



For Waste-water Electro-Mechanical operations



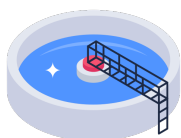
WHO We are

Winkel V Flow Misr Electromechanical was established in 2004 since then it was recognized as one of the most trusted companies in the market.

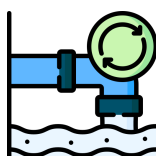
Winkel V Flow Misr Is specialized in the manufacturing of the electromechanical operations of water treatment plants. We offer a wide range of services from Design, Manufacturing, installation, Commissioning, Maintenance and after sale Services.

We have one the most trained, experienced team in Engineering Design and Manufacturing. That ensures the ability to provide the most suitable solution to all the relevant problems in the water treatment industry.

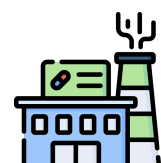
WHAT WE DO?



Water Purification
Plants' Equipment



Sewage water
Plant' Equipment



Pharmaceutical
Industries



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Mechanical Screen



DESCRIPTION:

The Multi Rake Screen is a chain operated bar screen for removal of solids from channel flow.

The Multi Rake Bar Screen is installed vertically and remains partially submerged within the channel. Debris is collected by a chain operated cleaning rake, intermeshing with the rake bars. The collected debris is discharged at top, during upward motion of the rake and the rake is cleaned by scraper during the descending motion of each cycle.

Drive unit is fitted at the top and controlled through a control panel.

DESIGN FEATURES:

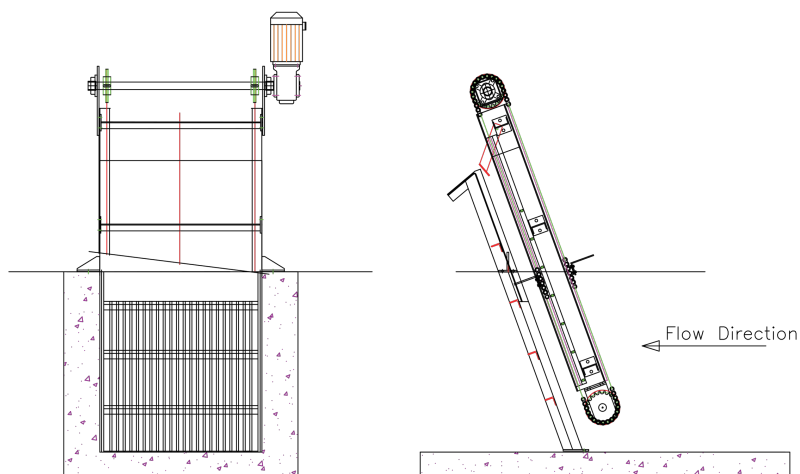
- All drive mechanism is above the water level.
- Screen operation can be controlled by level difference upstream/downstream through optional level control system.
- Rigid stainless steel design
- Low head loss.
- Low maintenance.
- High screening discharge capacity.
- Easy installation.

APPLICATIONS:

- Waste water pumping station
- Municipal and industrial waste water treatment plants.
- Surface water intake pump house.
- Storm water drain

OPTIONS:

- Belt Conveyor
- Screw conveyor with optional integrated press





BELT CONVEYOR

DESCRIPTION:

Every major waste water treatment plant operation also finds a use for a belt conveyor. We offer proven solutions for the removal of sludge, sludge cakes, raking, and the like. Belt conveyors are always solved individually according to the specific project and the investor's specification

The belt tension is adjusted mechanically via a tension roller. The opposite roller drives the belt

A rubberised cleaning roller is installed on the belt return after the scraper and a rubberised blade scrapes off any remaining mud on the belt

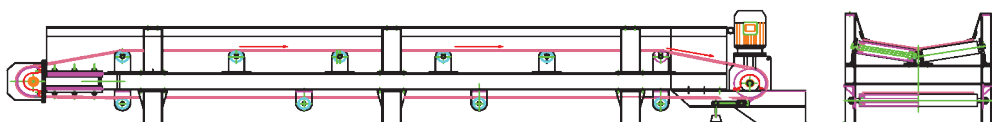
A simple concept and easy maintenance thanks to an external lubrication system

DESIGN FEATURES:

- Use less power than screw conveyors
- Does not change product as it conveys
- Best for long distances
- Best for high volumes

APPLICATIONS:

- Dewatered Sludge
- Dried Bio solids
- Raw Screenings
- Compacted Screenings
- Wet Grit
- Dewatered Grit





PENSTOCK & STOP LOG

DESCRIPTION:

Penstocks mainly consist of a steel frame, a steel gate, a neoprene sealing system sliding inside the frame, a stem, and a manual drive system complete with control wheel. Generally they serve the purpose of:

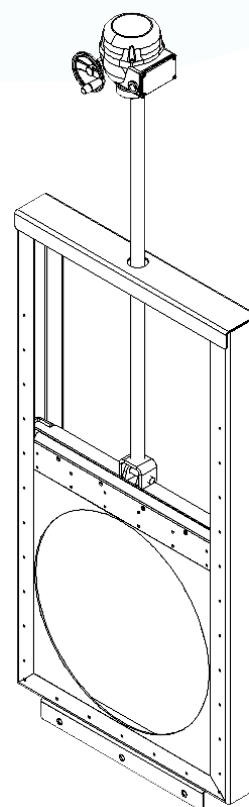
- Isolating a piece of equipment.
- Shutting off a whole part of a plant.
- Controlling water level and / or flow rates.

OPTIONS:

- Gearbox complete with hand wheel
- Electric actuator complete with limit switch, torque limit switch, position sensor, emergency for manual hand wheel, protection degree IP 65.
- Electric actuator ON/OFF
- Electric actuator with 20-4 mA signal
- Electric actuator with Profibus inverter

FEATURES:

- Different gate sizes up to 2 m wide and 2 m high - available.
- 3 or 4 side sealing system (neoprene hardness 60 Shore.
- TPN pitch stem – minimum thickness: 30 mm.
- Hot dip-galvanised carbon steel / 304 L / 316 L SS.
- Robust design.
- Wide range of applications and sizes.





Grit REMOVAL

DESCRIPTION:

Travelling Bridges for Settling Tanks are used to remove sludge and scum from rectangular tanks in both municipal and industrial waste water.

The bridge travels back and forth on the flat tank bottom. By travelling it conveys the settled sludge through the bottom scraper into a sludge collecting hopper. Scum and floating matter are collected by a surface scraper and transferred into a scum collecting channel.

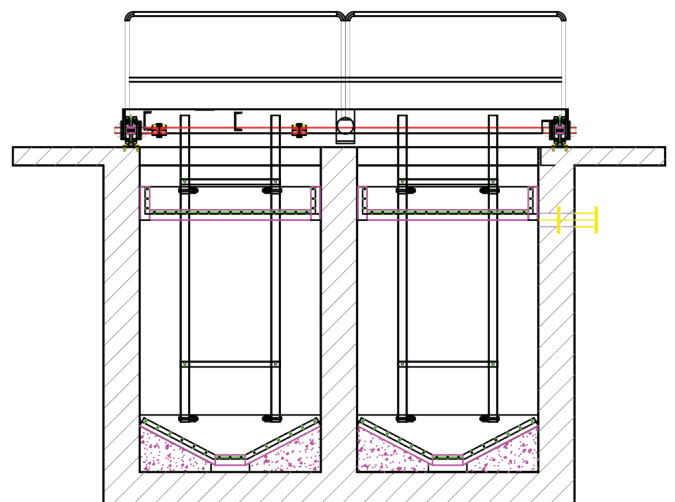
The scrapers are operated by one gear motor only.

DESIGN FEATURES:

- Available for up to 13m wide and 50m long tanks
- Sludge removal device
- Scum removal device
- Festooned cables
- Control panel
- Hot dip-galvanised carbon steel / 304 L / 316 L SS
- Quick installation
- High efficiency sludge and scum removal
- Easy installation even into existing tanks

APPLICATIONS:

- Motorized cable reel
- Spring cable reel
- Cable holding chain
- Travelling system on rails instead of wheels
- Alternative voltage and frequency
- Alternative degree of motor protection



CLARIFIER TANK



DESCRIPTION:

Traction Clarifiers are used to remove biological sludge and floating particles in circular primary and secondary settlement tanks in both municipal and industrial waste water treatment plants.

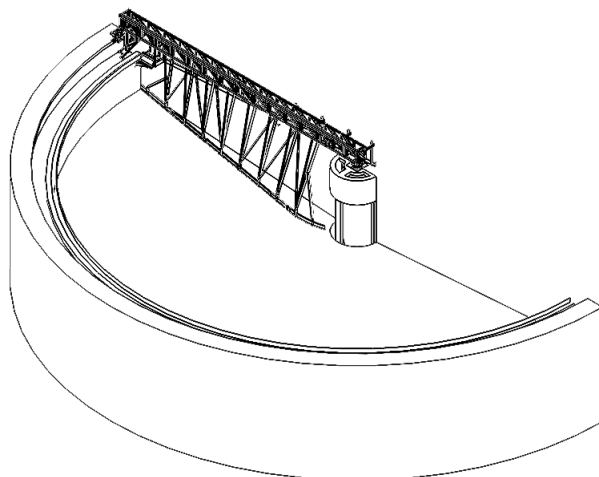
Traction Clarifiers consist of a movable truck lying in the center on a rotating central support and, at their periphery, on a traction trolley. Clarifiers are operated by a gearbox connected to a slip ring placed in the central support. Waste water enters the concrete tank through a central cylinder which spreads the liquid. Sludge settles on the tank bottom while light particles and scum float to the surface. Floating particles are collected by a surface scraper and conveyed into a scum-box. Clean water flows into the peripheral launder through Thomson profile weirs.

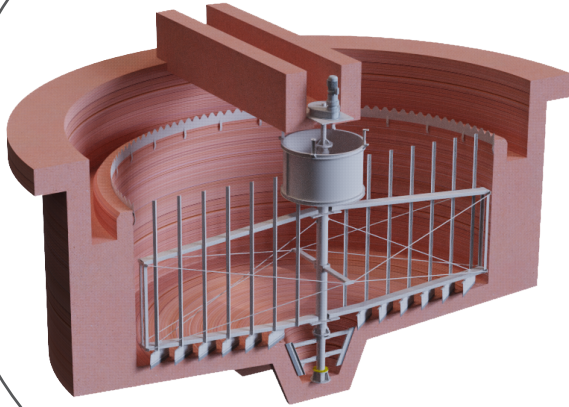
OPTIONS:

- Clarifier with $+3/1$ walkway length radius, with bottom scraper and back bottom scraper
- Double traction clarifier with diametric walkway and double scrapers
- Alternative voltage and frequency
- Scum removal by means of "rootling pipe" system
- Electric torque limit switch
- Motorized rotating brush for weirs/laundry cleaning

DESIGN FEATURES:

- Available for tanks of up to 60m in diameter
- Hot dip-galvanised carbon steel / 304 L / 316 L SS
- Quick installation
- High removal efficiency of sludge and floating matter
- Easy installation also into existing tanks





THICKNER

DESCRIPTION:

The ISP Sludge Thickener increases the concentration of the sludge due to its slow moving arms and vertical pickets. This also enables liberation of gas bubbles and aggregation of flakes of sludge.

The system is installed inside a circular tank with a walkway made of concrete. It is mainly composed of a central drive shaft made of steel complete with flanges for connection to a movable trellis and to the scraper blades of the sludge drain well. Movable trellis are equipped with vertical pickets and bottom scraper blades. The central cylinder is used for the sewage intake. It is anchored to the concrete walkway.

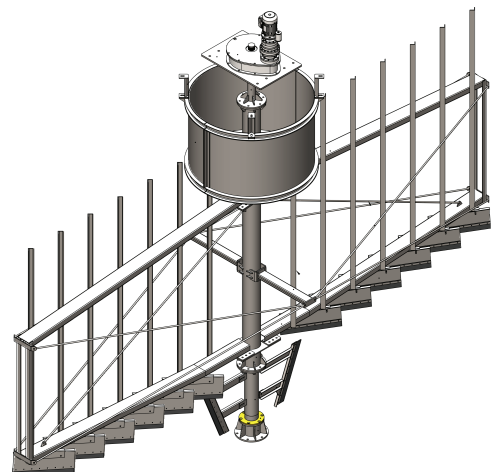
The ISP Sludge Thickener is operated by a drive unit composed of an epicycloid oil bath gearbox. It is coupled to the drive shaft by means of a flange or, if the tank diameter is more than 12 m, by means of a central bearing.

DESIGN FEATURES:

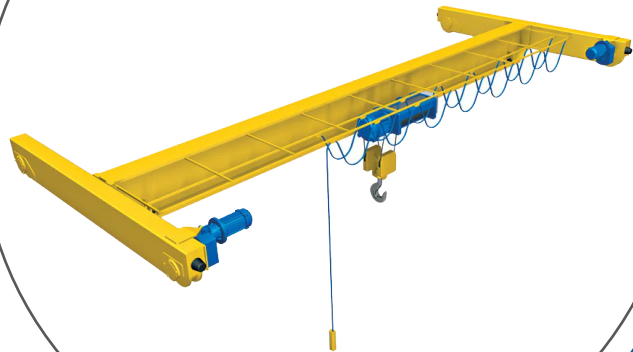
- Available for up to 18m diameter tanks
- Central bearing for units larger than 12m in diameter
- Hot dip-galvanised carbon steel / 304 L / 316 L SS
- Quick installation
- High efficiency in moisture content reduction
- Easy installation even in existing tanks

APPLICATIONS:

- Dewatered Sludge
- Dried Bio solids
- Raw Screenings
- Compacted Screenings
- Wet Grit
- Dewatered Grit



CRANE



Free standing Jib Cranes

DESCRIPTION:

These systems don't require a special foundation to be poured, so they can be installed almost anywhere within your facility and can be easily relocated if needed.

DESIGN FEATURES:

- Electric collector rings or air swivel for continuous 360-degree boom rotation.
- Ranging from 1 to 5 ton Capacity.
- Box track festooning.
- Motorized rotation.
- Rotation stops.
- Specialty paint finishes or hot-dip galvanizing available, as well as custom designs for outdoor applications.



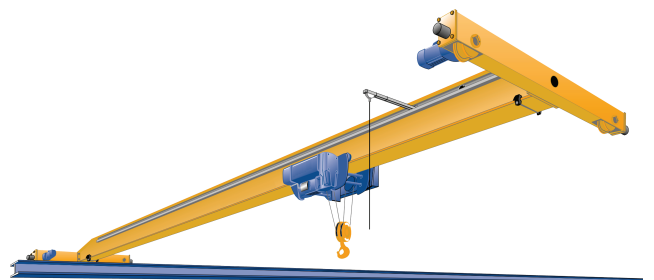
Wall-Traveling Cranes

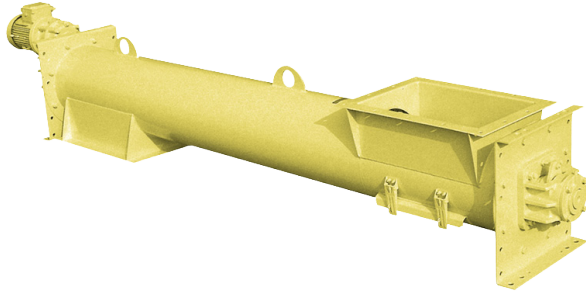
DESCRIPTION:

For long lateral movement of materials without taking up any floor space or interfering with large overhead cranes.

DESIGN FEATURES:

Overhead travelling cranes allow efficient material handling with load capacities up to 16 t and spans up to 39m even in plants with low ceilings. With a minimal safety clearance between top of crane and factory roof. And it is possible to make full use of the available height and to reduce the cost of a new building.





SCREW CONVEYOR

DESCRIPTION:

The modular CAO Tubular Screw Conveyor system is highly versatile offering numerous solutions for conveying powdery or granular materials. CAO Screw Conveyors are manufactured from carbon steel with suitable surface finishing. They consist of a tubular trough equipped with at least one inlet and outlet spout, an end plate at each tubular trough end, helicoid screw flighting welded on a centre pipe with coupling bush at each end, two end bearing assemblies complete with adjustable shaft seal, and a number of intermediate hanger bearings depending on the overall length of the screw conveyor. Furthermore, CAO Tubular Screw Conveyors are equipped with a gear motor appropriate for the application.

DESIGN FEATURES:

- Standard length tubular sections.
- Helicoid flighting welded on center pipe.
- Powder-coated.
- Flanged end bearing assemblies protected against material infiltration by adjustable shaft seals
- Wide range of intermediate hanger bearings designed for specific applications (self-lubricating versions included)
- Maintenance-free (or non) intermediate cast or fabricated hanger bearings with self-lubricating and other type slide bushes
- Splined shaft couplings



SAND SILO



DESCRIPTION:

We offer a full range of SmoothWall Silos designed specifically for sand storage. Without bolts or ribs, the SmoothWall Silo's seamless interior ensures unobstructed, safe and easy unloading. These silos are engineered for 1500 Kg/m³, with capacities up to 350-MT/silo. Winkel will build any size to meet your specific needs, with common portable sizes ranging from 150-MT to 350-MT.

DESIGN FEATURES:

- Heavy Duty design and build
- Powder Coat superior finish
- Min. 40 degree bottom cone and 35 degree roof cone
- 24" clearance under the slide gate
- Retractable ladder



Providing the Process Solution You Need

We have been engineering water and wastewater clarifying and mixing
.Years 15 process solutions for more than a

Our dedicated applications experts work closely with you to assess your
operation, determine the best process solution, and deliver the exact
.equipment you require

Expertise in Treatment & Mixing Solutions



Experience



Reliability



Quality

Ready to Get Started?



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