



WATER TREATMENT TECHNOLOGIES & EQUIPMENT

WAMGROUP® offers a comprehensive product range of machines and equipment for effluent pre-treatment and sludge treatment in both municipal and industrial waste water purification plants.

WAMGROUP® develops innovative market-oriented, industrially manufactured products distributed through its own global network.

WAMGROUP® is determined to supply the most comprehensive range of equipment available to deliver the one-stop-solution to its customers.

WAMGROUP® offers customers in any place in the world the highest possible quality product and service at a fair price.



ARCHIMEDEAN WATER SCREW PUMPS

Archimedean Screw Pumps PA

Since the late 1970s more than 1,200 Archimedean Water Screw Pumps ranging from 0.5 to 4 metres (13 ft) in diameter and flow rates of up to 4,500 litres per second (160 cu ft per sec) have been successfully operating.

- Single, double or triple flight
- Drive power installed up to 500 kW (680 HP) and more
- Constant efficiency over time





SCREW SCREENS

WASTEMASTER® GCP-GCE Screw Screens

GCP and GCE-type Screw Screens ensure efficient solids-liquid separation in the primary treatment section of civil waste water treatment plants, as well as in various industrial applications.

- Flow rates of up to 1,000 m³/h (590 cfm)
- Solids extraction of up to 0.33 dm³/s
- Solids volume reduction of up to 35%



WASTEMASTER® GCPC-GCEC In-Tank Screw Screens

Installed in a self-supporting tank, GCPC / GCEC-type Screw Screens can be easily installed and connected to the pipework in both civil and industrial effluent treatment plants.

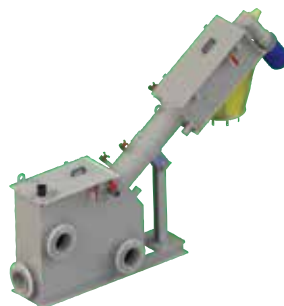
- Sturdy metal framework (completely enclosed structure in compliance with safety regulations and preventing odours) manufactured entirely from 304L/316L stainless steel
- Shaftless conveyor screw manufactured from 304/316 stainless steel or special high-resistance steel



WASTEMASTER® TSF 1 Mechanical Effluent Pre-treatment Plants

The TSF1 Compact Plant combines separation of solids present in effluents with compacting and de-watering of the solids extracted. It is designed to be fed by a pump or by gravity. The suspended solids are retained by the screen, thus increasing the liquid level in the front part of the screen.

- Flow rates of up to 500 m³/h (300 cfm)
- Solids extraction of up to 0.18 dm³/s (0.38 cfm)
- Screens are fitted with a special mesh suitable for the particular characteristics of waste water and solids



WASTEMASTER® GCV Vertical Screw Screens

GCV Vertical Screw Screens carry out solids-liquid separation with high efficiency in plants with little space available. The GCV is the only system available on the market for protection of submersible pumps.



WASTEMASTER® GCEV In-Channel Vertical Screw Screens

Designed for deep channels, the GCEV-type Vertical Screw Screens can handle high upfront water streams.

- Screw in 304 / 316 stainless steel or special high-resistance steel
- Flight brushes for continuous cleaning of the screen
- Screens in different mesh sizes (2, 3, 5, 6 or 10 mm)



WASTEMASTER® CT-CTC Mini-Screw Screens

Its lightweight design makes the CT Mini-Screw Screen the ideal choice for applications with low flow rates.

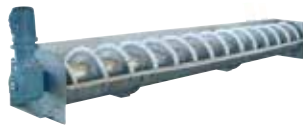
- Lightweight design (less than 30 kg)
- Anti-wear SINT™ engineering polymer screw for high extraction efficiency
- Screens with 2 or 5 mm mesh size



Overflow Spillways VSE

VSE Overflow Spillways are used to treat overflows. They consist of a semicircular filter installed on the edge of the spillway.

- 3 sizes available (300 / 500 / 700 mm)
- 3 opening sizes available (6 / 7 / 8 mm perforated plate)
- Lengths from 1 to 12 m



DRUM SCREENS

WASTEMASTER® FTR Rotary Drum Screens

FTR is a Rotating Drum Screen designed to combine separation of solids present in effluents with compacting and de-watering of the screenings.

- Perforated or wedge wire drum screen in various mesh sizes
- No outlet end bearing, no intermediate bearings
- Solids extraction of up to 15 m³/h



SPIRAMATIC VSA Fine Drum Screens

SPIRAMATIC VSA Fine Drum Screens screen, wash, convey, and dewater screenings all in one unit, thus eliminating the need for multiple pieces of equipment. They are used in both municipal and industrial applications, as well as for the pre-treatment in MBR plants.

- Filter mesh sizes for MBR pre-treatment: 1.0 – 1.5 – 2.0 – 3.0 mm round holes
- Filter mesh sizes (other than MBR use): 5.0 – 6.0 mm round holes or 0.5 – 1.0 – 2.0 – 3.0 – 4.0 – 5.0 – 6.0 mm wedge wire
- Channel width: 600 ~ 3,000 mm
- 35-degree incline angle



Internally Fed Rotating Drum Screens RTV

RTV Internally Fed Rotating Drum Screens are suitable for pre-treatment of both municipal and industrial waste water treatment, as well as MBR plants.

- 6 different sizes available
- Standard perforated media spacing: 1 ~ 6 mm
- Recommended spacing for MBR application: 1 ~ 3 mm



Externally Fed Drum Screens SGR

SGR Externally Fed Drum Screens are used for fine screening of sewage in civil waste water plants or for process water from industrial processing plants.

- Slot width: 0.25 ~ 2.5 mm
- Wedge wire filter with so-called "slot zero" to ensure drum resistance
- Screen in 304 L / 316 L stainless steel



Sub-vertical Mechanical Bar Screens GVB

GVB Sub-vertical Mechanical Bar Screens are used for coarse screening in both municipal and industrial waste water plants.

- 12 ~ 50 mm spacing
- 2 or more cleaning rakes ensuring quick, efficient solids removal
- Channel width: 400 ~ 2,000 mm
- 75-degree incline angle



Sub-vertical Mechanical Fine Bar Screens GVF

GVF Sub-vertical Mechanical Bar Screens are used for medium-fine screening in both municipal and industrial waste water treatment plants.

- 6 ~ 10 mm spacing
- 4 or more cleaning rakes depending on screen height
- Channel width: 400 ~ 2,000 mm
- 75-degree incline angle

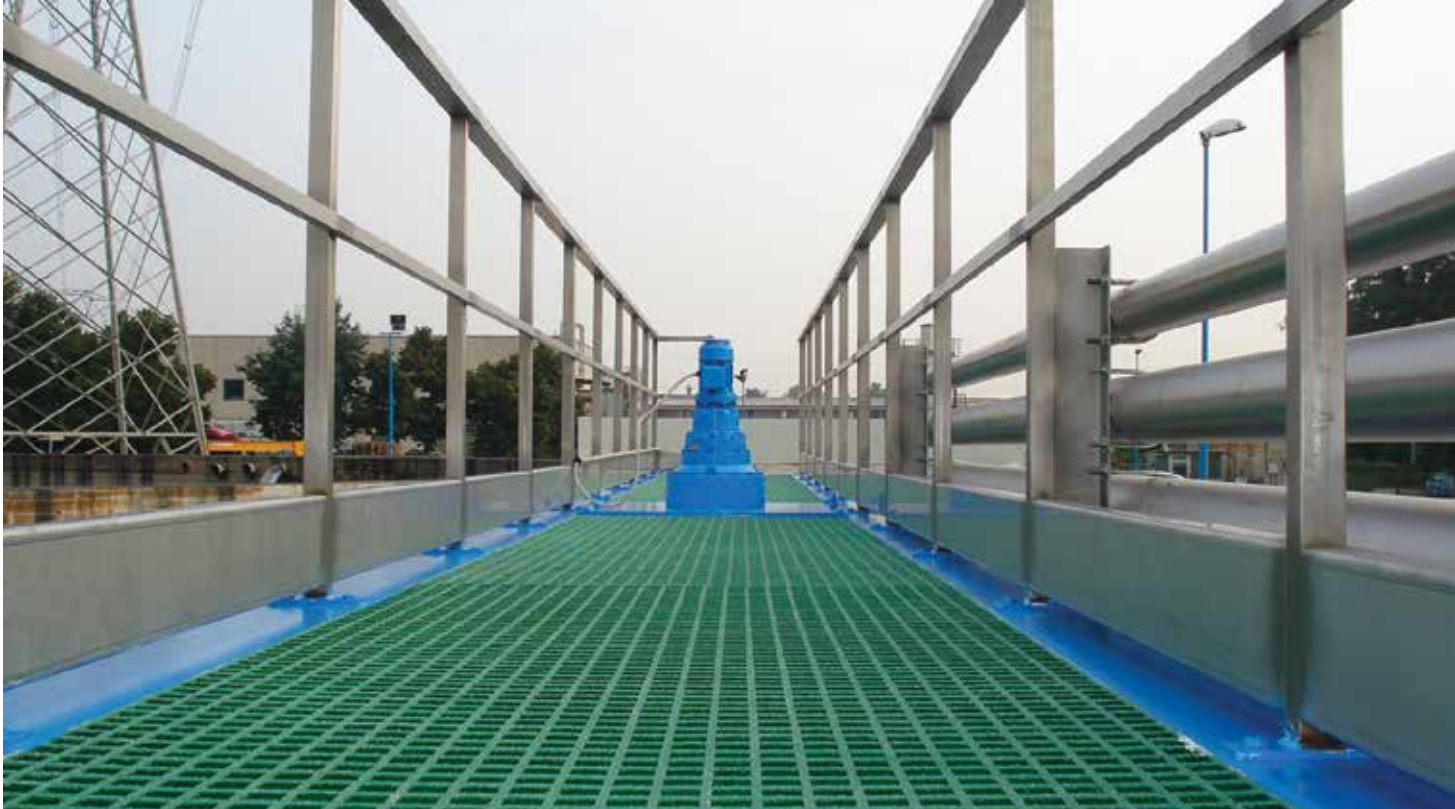


Sub-vertical Mechanical Perforated Screens GVS

GVS Sub-vertical Mechanical Bar Screens are used for fine screening in both municipal and industrial waste water plants.

- 3 ~ 6 mm perforation
- 4 or more cleaning blades and wipers depending on screen height
- Channel width: 400 ~ 2,000 mm
- 75-degree incline angle





PERFORATED BAND & BELT SCREENS / STEP SCREENS / THICKENERS

Fine Belt Screens VFR

VFR Fine Belt Screens are used for fine screening in both municipal and industrial waste water treatment plants.

- 6 sizes up to 2,000 mm wide
- 65 degree incline angle
- Perforated media openings from 2 to 6 mm
- Chain drive recessed into side rails
- Double cleaning system



Step Screens VTR

VTR Step Screens are another option for fine screening in municipal and industrial waste water treatment plants.

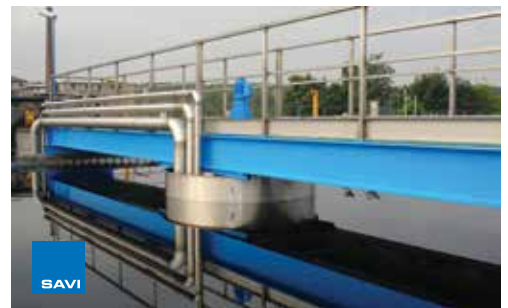
- Different sizes up to 1,800 mm wide
- Discharge height from 1,400 to 3,500 mm
- 3 and 6 mm spacing
- 55-degree incline angle



Sludge Thickeners ISP

ISP Sludge Thickeners are used to thicken sludge in municipal and industrial effluent treatment plants.

- For up to 18 m-diameter tanks
- Central bearing for units larger than 12 m in diameter
- Hot dip-galvanised carbon steel or 304 L / 316 L stainless steel





CLARIFIERS

Travelling Bridges for Settlement Tanks PVS

PVS Travelling Bridges installed in settling tanks in effluent treatment plants are used to remove sludge and scum from the bottom of the tank.

- Available for up to 13 m wide and 50 m long tanks
- Sludge and scum removal devices included



Peripheral Traction Clarifiers With Sludge Suction PTP

PTP Peripheral Traction Clarifiers are used to remove biological sludge and floating particles in circular primary and secondary settling tanks.

- Available for tanks of up to 60 m in diameter
- Scum removal device included
- Hot dip-galvanised carbon steel or 304 L / 316 L stainless steel



Central Traction Clarifiers PTC

PTC Central Traction Bridges are used to remove biological sludge in circular primary and secondary settling tanks in both municipal and industrial waste water treatment plants.

- Available for tanks of up to 18 m in diameter
- Central bearing for units larger than 14 m in diameter
- Electric torque limit switch, scum removal device, and walkway on request



Peripheral Traction Clarifiers with Sludge Suction PTA

PTA Peripheral Traction Clarifiers are used to remove biological sludge and floating particles in circular primary and secondary settling tanks.

- For up to 60-metre diameter tanks
- Scum removal device included





GRIT TREATMENT EQUIPMENT

GRITSEP® DS Grit Classifiers

The GRITSEP® DS Grit Classifier ensures efficient separation of grit or sand from waste water through decantation and removal by means of a conveyor screw.

- Liquid throughput: 5 ~ 36 m³/h (3 ~ 21 cfm)
- Solids throughput: 0.06 ~ 0.36 dm³/s (0.1 ~ 0.7 cfm)



GRITSEP® FGC Fluid Dynamic Grit Classifiers

GRITSEP® FGC is an innovative sand and Grit Classifier designed to achieve the highest sand removal rate available on the market today.

- Sand separation with particle size \geq 200 μ m and bulk density ranging from 2.60 to 2.65 t/m³
- Low drive power installed
- Small footprint



Settling Tank Travelling Bridges PVS

PVS Travelling Bridges for settling tanks are used to remove sludge and scum in both municipal and industrial waste water treatment plants.

- Available for up to 13 m wide and 50 m long tanks
- Sludge and scum removal devices included
- Control panel included



Travelling Bridges for Grease and Grit Removal PVD

PVD Travelling Bridges are used to remove grease and grit from the effluent in municipal and industrial waste water treatment plants.

- Quick installation
- High efficiency grit and grease removal
- Easy installation even into existing tanks



Circular Grit Traps DSP

DSP Grit Traps are designed to remove grit from sewage in waste water treatment plants.

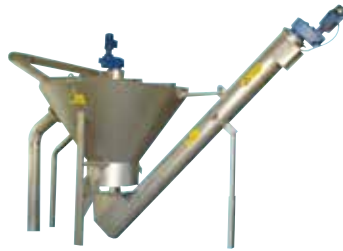
- Available for up to 6-metre diameter tanks
- Central bearing
- Carbon steel hot dip-galvanised or 304 L / 316 L stainless steel



Sand Washers CLSW

CLSW Sand Washers are used to separate sand from water and to wash the grit at the same time in order to remove organic particles.

- 3 sizes available
- Flow rates of up to 30 litres per second
- 97% organic separation efficiency





COMPACT PLANTS

WASTEMASTER® MIT Waste Water Mini-Treatment Plants

The MIT Mini-Treatment Plant carries out up to three different processes with the smallest ever overall dimensions: Screening, De-gritting and De-greasing.

- 90% separation of grain size ≥ 0.2 mm
- Screening, de-gritting, de-greasing in a single unit
- High separation performance



WASTEMASTER® TSF 2-3 Compact Plants for Mechanical Effluent Pre-treatment

The TSF2 and TSF3 Compact Pre-treatment Plants efficiently combine between two, respectively three functions of pre-treatment of sewage from civil or industrial installations.

- Flow rates of up to 210 litres per second (445 cfm)
- Inlet screen mesh: 0.5 ~ 10 mm
- Sand separation with TSF2/3:
90% particle size ≥ 200 μ m
- Grease removal with TSF3
- Up to 35% solids volume reduction





SEPTAGE RECEIVING STATIONS

WASTEMASTER® TSB 1 Septage Receiving Station

For pre-treatment of septage from cesspool tanks or industrial plants collected by special purge tankers, the TSB1 carries out two different processes: separation of solids present in the septage, as well as de-watering and compacting of the extracted solids.



WASTEMASTER® TSB 2-3 Septage Receiving Stations

The TSB2 and TSB3 Septage Receiving Stations carry out up to two, respectively three different processes: de-watering and compacting of screened solid waste, separation of sand and - TSB3 only - removal of floating greasy matter.

- Flow rates of up to 30 litres per second (63.5 cfm)
- Inlet screen mesh: 5, 6, 7 mm



WASTEMASTER® TSB 4 Septic Tank Sludge Treatment Plants

- Designed to treat highly concentrated waste
- Removes heavy solids, grit and grease/scum
- Reliable operation at remote locations



Sludge Receiving Stations VFA DM "THE BEAST"

VFA DM Septage Receiving Stations are also used for FOG and digester/sludge cleaning. The station screens, washes, conveys, and dewater screenings all in one unit, thus eliminating the need for multiple pieces of equipment.

- 3 sizes available
- Solids concentration up to 2-3%
- Dual motor drive system
- Drum screen round hole openings 5.0 – 6.0 mm wide
- Drum screen incline angle: 25 degrees





COMPACTORS

WASTECOM® CPS Screw Compactors

The CPS is a de-watering Screw Compactor for screened solids in civil and industrial waste water treatment plants.

- Trough liner manufactured from high-density, low-friction HDPE polymer
- No outlet, no intermediate bearing assemblies
- No mechanical components in contact with material handled



Shafted Washer Compactors VWP

VWP Shafted Washer Compactors are used to compact screenings removing, at the same time, organic particles in both municipal and industrial waste water treatment plants.

- 3 sizes available
- From 1.5 up to 6 m³/h of screenings
- Washing system for removal of organic matter



Shafted Washer Compactors VWP WM

VWP WM Shafted Washer Compactors are used to remove organic particles through a special washing system, at the same time compacting the solids.

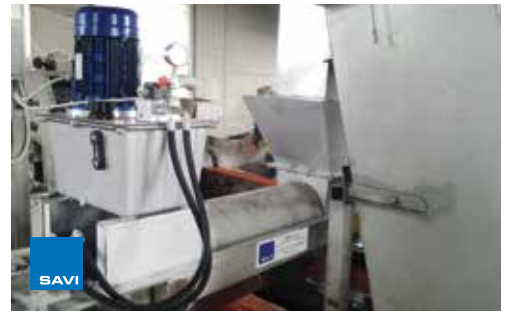
- 3 sizes available
- From 1.5 up to 6 m³/h of screenings
- Washing system with special hopper and impeller



Hydraulic Compactors CHP

CHP Compactors are used to compact screenings by means of a hydraulic ram.

- 3 sizes available
- Screenings throughput from 1.5 up to 3.5 m³/h
- Volume reduction of up to 60%





LIME DOSING COMPONENTS



Especially tailored to lime dosing requirements, WAMGROUP® has developed highly application-oriented equipment for silo venting and silo safety, for discharging, feeding, conveying, and intercepting lime powder in Lime Dosing Plants as used in waste water treatment.



Pinch Valve VM



Silo Safety System KCS



WAMFLO® Silo Venting Filter



Membrane Pressure Relief Valve VHS-C



Spring-loaded Pressure Relief Valve VCP



Rotary Level Indicator ILT



Bin Activator BA



Butterfly Valve VFS



Drop-Through Rotary Valve RV - RVR



Tubular Screw Feeder TU



Micro-Batch Feeder MBF



SLUDGE TREATMENT EQUIPMENT / SCREENINGS CONVEYING EQUIPMENT

Shaftless Screw Conveyors SSC

SSC Shaftless Screw Conveyors offer large volume capacity and the possibility of handling screenings and floating matter, as well as de-watered, thickened, or conditioned sludge.

- Throughput rates: up to 45 m³/h (26.4 cfm) for sludge; up to 12.9 m³/h (15 cfm) for screenings
- Drive power: 0.55 kW (0.75 HP) ~ 9.2 kW (12.5 HP)
- Trough and spiral manufactured from carbon steel or 304L / 316L stainless steel
- UHMWP trough liner



Chain Conveyors TCG

TCG Chain Conveyors enable material discharge in different points through intermediate outlet spouts, equipped with electrically operated slide valves especially designed for this purpose.

- Casing: single, double bottom, or side inlet for extraction from pits
- Chain with pressed or forged type links
- Chain guide in Polyzene® or manganese steel



Slide Valves VL

VL Slides Valves are the ideal equipment for intercepting the flow of powdery or granular materials, as well as screenings and sludge in gravity or conveying applications.





SLUDGE TREATMENT EQUIPMENT

Live Bin Bottoms MU

For discharging difficult materials such as sludge from polygonal hoppers or silos, MU Live Bin Bottoms (Multiple Screw Feeders) are the ideal equipment.

- Screw diameter: 150 ~ 600 mm (6 ~ 24 in)
- Up to six screws in one trough
- Open trough length ranging from 1,500 to 4,000 mm (5 ~ 13 ft)



Continuous Twin Shaft Paddle Mixers MESC

The MESC-type Twin Shaft Paddle Mixer is among the most efficient yet economic mixer types for inerting sludge.



Continuous Single Shaft Mixers WAH

The WAH Continuous Single Shaft Mixer is the ideal machine to obtain highest quality mixtures. Mixing with WAH is quick though gentle and efficient.



Loading Bellows BELLOJET® ZC

BELLOJET® ZC Loading Bellows are used for efficient dust-free discharging of dry, dusty bulk solids into open lorries/trucks.

- Inlet diameter: 300 mm (12 in)
- Maximum throughput rate: 250 m³/h (147 cfm)
- Filter surface: 10 m² (108 sq ft)





MISCELLANEOUS EQUIPMENT & ACCESSORIES

Penstocks PAR

PAR Penstocks are used in municipal and industrial waste water treatment plants to isolate a piece of equipment or parts of a plant.

Purposes:

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



Micro-Batch Feeders for Flocculant Feeding MBF

MBF Micro-Batch Feeders are suitable for feeding flocculant powders within polyelectrolyte stations. Feed rates range from 3 to 4,000 dm³/h (0.001 ~ 2.4 cfm).



FIBC Filling Systems RBB

RBB-type Filling Stations make filling of FIBCs simple and silos, dust-free.



FIBC Dischargers SBB

SBB-type FIBC Dischargers ensure economic, dust-free discharging of bulk solids from bulk bags.





SCREW SEPARATOR PRESSES

SEPCOM® Horizontal Solids-Liquid Screw Separator Presses

SEPCOM® Horizontal is a solids-liquid separating machine based on screw conveyor technology. Performing separation by both gravity and mechanical compression, the machine is designed to separate the liquid phase from the solid phase of a wide range of materials.



SEPCOM® MFT Micro-Filters

The SEPCOM® MFT Micro-Screen is a machine for micro-screening of the liquid phase from a previous separation process of slurry, digestate from biogas generation processes or waste water from industrial processes. It can be applied in all water purification processes.





BULK BIOMASS CONVEYING SYSTEMS

Bulk Biomass Digester Feeding Systems TCB

The TCB Bulk Biomass Conveying System represents the most reliable solution to any feeding and conveying requirement for general biomass handling in Biogas plants such as manure, crops, green waste, etc.



SEPCOM® Vertical Solids-Liquid Screw Separator Presses

SEPCOM® Vertical is an innovative solids-liquid screw separator press. Thanks to its special features, vertical work position and a twin-screw design, a variety of materials from biogas plants, industrial processes, as well as slurry from livestock breeding can be treated.





RENEWABLE ENERGY GENERATION

Hydrodynamic Screws PAE

Naturally downward flowing water starts the PAE Hydrodynamic Screw which transforms hydropower into electric energy. Hydrodynamic Screws exploit waterfalls of limited height and moderate flow rates ensuring an efficiency that cannot be matched by any other type of turbine.







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