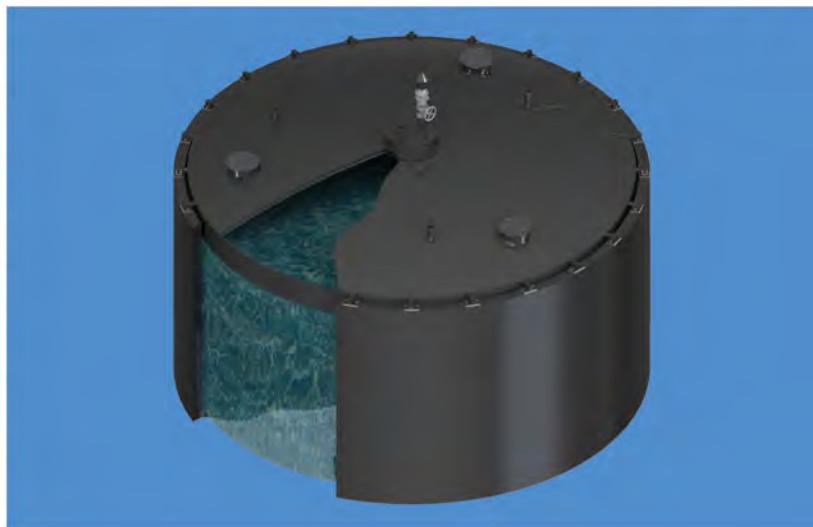
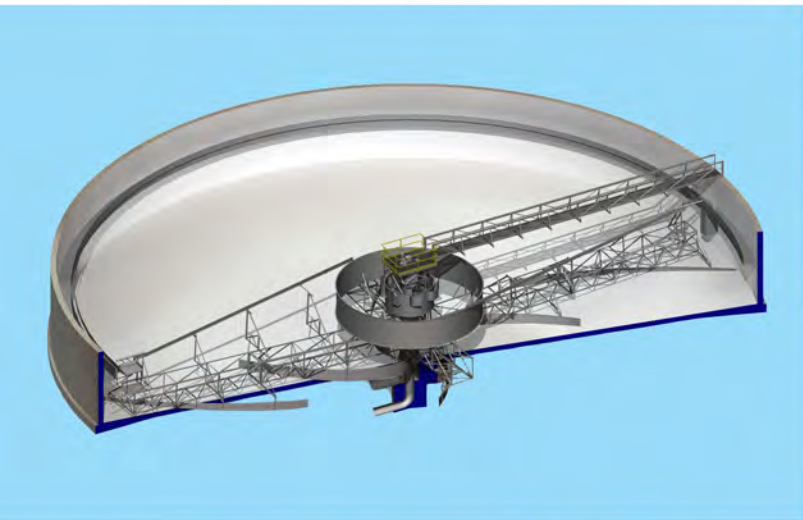




Water & Wastewater Treatment Solutions
Municipal & Industrial

CORPORATE SUMMARY

ClearStream Environmental was incorporated in 2002 to provide superior process equipment to the water and wastewater treatment industries. ClearStream has experienced tremendous success over the past few years, and has grown by approximately 100% per year for the past seven years. ClearStream is planning to continue to grow aggressively in the future. The success of the company can be directly attributed to our philosophy of supplying innovative, high quality, and competitively priced equipment, with superior customer service and support.





EXPERIENCE

The ClearStream technical staff has combined industry experience in excess of 45 years. Corporate management has been working in the water & wastewater treatment arena for nearly 35 years. ClearStream maintains a highly trained technical staff of engineers, project managers, equipment designers, procurement specialists, and detail draftsmen to ensure product quality and safety.

PRODUCTS

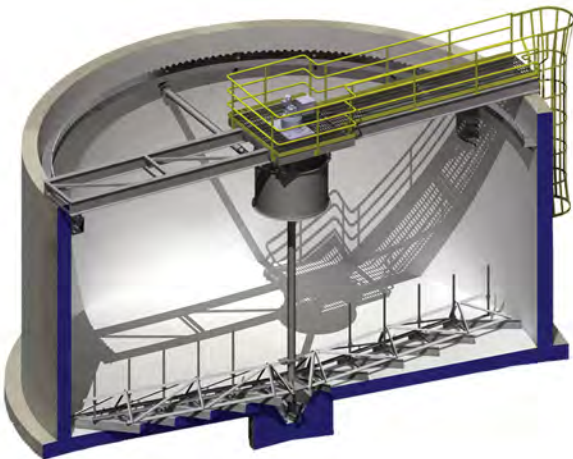
ClearStream offers a complete line of sedimentation equipment for all municipal and industrial applications. We can supply equipment ranging from very small pilot type mechanisms to very large and complex treatment equipment. ClearStream equipment is custom designed and fabricated to each individual customer's needs and specifications. ClearStream equipment has been installed, commissioned, and is reliably operating all over the world in numerous process applications.



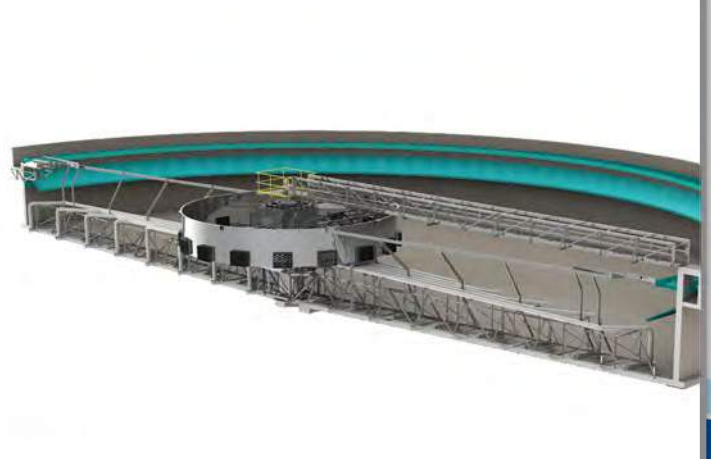
Suction Header Clarifiers



Solids Contact Clarifiers



Thickeners



Suction Pipe Clarifiers

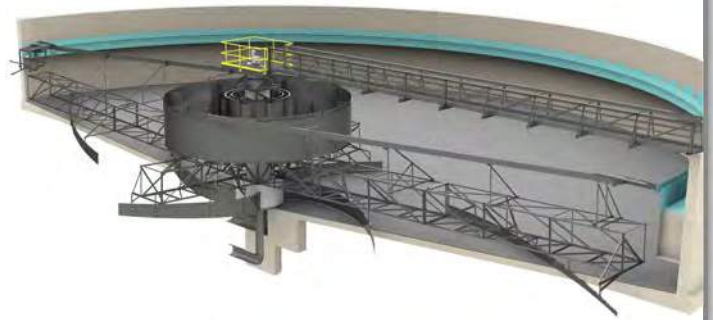
ClearStream welcomes all opportunities to supply proposals for any customer equipment needs.

PROCESS EQUIPMENT

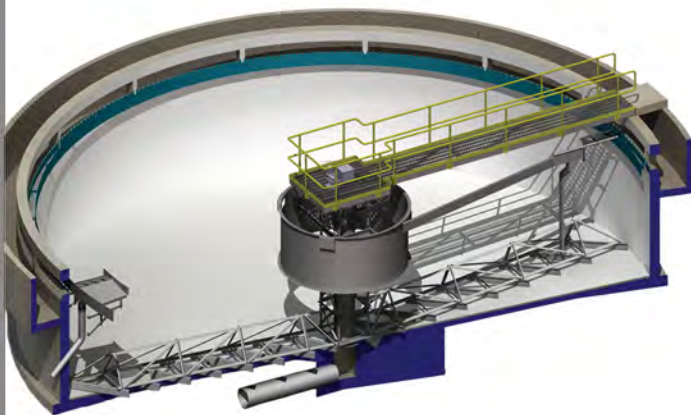
ClearStream offers a full line of process equipment. All of our equipment is custom designed and optimized, to meet each individual customer's specification and performance requirements.



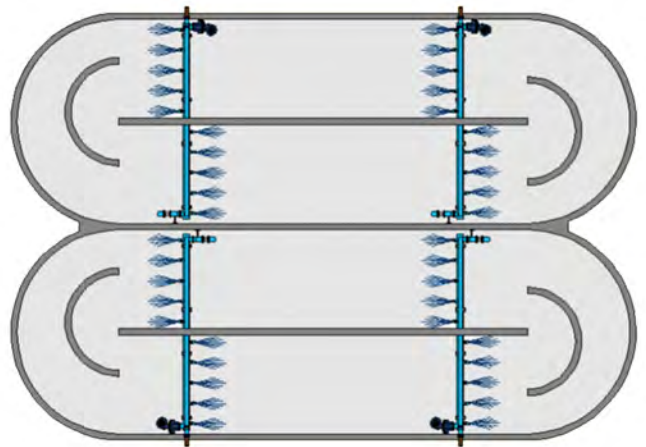
Digester Covers



Spiral Blade Clarifiers

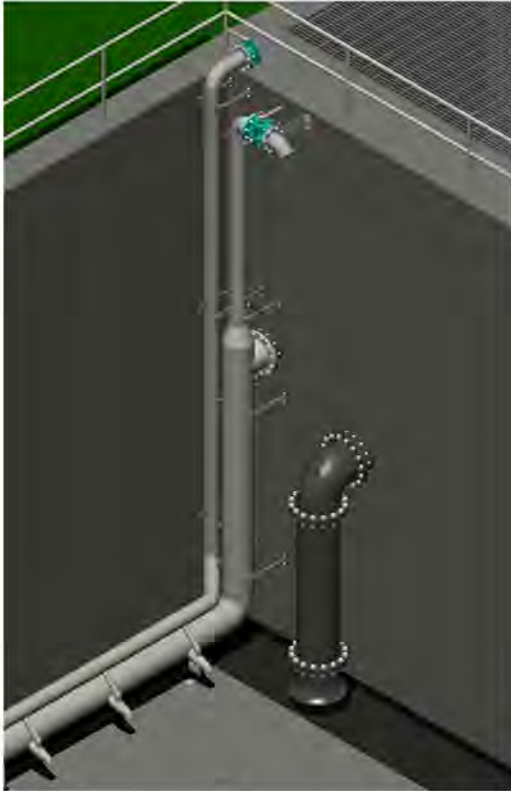


Segmented Blade Clarifiers



Oxidation Ditches

ClearFlo Biological Process Solutions



CLEARFLO JET AERATION SYSTEMS

ClearFlo jet aeration systems offer state of the art aeration and mixing for a wide variety of municipal and industrial wastewater and process applications.

Independent control of oxygen transfer and mixing, low installation costs, long life, high clean water transfer efficiency, high “dirty water” transfer efficiency, low maintenance, thermal conservation, and clean operation (eliminates airborne volatiles), make jets the ideal choice for new facilities, as well as upgrades, and process optimization projects.

Independent Control of Oxygen Transfer and Mixing

Air flow to each jet aerator can be varied from 10 SCFM to 80 SCFM to control oxygen delivery, without affecting mixing; jet systems can be operated ungassed for anoxic mixing. Anoxic mixing improves nutrient removal and settling.

The Highest Oxygen Transfer Efficiency of Any Aeration System in Dirty Water

No Mist, Spray, or Splash

Walkways and Hand Rails Stay Clean. Odors and Airborne VOCs are Reduced, or Eliminated.

Thermal Conservation

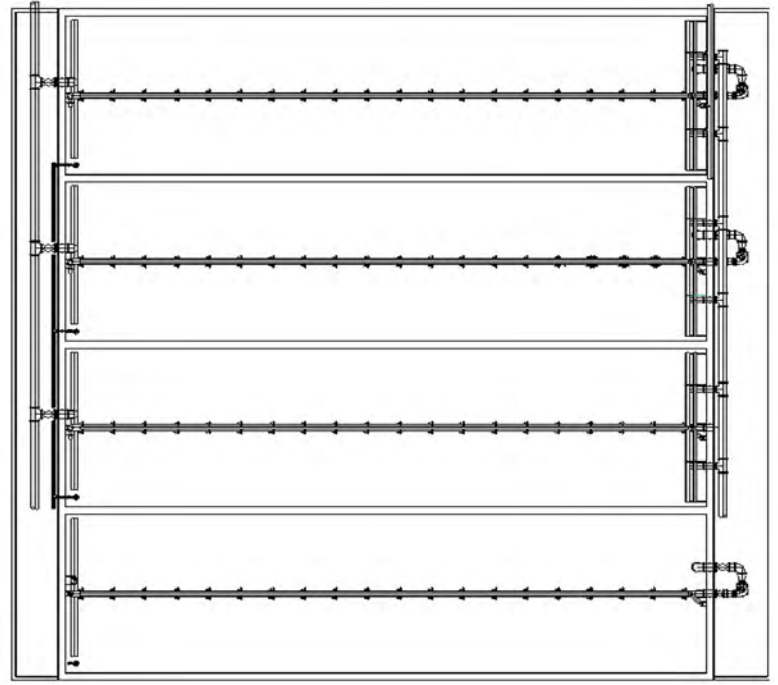
Submerged Release of Warm Compressed Air, and Lack of Splashing Eliminates Freezing Problems, Even in the Coldest Climates; Allows Year Round Nitrification/Denitrification.

Low Maintenance

Simple Five Minute Backflushing Operation is the Only Required Maintenance

CLEARFLO SEQUENCING BATCH REACTOR SYSTEMS

ClearFlo SBR systems are optimized for a wide variety of applications; from small packaged single train systems, to large Constant Level SBR systems. State of the art SBR designs are available to meet the Nation's toughest BNR standards. Our proprietary operating strategy enables ClearFlo SBR systems to treat flows from zero to 350% of design flow without bypassing, or permit violations.



CLEARFLO CONTINUOUS LOOP REACTOR

ClearFlo CLR systems are optimized for a wide variety of applications; from small packaged “bullseye” systems with an oxidation channel wrapped around a ClearStream clarifier for carbonaceous and ammonia removal, to large multi-channel systems for reliable and cost effective BNR processes.

Deeper space saving basins increase overall efficiency, and reduce heat loss during winter operation. Clean operating subsurface jet aeration eliminates mist and spray. Low maintenance, (no shafts or disks to break, or expensive gear drives to service), and long life make ClearFlo CLR Systems the clear choice.

ClearFlo Biological Process Solutions

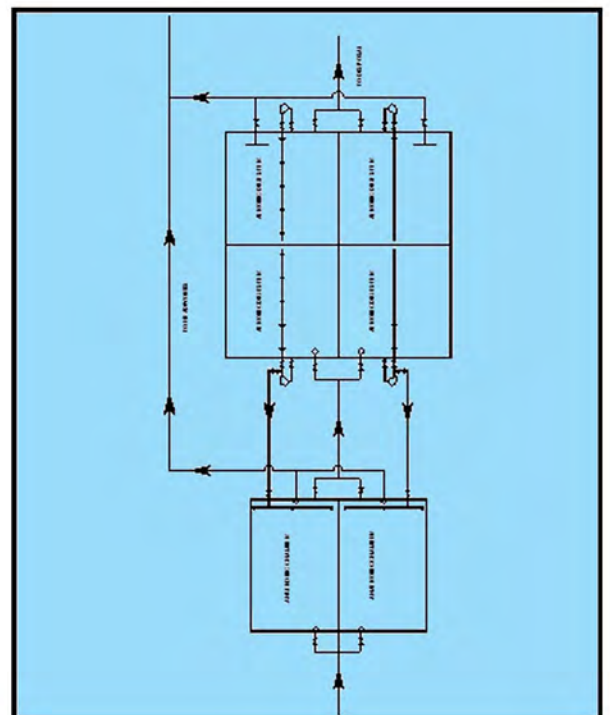


CLEARFLO PROCESS OPTIMIZATION & RETROFITS

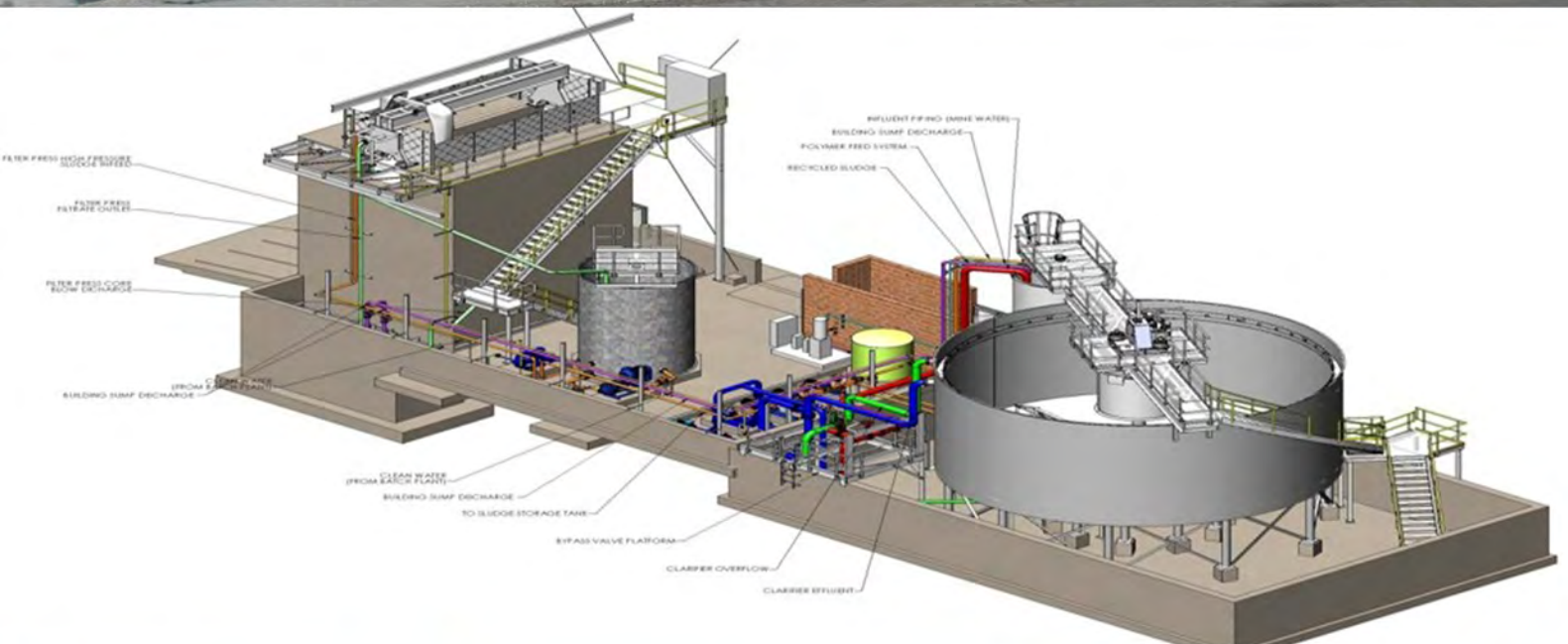
Tightening effluent standards and rising energy costs have left many facilities in an untenable situation. Process systems designed and installed in the 1970s and 80s are incapable of meeting current effluent standards, and the power costs continue to rise. Let ClearStream process engineers evaluate your current system and develop a plan to increase capacity, meet current standards, and reduce energy consumption.

CLEARFLO HYBRID DIGESTER SLUDGE MINIMIZATION SYSTEMS

By combining facultative/anaerobic and aerobic digestion chambers, ClearFlo process engineers can reduce solids sent to disposal by up to 80%, compared to conventional solids digestion systems. Using proven principles of enhanced facultative cell lysis, coupled with state of the art ORP control, a ClearFlo Hybrid digestion system can reduce solids handling costs to a fraction of that of current aerobic systems.



Industrial Treatment Equipment



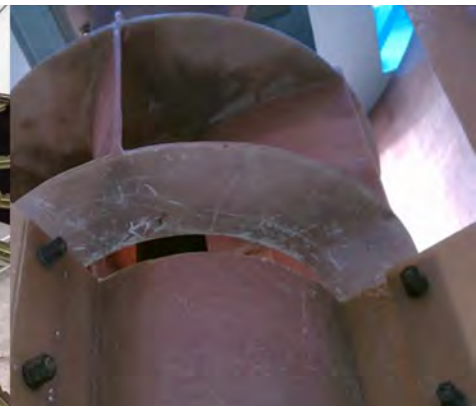
Gold Mine Slimes Recovery - Turn-key Supply with Erection and Installation



Custom Designed Piloting
Equipment



Consol Energy - 80' Diameter
Flocculating Clarifier



Frac Water SCC - FRP & Rubber
Lined Steel Construction

TANKAGE & INSTALLATION

ClearStream offers steel and fiberglass tank supply, to complement our sedimentation equipment lines. Additionally, we offer turn-key installation services for the tank and mechanism, if desired by the customer. Our in-house specialists can oversee the construction and installation of the mechanism and tank to create a single source for the entire treatment package.



FIELD SERVICE & RETROFIT SERVICES

ClearStream also offers field service for existing mechanisms, including part replacement and rehabilitation. We can also supply complete retro-fit of existing mechanisms supplied by any manufacturer. Many ClearStream supplied replacement units are currently in operation all over the world.



DRIVE UNITS

ClearStream provides drive units to deliver a superior treatment package. Our drives utilize a precision main gear and bearing, with a torque overload protection system. The main bearing comes standard with a 10 year warranty.



DESIGN METHODOLOGY

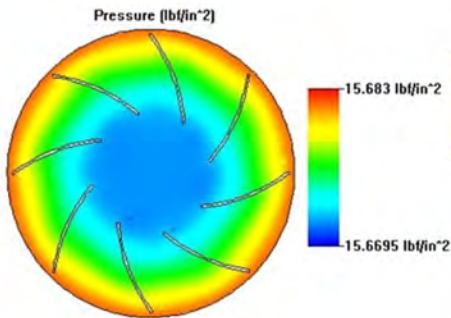
ClearStream utilizes cutting edge analysis and design technologies, to custom design each piece of process equipment to meet each individual customer's needs. All equipment is analyzed using advanced Computational Fluid Dynamic (CFD), Finite Element Analysis (FEA), and Civil / Structural software codes, to ensure process performance and structural integrity. All mechanisms are fully designed in a 3-D CAD environment, to produce the highest quality, and customer friendly designs possible.



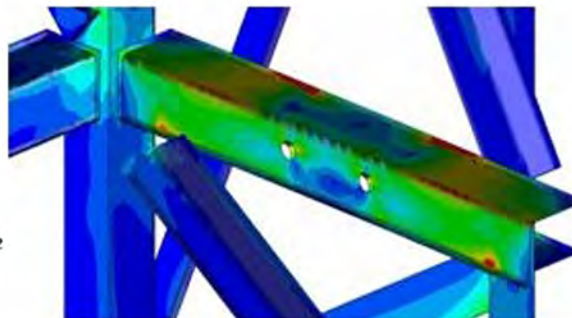
26' Clarifier Installation



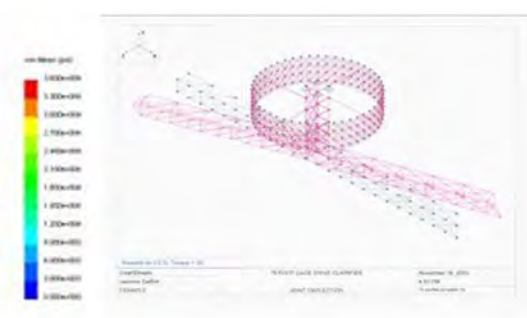
26' Clarifier CAD Design



Radial Turbine CFD Analysis



Rake Arm FEA Analysis



RISA Structural Analysis

ADDITIONAL DESIGN RESOURCES

In addition to substantial internal capability for design and testing, ClearStream utilizes several outside, independent design resources, to ensure the highest quality equipment designs. To complement internal capabilities, ClearStream occasionally contracts with an independent testing lab (Pocock Industrial), for additional support on more elaborate projects.



CONTACT US



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REPRESENTED BY:

