باسية للمقاولات

Basia Contracting

ISO 9001

Clarifiers & Thickeners

Wide Range of Clarifiers & Thickeners

Clarifier - Circular / Square Tank

- Full Bridge - Central Drive
- Half Bridge - Central Drive
- Lamella / Tube Settler
- Rotating Bridge - Peripheral Drive

Clarifier - Rectangular Tank

- Travelling Bridge Sludge Scraper
- Chain & Scrapper Sludge Collector

Clariflocculator - Circular Tank

- Rotating Bridge Peripheral Drive With 2 / 4 Flocculators
- Central Driven With Independent Flocculator Drives / Dual Stack Concentric Flocculator Drive

Reactor Clarifier - High Rate Solid Contact type

- Full Bridge With Side Feed
- Half Bridge With Bottom Feed

Clarfier - Suction type and Peripheral Feed Suction type

- Full Bridge - Central Drive
- Half Bridge - Central Drive

Gravity Thickener

- Central Drive - Full / Half Bridge Type
  - Without Rake Lifting Device
  - With Manual / Semi - automatic / Automatic Rake Lifting Device
- Peripheral Drive - Rotating Bridge

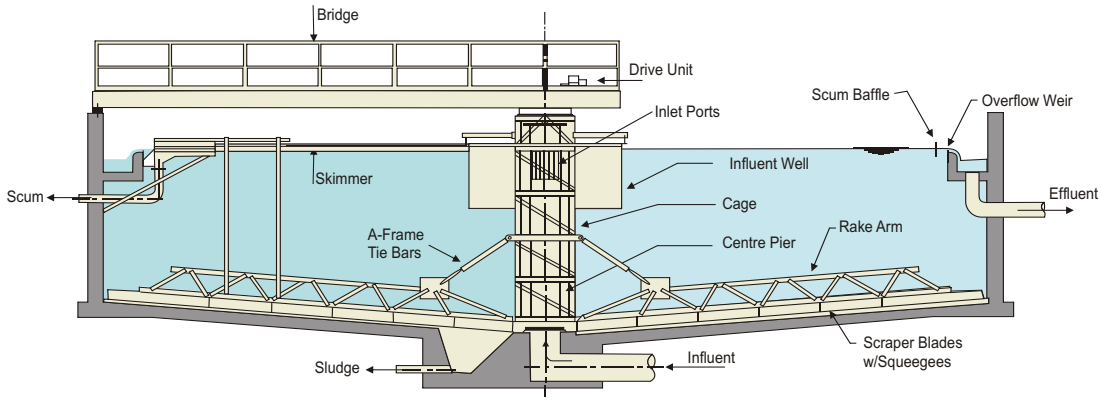
Dissolved Air Flotation Thickener

Gravity Belt Thickener

Clarifier / Thickener /Clariflocculator

Central Drive Unit

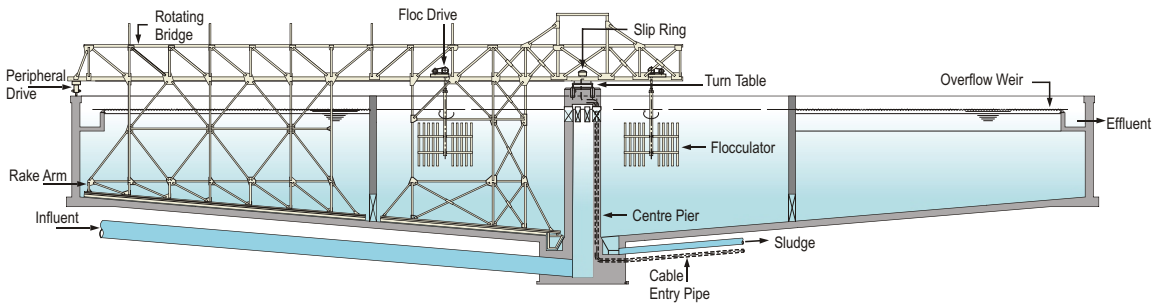
- Bridge spanning full tank diameter (with Center Shaft) / half the tank diameter (with Center Cage)
- Rake arms spanning full tank diameter
- Range of rugged Central Drive heads with torque overload sensing
- Surface skimmer (Optional)
- Manual / semi-automatic / automatic rake lifting (Optional)
- Designs upto 30M diameter (Full Bridge) and upto 70M diameter (Half Bridge)
- Lamella / Tube Settler options available for high rate clarification



Clarifier - Central Drive Half Bridge

Peripheral Drive Unit

- Rotating Bridge spanning half the tank diameter or more
- Clariflocculator design with 2 / 4 Flocculation paddles
- Rake arms suspended from the bridge
- Peripheral drive designs with Rubber / PU tyred wheels running on concrete wall / Steel wheels running on rails
- Surface skimmer (Optional)
- Designs upto 60M diameter and above



Clariflocculator - Peripheral Drive

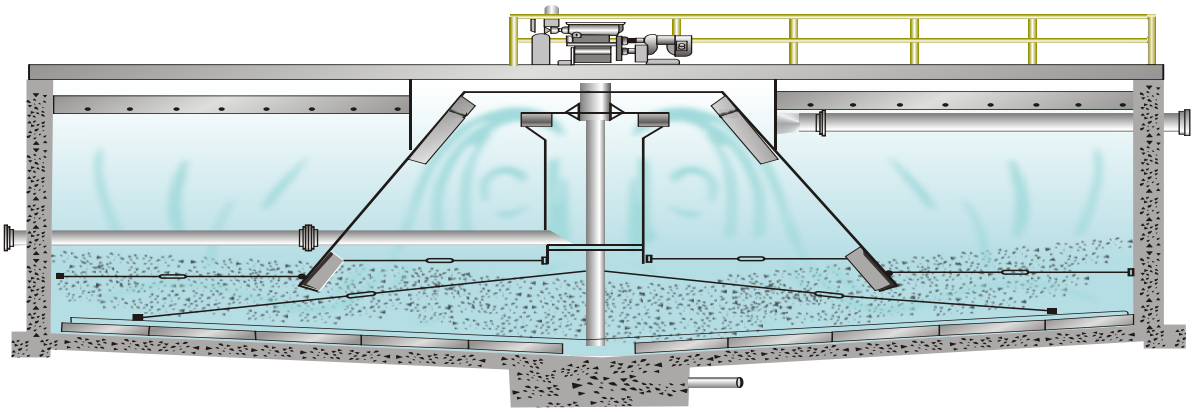
Central Drive Clariflocculator

- Fixed Bridge spanning full/half tank diameter. Rake arms spanning the full tank diameter
- Centrally driven rake arms through rugged drive head
- Designs with 2/4 Floc Paddles with independent drives
- Alternate Single flocculator drive with concentric dual stack drive design upto 40M diameter and above

High Rate Solid Contact Clarifier - Reactor Type

Features

- Mixing, Flocculation and Clarification in a SINGLE unit
- High overflow rates and shorter detention time vs conventional clarifiers resulting in smaller footprint
- Utilises the solids contact principle plus unique "controlled recirculation" bringing previously formed flocs "in contact" with the raw water.
- Varied Applications in Surface Water Treatment for Removal of Turbidity, Suspended Solids, Softening, Colour, Taste and Odour; Primary and Tertiary Treatment of Municipal wastewater, Pulp & Paper, Metal Hydroxide Removal, Steel Waste etc.



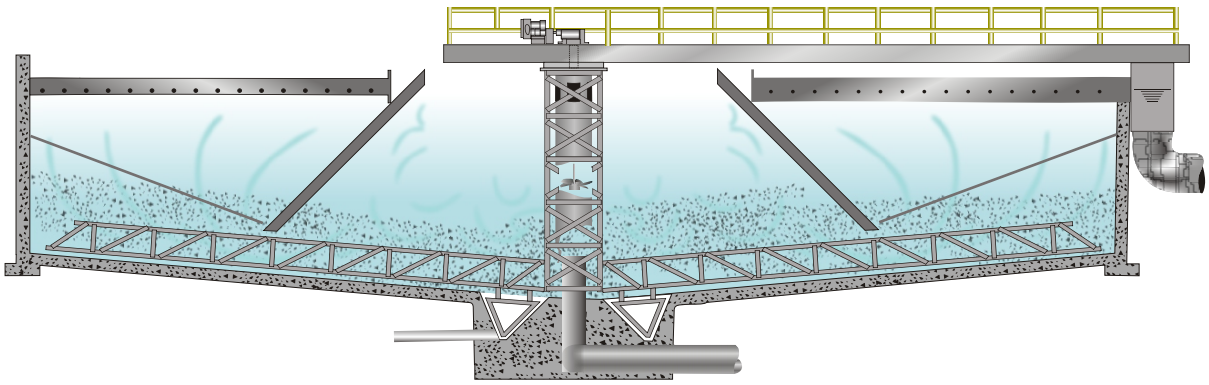
Reactor Clarifier - Full Bridge Side Feed

Half Bridge with Bottom Feed

- Bridge spanning half the tank diameter & Rake Arms spanning full tank diameter
- Rugged Drive Head with torque overload with independent mixer drive.
- Feed from bottom of tank connecting to central draft tube
- Available for sizes upto 50M and above

Full Bridge with Side Feed

- Bridge & Rake Arms spanning the tank diameter
- Dual Stack drive arrangement with torque overload
- Feed from side connecting to central draft tube
- Available for sizes upto 18M and above



Reactor Clarifier - Half Bridge Bottom Feed

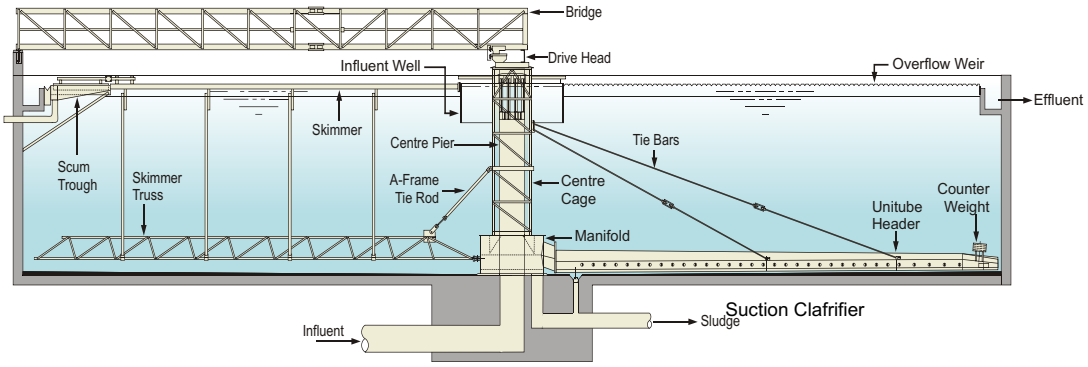
Suction Clarifier

What is it?

- A clarifier mechanism employing a unitube header (a specially designed rectangular shaped arm provided with orifices) in place of conventional rake arms, which sucks the settled sludge hydraulically for further withdrawal.

Advantages

- Positive, Rapid Sludge Removal -Resulting in fresher sludge, less chance of septicity, reduced aeration requirements, prevention of phosphate release
- Maximum Solids Concentration - Resulting in reduced sludge volumes, lesser pumping & disposal costs
- Minimum Sludge Turbulence - Suction removal of sludge minimizes underwater disturbance and re-suspension of sludge assisting in consistent clear overflow
- Economy - Requires virtually flat floors resulting in reduced civil costs, reduced torque and power requirements, superior sludge quality resulting in lower aeration requirements



Suction Clarifier

Peripheral Feed Suction Clarifier

What is it?

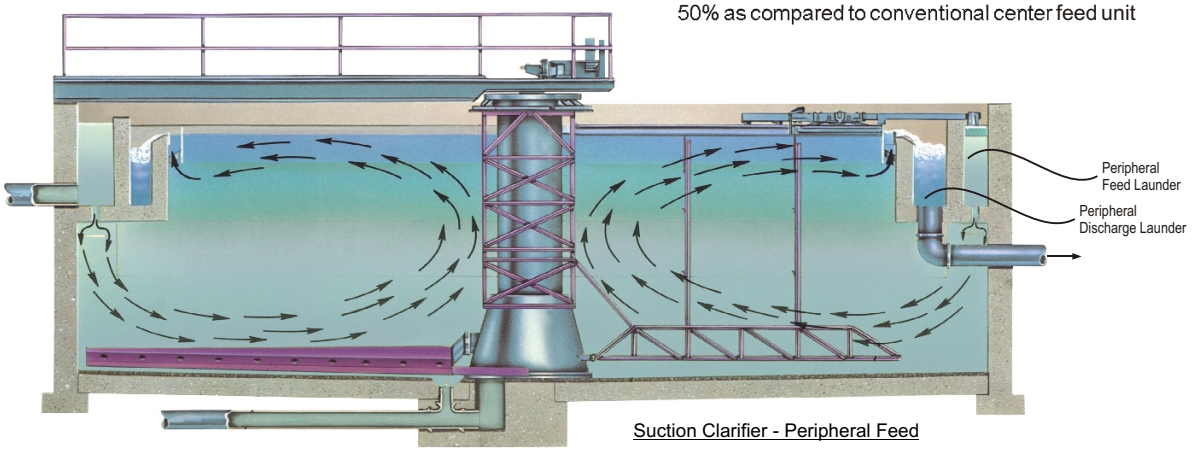
- Clarifier with Peripheral Feed & Peripheral Take off

Applications

- Secondary / Final Clarifier typically in Municipal Wastewater Treatment

Advantages

- Hydraulic Efficiency - 50 to 80% more than the conventional center feed clarifier
- Higher Overflow Rates - resulting in reduced foot print / less number of units
- Eliminates Short circuiting, permitting full utilization of tank volume and reduction in surface area by as much as 50% as compared to conventional center feed unit



Suction Clarifier - Peripheral Feed

Clarifier - Rectangular Tank

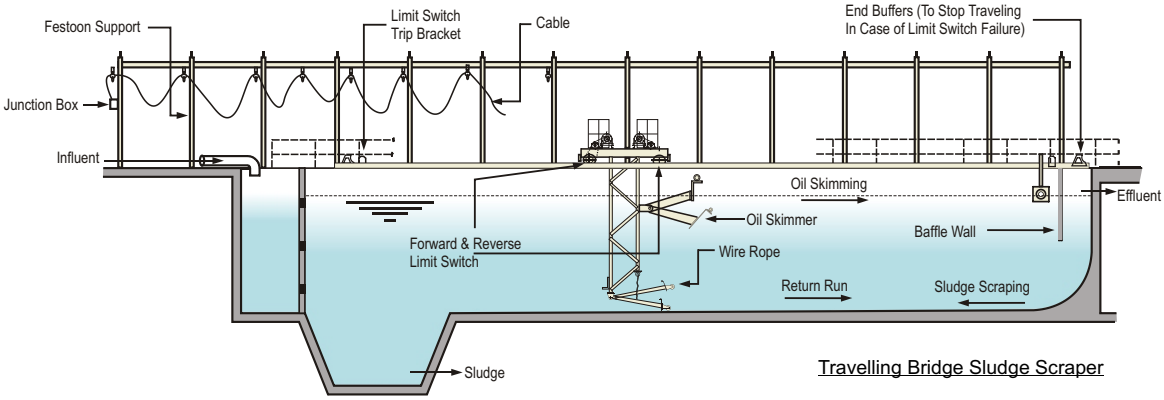
Travelling Bridge Sludge Scraper

Advantages

- Effective Removal of Sludge towards influent end of the tank
- Effective Removal of Scum / Floating material towards effluent end of the tank
- Entire tank area coverage

Features

- Bridge spanning the entire tank width traveling on Steel rails as both sides of the tank
- Suspended scrapper and skimmer arms from bridge
- Festoon Electrification for bridge mounted drives
- Bridge mounted Controls for auto manual operation
- Optional Rack & Pinion arrangement for non-slip traction for extra-wide tanks / heavy sludge loads



Travelling Bridge Sludge Scraper

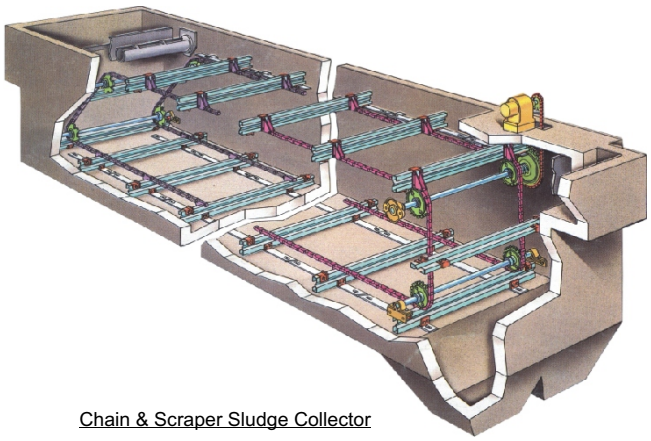
Chain & Scraper Sludge Collector

Advantages

- Endless Chains along each side of the tank carried on sprockets with Flights attached at regular spacing spanning the entire tank width
- Available also in non-metallic Chains, Sprockets, Flights etc. for corrosive / hazardous applications

Features

- Effective Sludge Removal to one end of the tank
- Effective Removal of Scum / Floating material to other end of the tank
- Entire tank area coverage

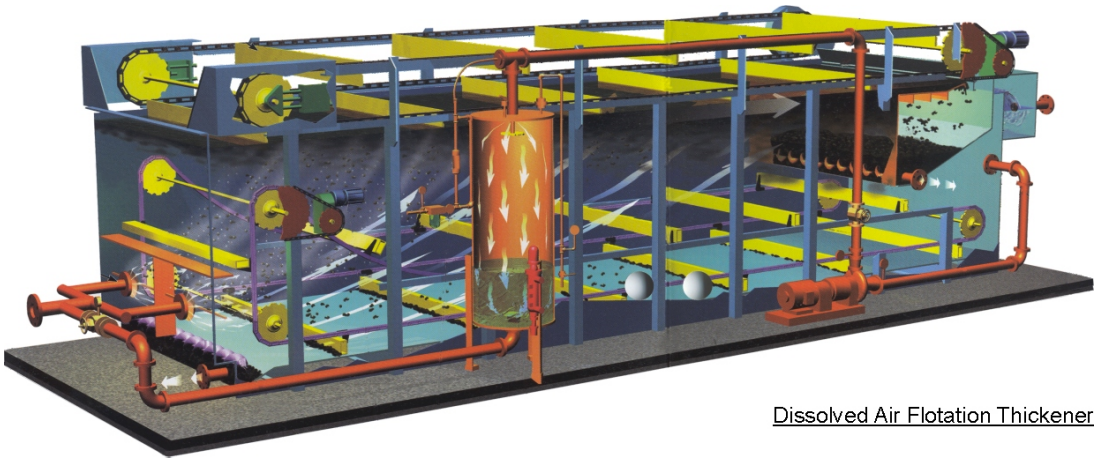


Chain & Scraper Sludge Collector

Dissolved Air Flotation Thickener

Features & Benefits

- Exceptionally effective in concentrating chemically treated sludges as well as sludges floated without the use of chemicals
- With chemicals, loadings can be increased upto 3 times
- Choice to operate with or without chemicals depending on best economies for each situation
- Achieving 5% total solids and more on biological sludges alone, far surpassing the performance of conventional gravity systems
- Employs principle of Floating the solids to the tank surface by millions of tiny air bubbles, forming a highly concentrated sludge blanket
- Introduces air into an external liquid source such as recirculated effluent at elevated pressure in a saturation tank and then blending this air saturated stream flow with the sludge to be thickened
- Floated thickened sludge is continuously skimmed from tank surface by chain & flight skimmer assuring scum removal at highest possible solids concentration

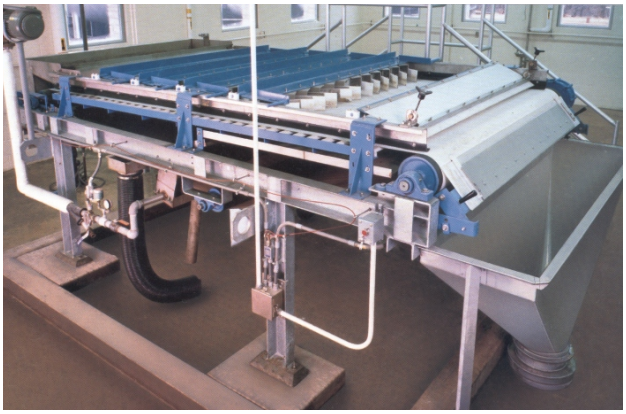


Dissolved Air Flotation Thickener

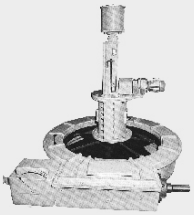
Gravity Belt Thickener

Features & Benefits

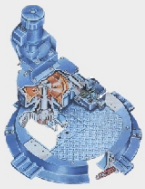
- Efficiently reduces the volume of wastewater sludge both - industrial and municipal process slurries
- Uses principle of liquid separation by gravity drainage enhancing separation by sludge rolling action
- Small Foot print
- Low capital cost, easy installation



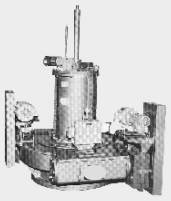
Belt Thickener



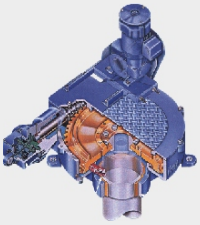
Full Bridge Drive Head
with Rake Lift (Medium Duty)



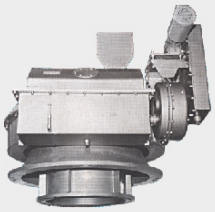
Half Bridge Drive Head
without Rake Lift (Medium Duty)



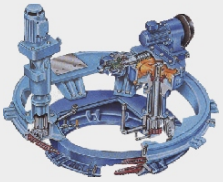
Full Bridge Drive Head
with Rake Lift (Heavy Duty)



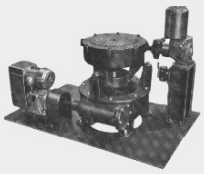
Full Bridge Drive Head
without Rake Lift (Medium Duty)



Half Bridge Drive Head
with Rake Lift (Heavy Duty)



Half Bridge Drive Head
without Rake Lift (Dual Drive)



Concentric Full Bridge
CF Drive Head (Medium Duty)

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