
- Stainless steel/plastic turbine effluent pump
- Heights from 48" to 120" available
- Simplex and duplex systems
- All vaults fit in an 18" tank opening
- Alarm box or control panel packages available



Products may not be exactly as shown.

Pump Systems

CENTRIFUGAL EFFLUENT PUMPS

APPLICATION:

Septic Tank
Low Pressure Pipe (LPP)
Enhanced Flow STEP Systems

FEATURES:

- Non-Clogging vortex impeller design
- Passes 1/2" spherical solids
- 1-1/2" NPT discharge
- Automatic reset thermal overload protection
- All stainless steel hardware
- Cast iron switch case, motor and pump housing
- Engineered, glass-filled impeller with metal insert
- Glass-filled polypropylene base
- UL Listed 3-wire 15' standard cord
- Corrosion-resistant powder coated epoxy finish

ACCESSORIES:

Pump Stand (p/n 10-2421)



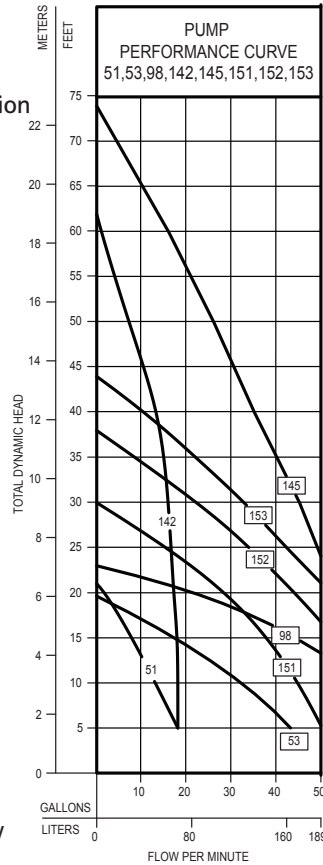
Model 51

NOTE:
Boxed numbers only
apply to Centrifugal
STEP Systems

Model 142



Tested to UL Standard
UL778 & Certified to CSA
Standard C22.2 No. 108



151976

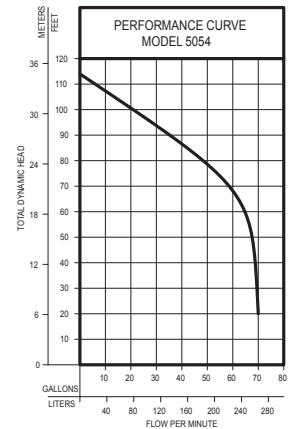
HIGH HEAD CENTRIFUGAL EFFLUENT PUMP MODEL 5054

FEATURES:

- 230 V, 1 HP, 1 Ph
- 14.0 FLA
- Non automatic (N)
- 1-1/2" NPT discharge
- Passes 3/4" spherical solids
- High efficiency, semi-open vortex impeller
- Maximum flow of 70 GPM at 20' TDH
- 114' shutoff head
- powder coated, cast iron housing



Model 5054



CENTRIFUGAL STEP SYSTEMS

APPLICATION:

Onsite enhanced flow or low pressure pipe (LPP) systems, or repairs to failed septic systems where gravity flow is not an option.

FLOW RATE:

Up to 50 GPM

FEATURES:

- Available with various centrifugal pumps
- Tank made from durable polyethylene
- Cast iron centrifugal pump
- Alarm box or control panel packages available

ACCESSORIES:

STEP system stand
(p/n 5040-0041)



EZ-PULL QUICK DISCONNECT

APPLICATION:

Allows for quick installation or removal of a pump.

FEATURES:

- Available in 1-1/2" and 2" FPT.
- Two-piece tapered male and female connection with an O-ring to provide a watertight seal.



Effluent Filters

WW1 EFFLUENT FILTER

APPLICATION:

Single family homes

FILTER AREA:

132 linear feet of 1/16" filtration

MAX. FLOW RATE:

1,500 GPD

FEATURES:

- Improves the performance of your septic system
- Controls surges
- Prolongs lateral field life
- Easy to install or retrofit
- Easy to maintain
- Filters can be manifolded together to increase flow rates
- All filters fit 4" SCH 40 or DWV tees.
- Reducer bushing included for SDR 35 tees.
- Allows the homeowner to monitor the condition of the tank

ACCESSORIES:

High Water Alarm Bracket (p/n 5090-0014)



PATENT NOS.
6,136,190
6,331,247
6,495,040



CONTAINER ASSEMBLY

APPLICATION:

Allows use of effluent filters outside the septic tank

FEATURES:

- Includes filter container, a riser lid and screws, a 12" riser, 4" SDR 35 and SCH 40 pipe seals and sealant
- Additional 6" or 12" tall risers are available

ACCESSORIES:

WW1 effluent filter with 4" sanitary tee (p/n 170-0144)



WW4 EFFLUENT FILTER

APPLICATION:

• Single family homes or commercial applications

FILTER AREA:

528 linear feet of 1/16" filtration

MAX. FLOW RATE:

4,000 GPD

FEATURES:

- By-pass protection
- Outlet socket designed for gluing to 4" SCH 40 pipe
- Reducer bushing included for SDR 35 pipe
- Filter handles provided to extend up inside riser
- Integral pipe bosses for support legs
- All materials are non-corrodible in the septic tank environment
- Filters can be manifolded together to increase flow rates.



PATENT NOS.
6,136,190
6,331,247
6,495,040



PRESSURE EFFLUENT FILTER

APPLICATION:

Single family homes or commercial applications. Low-pressure pipe, drip, or enhanced flow applications. Prefilter for dosed treatment devices such as recirculating media filters.

FILTER AREA:

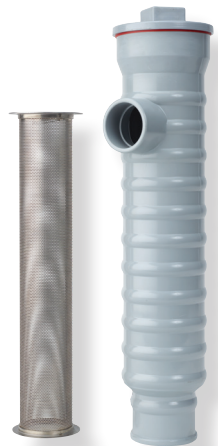
The filter screen is a type 347 stainless steel with 1/16" diameter holes. By using sock inserts, filtration to 100 or 600 microns is achieved. The element is 3 inches in diameter and 18 inches long with a 69.5 square inch open area.

FEATURES:

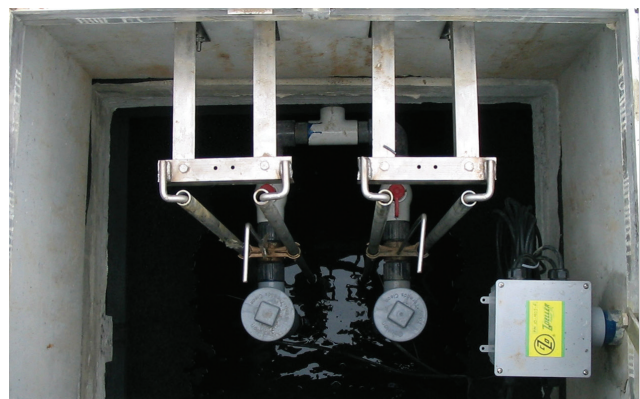
- Available in 2" or 3" PVC socket inlet/outlet
- Can be used with centrifugal pumps or turbine pumps

ACCESSORIES:

- Pressure alarm switch (p/n 5000-0006)
- Standard screen removal wrench (p/n 5000-0004)
- Bristle screen removal wrench (p/n 5000-0005) (use with filter sock)
- Protective sock
 - 100 Micron Sock (p/n 5000-0002)
 - 600 Micron Sock (p/n 5000-0003)



NOTE:
Pump and discharge pipe not included.



Distribution Components

HIGH WATER ALARM BRACKET

Can be used on WW1 and WW4 filters.
Float sold separately.



Alarm bracket shown on
WW1 Effluent Filter.



TRU-FLOW®

TRU-FLOW® SPLITTER SYSTEM

APPLICATION:

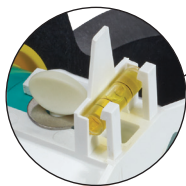
- Alternative to a concrete distribution box
- 4:1 or 3:2 recirculating splitter

FEATURES:

- Tested from 1/10 GPM to 30 GPM flows
- Bubble level built-in for easy adjustments and maintenance
- Maintainable and adjustable from surface after installation
- 4" riser easily attached to visually inspect and adjust the diverter
- Non-corrodible polypropylene frame
- Will tolerate settlement of as much as 15° front-to-back (30° total) and/or 12° side-to-side (24° total)
- Field adaptable from 2 to 5 outlets
- SCH 40 model also available

ACCESSORIES:

6" diameter x 36" tall riser (p/n 173-0007)



SPIDER VALVE®

APPLICATION:

- Pressurized splitting to a gravity disposal field
- Small lots requiring unequal lateral line length

FEATURES:

- Splits effluent evenly from 2 lines up to 10 lines
- Install at highest elevation in system
- Mounts in 24" diameter access riser
- 3 feet of 1/2" PVC flexible pipe on each discharge for ease of assembly
- 2" SCH 80 PVC manifold with cleanout for equal pressurization and easy maintenance
- Comes standard with 5/32" Id washers

ACCESSORIES:

Distal pressure gauge kit (p/n 5051-0039)



6 Outlet Shown

ORIFICE SHIELDS

APPLICATION:

- Protects dosing orifices from surrounding media in pressurized distribution systems

FEATURES:

- Solid (upward spray) or slotted (downward spray)
- 3" shields easily snap onto 3/4" or 1" piping
- 4" shields easily snap onto 1-1/2" or 2" piping



Solid Caps



Slotted Caps



Solid caps shown.

CARBON VENT

APPLICATION:

- Septic tank
- Portable toilet



FEATURES:

- Fits 3" or 4"
- Non-corrodible material
- Eliminates septic tank odors
- No adverse effect to the biological septic tank environment
- Withstand ambient weather conditions

Distribution Components

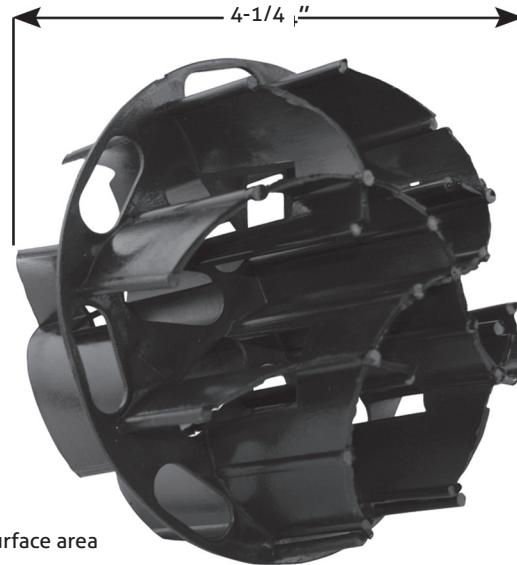
SPHERICAL MEDIA

APPLICATION:

Trickling filters, fixed film, attached growth systems and submerged aeration units

FEATURES:

- Provides adequate surface area for BOD, COD and TSS reductions, as well as biofilm development
- ABS material is highly resistant to most chemical, biological and physical agents
- Approximately 512 media balls in one cubic yard and 729 media balls in one cubic meter
- Lightweight and easy to transport



122 in² surface area

DRIP LINE & ACCESSORIES

FEATURES:

- Installation requires minimal site disturbance
- Flexible installation can be adapted to most sites
- Natural landscaping can be maintained
- Ideal for steep slopes, uneven terrain and rocky soils



ACTUATOR ZONE VALVES

APPLICATION:

- Zoning of large effluent distribution networks
- Designed to be used in place of solenoid valves

FEATURES:

VALVE

- Never needs lubrication
- Can be operated manually
- 24-month limited warranty
- 2 and 3 port configurations

ACTUATOR

- Utilizes 24-volt AC power
- Movement is completely customizable
- 24-month limited warranty



Certified to
NSF/ANSI
Standard 46



Tested to UL
Standard UL508



Distribution Components

BULL RUN® VALVE

APPLICATION:

- Alternate effluent flow from one drainfield to another

FEATURES:

- Available in 4" SCH 40 PVC
- Effluent use only
- No user contact with wastewater
- Actuator key for changing valve from one drainfield to another

ACCESSORIES:

- Actuator keys
 - 28" (p/n 170-0044)
 - 36" (p/n 170-0045)
 - 48" (p/n 170-0046)



SPLITTER VALVE & CAT'S EYE WEIR

APPLICATION:

- Splits effluent flows for wastewater recirculation

FEATURES:

- 80/20% weir comes standard
- Additional weir plates are available. Consult factory.
- Adjustable return rate



AUTOMATIC MULTIZONE VALVES

APPLICATION:

- Multiple-zone residential and small commercial disposal fields

FEATURES:

- No electricity required
- For use in pump fed applications
- 4000 Series-High strength non-corrodible ABS polymer construction
- 6000 Series-Die cast metal & high strength non-corrodible ABS polymer construction
- Available for 2 to 6 zone operation
- Purple cap for wastewater
- Preassembled 6000 series units with unions and shut-off valves are available. Consult factory.



4000 Series



6000 Series

Accessories

STANDARD RISER SYSTEMS

FEATURES:

- Available in 12", 18", 24", and 30" diameters
- Heights up to 7'; for larger heights consult factory
- All materials are non-corrodible & environmentally safe
- Lid is secured with square drive screws
- Sturdy construction
- Gas-tight and watertight



ECONOMY RISER SYSTEMS

FEATURES:

- Available in 12", 20", and 24" diameter
- Injection-molded
- HDPE is non-corrodible in a septic environment
- Watertight
- Stackable



Controls

TIMED DOSE CONTROL PANELS

APPLICATION:

- Media filter systems
- Pressure distribution systems
- Mound systems

FEATURES:

- NEMA 4X enclosure
- Panels include (3) 20' control switches
- Exterior alarm: test / normal / silence
- 24-month warranty
- Lockable latch
- Custom panels available; consult factory



ALARM BOX WITH TOUCH PANEL

APPLICATION:

- Pump chambers
- Dose tanks
- Sump pump basins
- Holding tanks
- Lift stations
- Non potable water applications

FEATURES:

- NEMA 4X enclosure, UL-listed
- 115 volt
- Audible and visual alarm

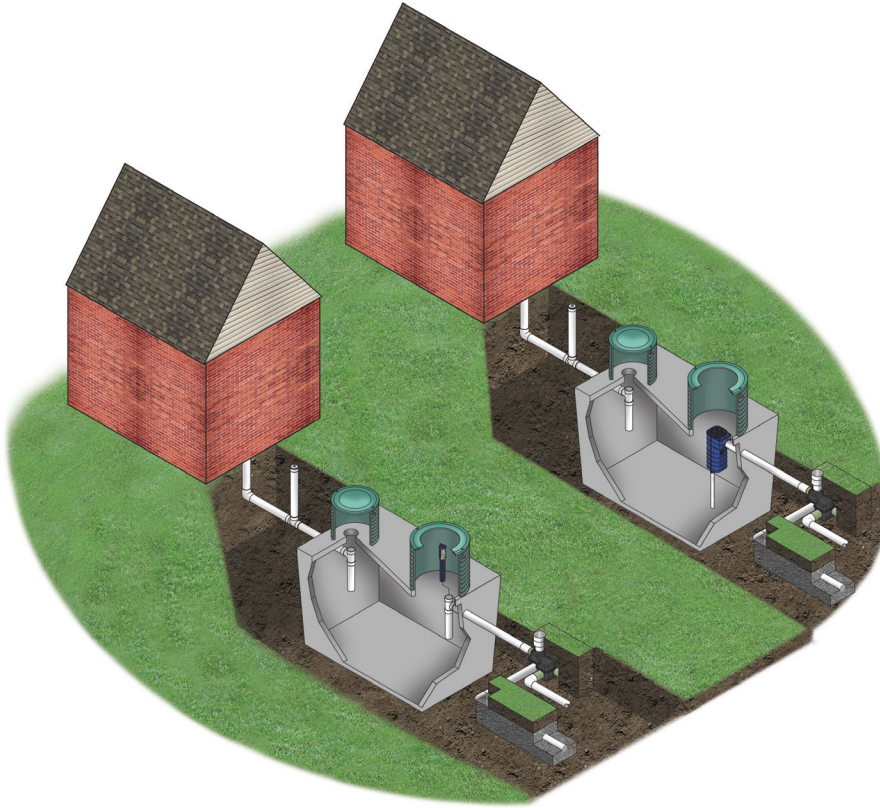


NOTE: Float sold separately.



Sketches

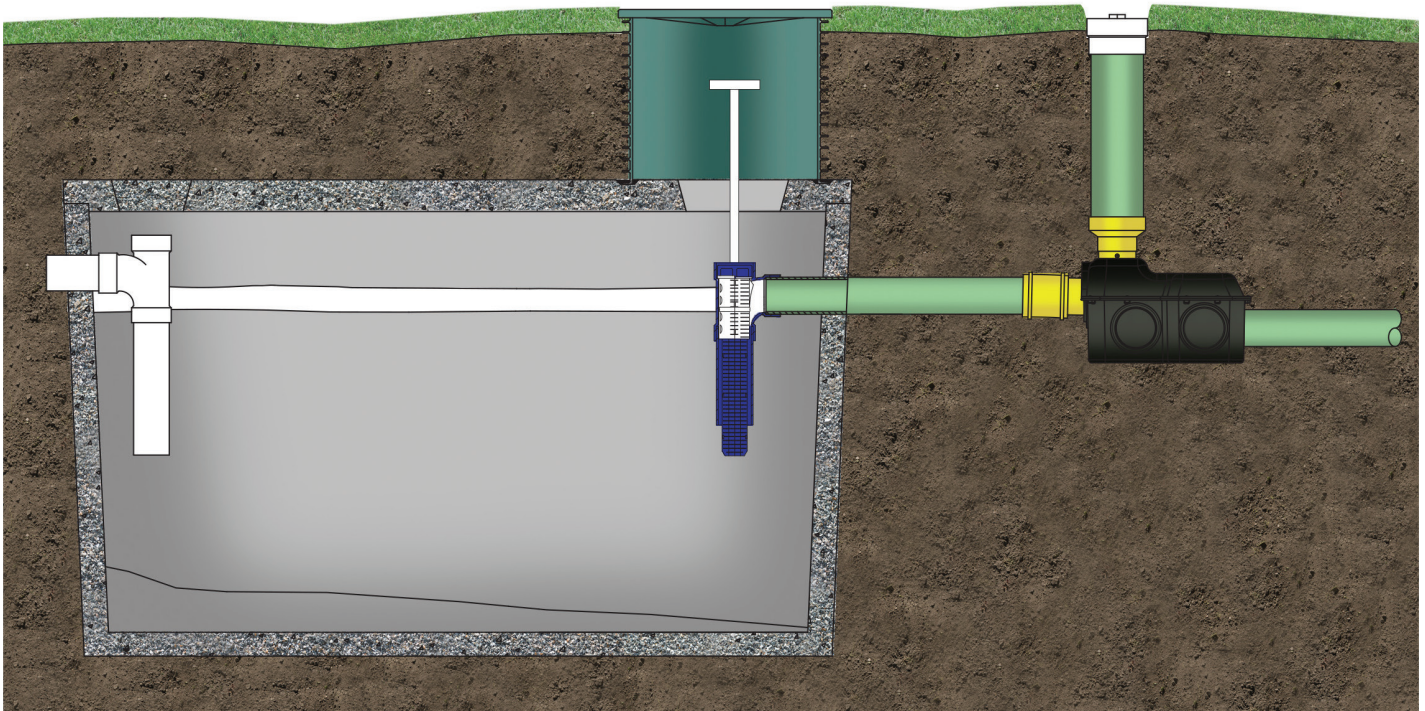
WW1 and WW4 install going to a Tru-Flow Splitter System



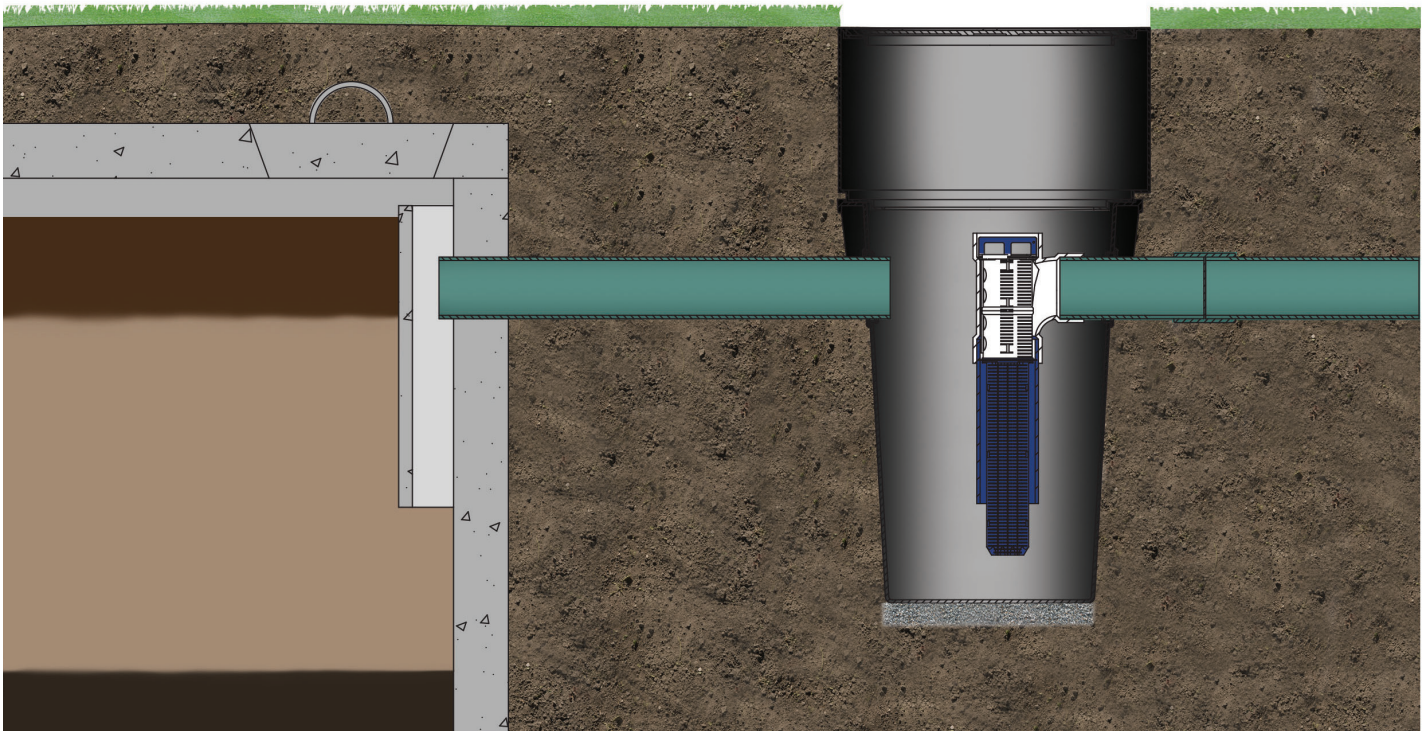
WW4 filter to pump tank
5041 High Head STEP System
5040 Centrifugal STEP System
Spider Valve disposal
Low Pressure Pipe chamber disposal



WW1 EFFLUENT FILTER TO TRU-FLOW SPLITTER SYSTEM

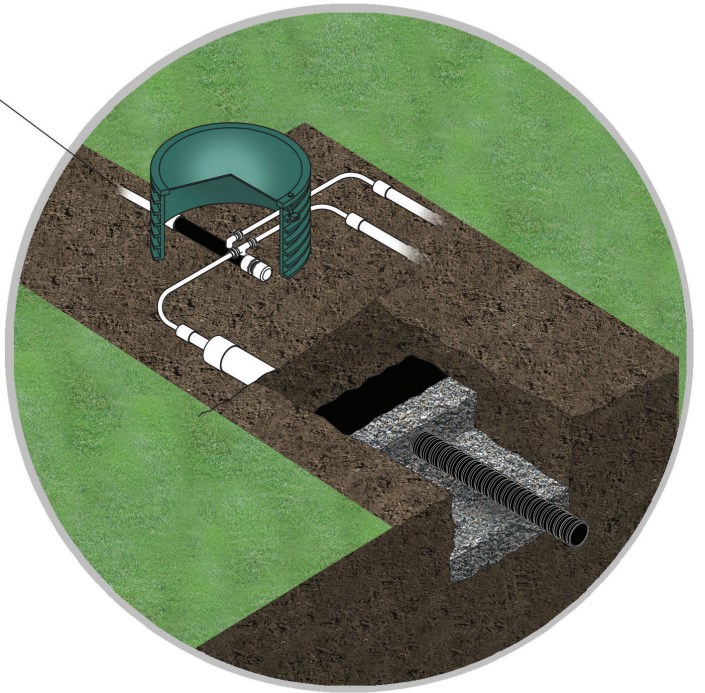
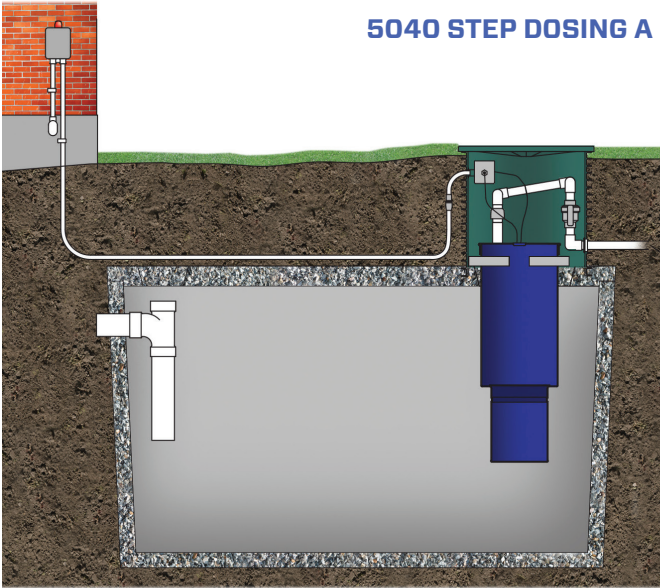


FILTER CONTAINER INSTALLATION WITH A WW1

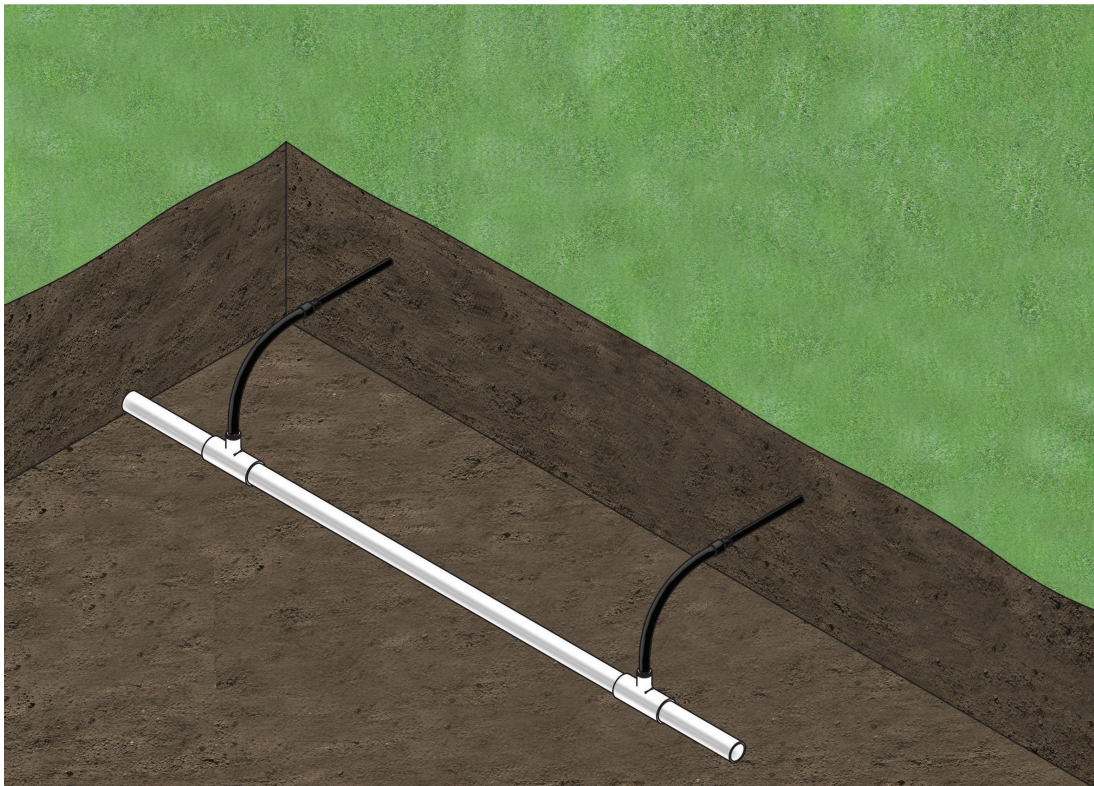


Sketches

5040 STEP DOSING A SPIDER VALVE DISTRIBUTION

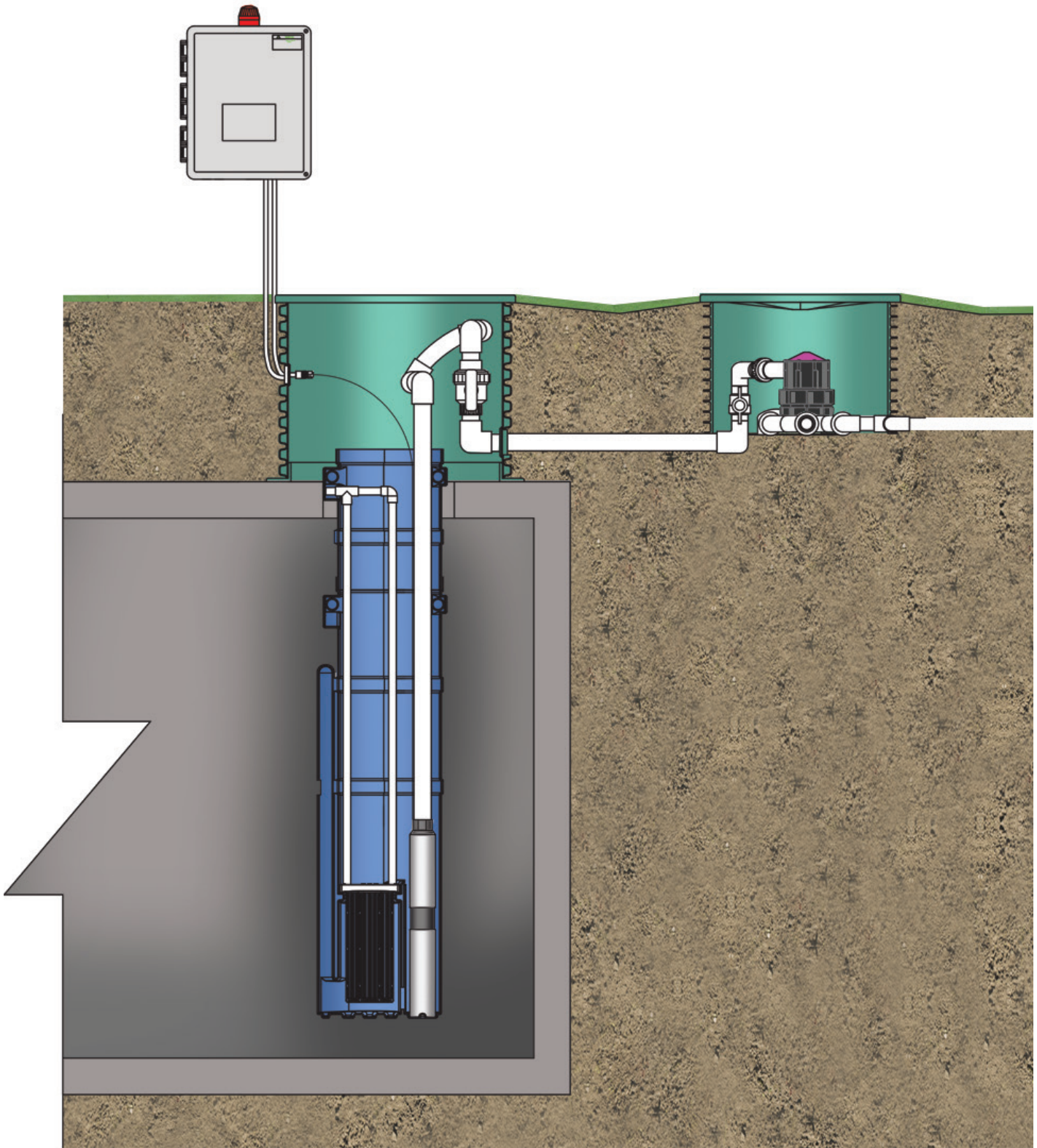


DRIP IRRIGATION AND MANIFOLD



Sketches

5041 EXTENDED VAULT HIGH HEAD STEP DOSING A MULTI-ZONE VALVE





ABOUT THE ZOELLER FAMILY OF WATER SOLUTIONS

Founded in 1939, Zoeller Company is one of the oldest independently-owned professional pump manufacturers in North America. Headquartered in Louisville, Kentucky USA, Zoeller has over 800 employees worldwide and close to 600,000 sq. ft. of manufacturing facilities from our seven operations in North America and Asia.

Zoeller Company has established itself as an innovative leader in pumping equipment and water treatment systems by continuous research and development. The quality of our products is demonstrated by UL, CSA, CE, and NSF listings as well as continued growth throughout the United States, Canada, Mexico, and over 40 other countries around the globe. The company has also expanded to include five brands, which have become the foundation of Zoeller.



The original Zoeller product line now resides in Zoeller Pump Company, which offers a broad range of submersible pumps from fractional to 7-1/2 HP for residential and commercial sump, effluent, dewatering and grinding applications.



Flint & Walling, founded in 1866 in Kendallville, Indiana USA, is the only pump company in the U. S. to manufacture its own motor for jet and centrifugal pumps. This product line specializes in deep well pumps that range from 5 GPM to 1,000 GPM, as well as centrifugal, jet, booster, and submersible pumps up to 7-1/2 HP.

Founded in 1952, Wolf Pump is a manufacturer of submersible turbine pumps located in Abernathy,



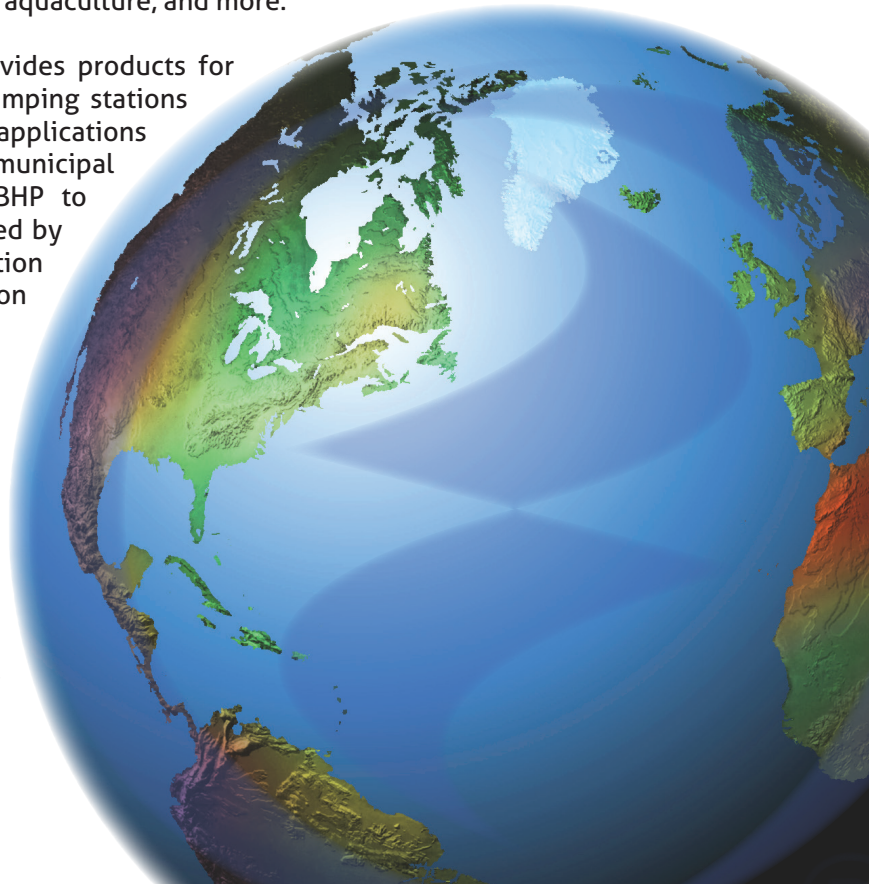
Texas. Wolf currently produces 4" to 8" pumps with capacities ranging from 35 to 1000 GPM. These pumps are known for their efficiency and durability in demanding water applications including irrigation, municipal water supplies, dewatering applications, dairy production, mining, the oil and gas industries, aquaculture, and more.



Zoeller Engineered Products provides products for storm water removal, sewage pumping stations and hazardous environment applications for residential, commercial and municipal markets. Available from 1/2 BHP to 100 BHP, each pump is customized by design, manufacture and installation according to exact application needs.



Clarus® Environmental offers sustainable environmental products, solutions, and services for the collection, treatment, and dispersal of residential and community wastewater. This line specializes in onsite pumps, pressure sewers, biological and mechanical treatment processes, disinfection, and discharge of safe water.



CL0011
0220
Supersedes
0519



3649 Cane Run Road • Louisville, KY 40211 • 502-778-2731 • 1-800-928-7867 • clarusenvironmental.com