

# We bring back to life.



# **HEADWORKS**



### PERFORATED PLATE FILTER SCREEN

The Filter Screen eliminates operational disruptions caused by fibrous and other inorganic material. Depending on the perforated panel, the screening capture rate is much greater than that of a bar screen.



### **ROTARY DRUM SCREEN**

As the drum rotates, screened fluids pass through the perforations in the drum and fall into the water collection trough underneath the drum and are then discharged. Solids are retained within the drum and are dewatered as they are moved to the elevated end of the drum by the internal flights.



### IN CHANNEL PERFORATED DRUM SCREEN

The screen utilizes a rotating drum to capture influent screenings. The perforated plate provides a much higher capture rate than that of rotating bar style screens.



### **MULTI-RAKE BAR SCREEN**

The multi-rake screen utilizes multiple rakes to quickly and efficiently clean the screen face in 5-second intervals. Bar spacing down to 4 mm is available.



### **SCREENINGS WASHER COMPACTOR**

The washer compactor is synonymous with hygienic and efficient handling of screenings. Screening disposal is a cost factor for every installation; wet screenings are heavy and increase disposal costs.



### XGT VORTEX GRIT REMOVAL SYSTEM

The XGT Vortex grit removal system is available in 270 and 360-degree designs. The unique X-impeller design enhances organics removal while optimizing grit separation.



### **TRAVELING BRIDGE (GRIT & GREASE)**

The highly reliable Traveling Grit & Grease Bridge is available in a variety of designs to meet plant specific needs. Kusters Water is the leader in Traveling Grit & Grease Bridge technology.



### **GRIT WASHER**

The grit washer was developed with two aims in mind: To achieve a very high separation performance of the finest grit particles and to achieve grit with <3% total volatile solids.



### STATIC SCREEN

Kusters Water offers a complete line of factory built static screens. Every screen is designed to provide trouble free liquid separation, without any moving parts.





### **SELF-CONTAINED COMPLETE PLANT**

The Complete Plant provides a total headworks solution for small and large facilities. The raw influent flow undergoes a series of pre-treatment processes including: Fine Screening, grit collection, grease collection and conveying.



### SPIRAL SCREEN

Kusters Water offers a complete line of in channel or in-tank screening systems. Each unit utilizes a perforated plate or v-wire screen section to effectively remove unwanted solids and debris from the influent.



### **CENTERFLOW BAND SCREEN**

Double flow, vertical, perforated opening, 2mm – 12mm for flows up to 100 mgd at channel heights up to 65 feet.



### **CLIMBER TYPE BAR SCREEN**

3/16" to 4" openings. Up to 12 ft wide and 75 ft deep channels. 304 and 316 stainless steel materials of construction. Pin Rack or Gear Rack design.



### **GRIT CLASSIFIERS**

Grit Classifiers utilize carefully sized settling hoppers to provide accurate surface settling rates. The hopper is attached to a discharge screw assembly to remove the settled and washed grit.



### **CIRCULAR GRIT COLLECTORS**

Grit Collectors are available in sizes ranging from 8 ft to 40 ft in diameter. Flow rates up to 49.0 MGD per basin.



### **AERATED GRIT CHAMBER**

Aerated grit chambers are offered in a variety of configurations. All the necessary items such as diffusers, blowers, conveyors, controls and airlifts can be provided.



BY KUSTERS WATER



# **CLARIFICATION**



STANDARD SCRAPER CLARIFIERS
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Standard scraper clarifiers are designed for all applications involving sludge removal.



**SPIRAL BLADE CLARIFIER SYSTEMS** 

Spiral blade clarifiers are commonly used in primary and secondary clarification.



**TAPERED HEADER SUCTION CLARIFIERS** 

Rapid sludge removal clarifiers are specifically designed to provide quick and uniform removal of return activated sludge (RAS), the collectors utilize a rotating tapered sludge collection header and manifold assembly to remove activated sludge.



**SUCTION LIFT CLARIFIERS** 

Rapid sludge removal clarifiers are specifically designed to provide quick and uniform removal of return activated sludge (RAS); collectors utilize collection pipes located at multiple points along each arm.



### **CROSS FLOW CLARIFIERS**

Kusters Water offers a complete line of conventional water treatment clarifiers for use in pre-sedimentation, final sedimentation, and filter backwash sedimentation. Corner sweeps are available as an option.



### **FLOCCULATING CLARIFIERS**

Flocculation clarifiers are particularly effective for flocculation and clarification of municipal and industrial water supplies, screened primary sewage, wastes with high grit content, and industrial wastewater containing heavy settleable solids.

# **THICKENING**



**CIRCULAR DISSOLVED AIR FLOTATION** 

Ideally suited for municipal applications including thickening and algae removal.



RECTANGULAR DISSOLVED AIR FLOTATION

Ideally suited for liquid-solid separation in many industries, including separation of free oils and grease.



**ROTARY DRUM THICKENER** 

Drum thickeners are used for municipal sludge thickening. 3-6% thickened sludge is typical.





### **SOLIDS CONTACT CLARIFIERS**

Solids contact units employ proven recycle solids contact principal for highly efficient flocculation, sedimentation, and clarification in a single compact basin.



### INDUSTRIAL CLARIFIERS

Kusters Water offers a complete line of heavy-duty clarifiers for all types of liquid-solids separation.



### FIELD ERECTION AND INSTALLATION

Kusters Water offers field installation and erection services for most of our products. We perform on both union and non-union project sites. Additionally, we regularly engage in design-build contracts with many of our clients, allowing for total treatment solutions.



### **HYDRAULIC CLARIFIER DRIVES**

Hydraulic Powered Clarifier Drive Units (Type H) are used in municipal and industrial clarifier applications. The hydraulic overload system provides increased protection to the drive system.



### **CAST IRON CLARIFIER DRIVES**

Cast Iron Clarifier Drive Units are used in municipal and industrial clarifier applications.



### TRAVELING BRIDGE CLARIFIERS

Kusters Water traveling bridge clarifiers are designed for installation in new or existing concrete basins for the removal of settled solids and floating material.



### **INDUSTRIAL THICKENERS**

Kusters Water offers a complete line of heavy-duty thickeners for all types of liquid-solids separation.



### THICKENER LIFT DRIVES

Lift drives are utilized in heavy solids, high-torque applications. The standard unit is equipped with an electric or manual lift assembly that raises and lowers the drive shaft and rakes. Commonly used in mining, aggregate and thickening applications.



### **GRAVITY THICKENER**

Gravity Thickeners are commonly used for thickening of activated sludge and water treatment sludge.





# **SPECIALTY ITEMS**



### **CSO TERMINODOUR**

Whereas other systems extract and treat odors, the Terminodour system is unique in that it oxidizes the odor at the point of the source. Ideally suited for removal of hydrogen sulfide.



### **CONTROLS**

Kusters Water offers a full line of custom built control panels (UL Listed).



### "BOLT-IN" REPLACEMENT DRIVES

Kusters Water offers the industry's largest selection of clarifier and thickener drives. Retrofit drives are available for all brands.



### **SKIMMERS**

Kusters Water offers a complete line of custom skimmers for use in water and wastewater application. Typical applications include: Rectangular and circular clarifier basins, chlorine contact tank, oxidation ditches, Dissolved Air Flotation tanks, etc.



### **CONVEYORS**

Shafted and Shaftless conveyors are available to compliment any of our products.



# LA-EDI (ENHANCED FLOCCULATION AND ENERGY-DISSIPATION INLET)

The LA-EDI inlet was developed to respond to the problem of turbulence in the centerwell area of many clarifiers.



# **BIOLOGICAL**



### **MEMBRANE BIOREACTOR (MBR)**

Kusters Water offers complete Custom or Prefabricated MBR systems. Utilizing Biological Nutrient Removal design strategies and Ultra Filtration membranes, Kusters Water delivers a complete, headworks-to-discharge, wastewater treatment system tailored to meet the most stringent water quality needs for reuse or discharge.



# PACKAGED WASTEWATER TREATMENT PLANTS

Kusters Water offers a complete line of packaged biological wastewater treatment systems. These plants are a cost effective alternative to MBR, SBRs and RBCs.



### TRICKLING FILTER - ROTARY DISTRIBUTORS

Rotary distributors are used in industrial and municipal applications. All distributors are computer designed to provide a uniform flow distribution, high BOD removals and a stable effluent.

## **BIOSOLIDS**



### **SCREW PRESS**

Utilized for sludge dewatering, the screw press provides high capture rates with low maintenance and simple operation.



### **DISSOLVED AIR FLOTATION**

Dissolved Air Flotation (DAF) is commonly utilized for thickening of WAS.



### **ROTARY DRUM THICKENER**

Drum thickeners are used for municipal sludge thickening. 3-6% thickened sludge is typical.



