



INDUSTRIAL & MUNICIPAL  
WATER & WASTE TREATMENT

# PRODUCT CATALOGUE

*Technologies that will enhance the quality  
of human health and improve the enviroment*

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## About Us

- **A.I.M. EQUIP** is an Australian-based company that provides engineering solutions and industrial machinery specialising in water, wastewater, waste management, and other industrial sectors. AIM EQUIP uses innovative approaches to deal with intricate problems to come up with practical and cost-effective solutions so that our brand guarantees the best quality for design, machinery and after-sale services in the following sectors:
  - **Solid control and Slurry solution ( Mud Cleaner, Shaker, De-sander, Desilter),**
  - **Solid separation (Decanter Centrifuge, Coal Screen Scroll Centrifuge, Screw press dehydrator, Filter press, screw),**
  - **Thermal desorption units (TDU),**
  - **Shaftless conveyor,**
  - **Landfill leachate treatment,**
  - **The municipal sewage treatment plant,**
  - **Papermill effluent treatment,**
  - **Food and Beverage water treatment,**
  - **Sugar refinery wastewater treatment,**
  - **Reuse of printing and dyeing wastewater treatment,**
  - **Oil and gas wastewater treatment,**



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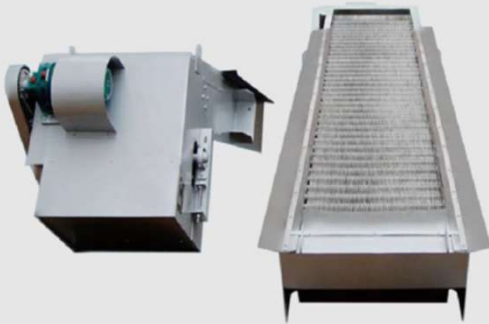
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## Mechanical Bar Screen

- **Power: 0.55-3.0 kW**
- **Line speed: 2.5-3.0 m/min**
- **Width: 600-3000 mm**

### Application :

Widely applied to intercept & remove floating pollutants and solid-liquid separation, install ahead of influents of a various pumping station, urban sewage treatment plants and industrial wastewater treatment process.



## Rotary Drum Screen

- **Power: 0.75-3.0 kW**
- **Drum Diameter: 600-2600 mm**
- **Drum Length: 600-2200 mm**

### Application :

It can be used in municipal sewage treatment plants, to intercept and automatic remove of solid particles or suspended solids. Also be applied in the tap water industry, power plant inlets, and also as pre-stage screening equipment in the wastewater treatment process of textile, food processing, papermaking, leather and other industries.



## Rotary Disk Filter

- **Power: 0.55kW-3.0kW**
- **Capacity: 1000-30000 m<sup>3</sup>/d**
- **Disc pcs. :2-30**

### Application :

Upgrade of existing sewage treatment plant: from Grade B to Grade A; Industrial production water reusing: cooling water circulating in steel plant and power plant; Domestic wastewater treatment and reusing; Water reuse of papermaking, printing and dyeing industry; Aquaculture water treatment.



## Micro Screen Filter

- **Capacity: 50-1250 m<sup>3</sup>/h**
- **Mesh hole: 10 μm**
- **Power: 0.18-1.5kW**
- **BW Power: 0.75-2.2kW**

### Application :

Black and white wastewater treatment in processes of concentration, washing, screening, bleaching, and papermaking in pulping and papermaking process; Waste water treatment, with fiber recovery over 90%; Water purification in textile, printing and dyeing, food, water, power plants and other industries; Wastewater treatment in chemical, printing and dyeing, and textile industries.



## Drilling Fluid Decanter Centrifuge

- Australian engineering and design.
- Stainless steel 304 bowls, screw propeller and collection box
- Hardened alloy impeller for the propeller
- Replicable and hardened alloy and inlay high resistant ceramic discharge port
- SKF bearings
- All reputable European brands for electrical parts
- Planetary differential system on demand
- AIM EQUIP screw feeding pump on demand

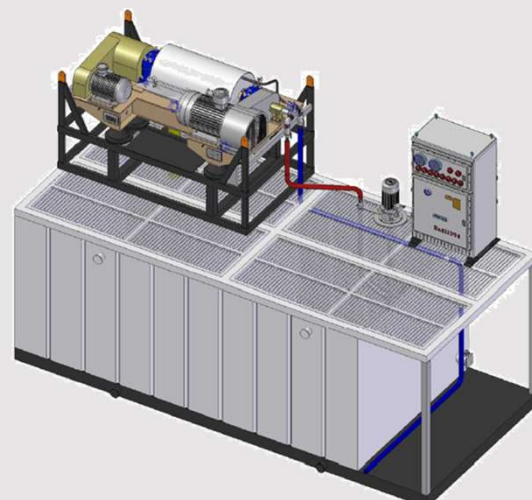


### Product Features :

Small footprint ; Stable performance & easy maintenance. More durable bearings. Low noise. Higher separation performance.

### Application :

AIM EQUIP Drilling Fluid Centrifuge is used to recycle barites, and to remove small solid particles in order to reduce solids content in mud and increase the performance of drilling fluid. .



## Hyperboloid mixer

- **Power: 0.75kW-7.5kW**
- **Impeller diameter: 500-2800 mm**
- **Rotary speed : 20-250 rpm**
- **Service area: 1-22 m**

### Application :

Widely applied for environmental protection, chemical, energy, and other industries which solid, liquid and gas mixing are required, especially in coagulation tanks, regulating tanks, anaerobic Pool, nitrification and denitrification tanks of sewage treatment plant.



## Auto Dosing System

- **Capacity: 1000-3000**
- **Mixer power: 0.75-3.0kW**
- **Feeding power: 0.37kW**

### Application :

Widely used for raw water treatment of power plants, boiler feed water treatment, oil gathering dewater treatment, all kinds of chemical dosing and wastewater treatment, also can be used for automatic dosing of coagulate, phosphate removing agent, ammonia, whitewash, corrosion inhibitor anti-sludging agent, etc.



## Barrel dosing system

- **Power : 0.37kW-2.20kW**
- **Material: PC**
- **Capacity : 50-3000L/h**

### Application :

Use for Preparation and injection of polymer in process of semi-finished production such as food, chemical, paper, printing and dyeing, and flocculants dosing for sewage treatment plant.



## Mixing Agitator

- **Power: 0.55kW-3.0kW**
- **Rotary speed: 46-102 rpm**

### Application :

Mainly used for mixing and agitating between chemical agents and water in treatment process.



## Anaerobic Reactor

- **Material: anticorrosive carbon steel**
- **Diameter: 3-20m**
- **Process: UASB**

### Application :

Pulp and paper making effluent; Breweries and beverage industry wastewater; Food & Beverage Industry wastewater treatment; Distilleries and fermentation industry wastewater treatment.



## Anaerobic Reactor

- **Material: anticorrosive C.S**
- **Diameter: 3-20m**
- **Process: IC**

### Application :

Pulp and paper making effluent; Breweries and beverage industry wastewater; Food & Beverage Industry wastewater treatment; Distilleries and fermentation industry wastewater treatment.



## Submersible Aerator

- **Power: 1.5-55 kw**
- **Air volume: 40-780 m<sup>3</sup>/h**
- **Oxygen input: 1-80 kg/h**
- **Material: FC-200**

### Application:

It is professional aeration equipment mainly used for feeding water pre-treatment and sewage biochemical treatment process, such as aeration grit chamber, pre-aeration tank, aeration tank, air flotation tank, stirring etc., also can be used in aquaculture pond to add oxygen and landscape water conservation.



## Submersible jet aerator

- **Power: 0.75-5.5 kw**
- **Air volume: 11-100 m<sup>3</sup>/h**
- **Oxygen input: 0.35-6 kg/h**
- **Material: FC-200**

### Application:

It is professional aeration equipment mainly used for feeding water pre-treatment and sewage biochemical treatment process, such as aeration grit chamber, pre-aeration tank, aeration tank, air flotation tank, stirring etc., also can be used in aquaculture pond to add oxygen and landscape water conservation.



**Swirl microbubble aerator**

- **Air Flow: 0.4-1.2 m<sup>3</sup>/h**
- **Oxygen input: 1.6- 4.0 kg/h**
- **Oxygen transfer rate: 22—25%**

**Feature:**

Without any moving parts, no damage, free-maintenance; The mixture flows through the large diameter nozzle to release, no clogging, and free-cleaning; Nano-scale new materials, anti-aging, no scaling; Adapt to various wastewater environments, stable operation more than 10 years.



**Surface Aerator**

- **Material: SS304**
- **Capacity: 5-120 m<sup>3</sup>/min**
- **Power: 1.5-75 kw**
- **Oxygen input: 3-95 kg/h**



**Application :**

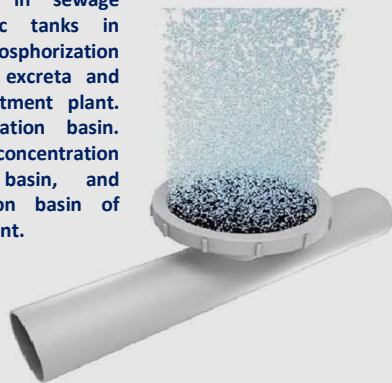
The Surface Aerator use a motor to directly drive the axial flow impeller, which discharges the waste water from the conduit through the water deflector and forms a thin (or water drop-shaped) water curtain. When contact with air during the transfer, it will form water drop shape, which fall to the water surface and form the turbulence and bubbles. These bubbles will improve oxygen dispersion and increase oxygen in water. This Surface Aerator pumps water from the bottom to the top and creates circulation flows and stir processes. It's suitable for domestic waste water treatment, agriculture and aquaculture oxygen supply another industrial waste water aeration applications.

**Microporous Aeration Disc**

- **Air flow: 2-12 m<sup>3</sup>/h**
- **Service area: 0.56-1.3 m<sup>2</sup>**
- **Oxygen utilization efficiency: 25—29% in 4 m water depth**

**Application :**

Aeration for SBR reaction basin, contact oxidation pond, and activated sludge aeration basin in sewage disposal plant. Aerobic tanks in denitrification / dephosphorization processes. Aeration for excreta and animal wastewater treatment plant. Aeration of deep aeration basin. Aeration for high concentration wastewater aeration basin, and aeration for equalization basin of wastewater treatment plant.



**Microporous Aeration Pipe**

- **Air flow: 2-20 m<sup>3</sup>/h**
- **Service area: 1-3 m<sup>2</sup>**
- **Oxygen utilization efficiency: 16—29% in 3 m water depth**

**Application :**

Municipal sewage; Various industrial wastewater treatment; Ozone diffuse; Sludge stabilization ; Aquafarm; Rivers and lakes purify water.



## Peripheral Driving Sludge Thickener

- Tank diameter: 12-56 m
- Tank depth: 3.5-4.5 m
- Line speed: 1-2 m/min
- Motor power): 0.18—1.10 kw

### Application:

Installed on medium and large size circular clarifiers tanks in wastewater treatment plant, Inlet water and sludge discharge pass through the centre pit of bottom, Outlet water overflow around tank , which keeps a stable water quality and quantity.



## Bridge Sludge Thickener

- Tank wide: 4-20 m
- Speed: 1-1.5 m/min
- Drive motor: 0.75-2 kw
- Tank depth: 3-5 m

### Application:

It is suitable for horizontal sedimentation tank or inclined tube sedimentation tank in sewage treatment plant, water supply plant and industrial production, to scrap the sludge at bottom to sludge collecting tank and absorbed by pump, then discharge, can be customized as requirement.



## Inclined tube/ plate packing

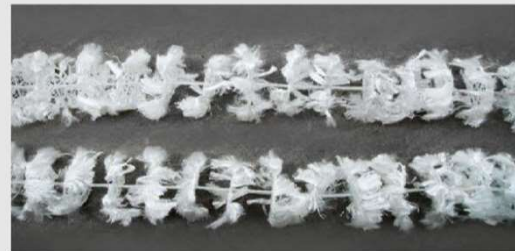
- Content: 100%
- Specification: Ø25, Ø35, Ø50, Ø80
- Material: PP/FRP/PVC

### Application :

Mainly used in water treatment projects for sand removal, industrial and domestic water precipitation, sewage precipitation, oil separation and tailings concentration treatment, also can be used for the old pool remould, and it has been widely used in water supply and drainage engineering in recent years and has become a water treatment device.

## Combined packing

- Diameter: Ø150mm, Ø180mm, Ø200mm
- Interval: 60mm,80mm, 100mm,150mm
- Common use interval: 100mm
- Installation: square, equilateral triangle etc.



### Application :

Used for sewage and waste water treatment projects, suitable for contact oxidation tower, oxidation tank and other equipment, it' s a wastewater treatment biological carrier for biological contact oxidation process and anaerobic fermentation.



### Belt Filter Press

- Power : 2.25-5.5 kW
- Belt Width: 800-2500 mm
- Capacity: 5-50 m<sup>3</sup>/h
- Cake Dryness: 18-22%

**Application:**

Mainly used for solid/liquid separation process, particularly the dewatering of sludge in the chemical industry, paper mill, printing and dyeing mill, mining and water treatment.

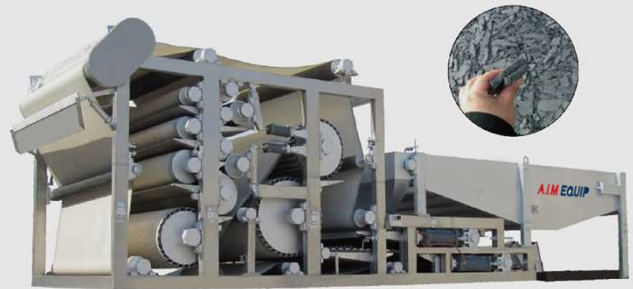


### Dewatering Belt press

- Power: 3.7-8.5 kW
- Belt Width: 800-2500 mm
- Capacity: 3-12 m<sup>3</sup>/h
- Cake Dryness: 35-45%

**Application :**

Mainly used for secondary pressing of municipal and industrial sludge, to increase sludge concentration and recycling of sludge, such as incineration, fertilizer production, brick making, etc., and can also be used for concentration of other materials.



### Screw press dehydrator

- Power: 0.36-9.0 kW
- Capacity: 5-640 kg/h
- Material: SS 304, C.S.
- Cake Dryness: 18-20%

**Application:**

Applied for thickening and dewatering of sludge in WWTPs, with features of small footprint ,lightweight and automatic operation with minimal maintenance. The water content of discharge solids is about 80%, for sludge from STP.



### Filter Press

- Power: 2.2-15 kW
- Filter area: 30-1000 m<sup>2</sup>
- Plate size 870±870 mm

**Application:**

Widely used in mining, metallurgy, petroleum, chemical, medicine, textile, printing and dyeing, paper making, foodstuff, alcohol, inorganic salt, coal washing, dyestuff and sewage treatment industries.



## Ozone Generator

### Application:

Used to decompose the refractory organic matter, improve the biodegradability of sewage, kill the bacteria and viruses with strong chlorine resistance, and also have the effect of decolorization and deodorization, and increase the dissolved oxygen and improve the water quality.



## Chlorine Dioxide Generator

### Application:

Disinfection of tap water in various occasions; Sterilization and disinfection of food facilities in restaurants, hotels, and tableware; Final sterilization and disinfection of facilities, pipes and containers in food, beverage and fermentation industries; Sterilization of pipelines, facilities and environment in dairy factories and slaughterhouses; Hospital sewage disinfection; Disinfection of swimming pools, industrial circulating water and bath water; Sterilization and deodorization in wastewater reuse.



## Sodium Hypochlorite Generator

### Application:

Mainly used for the treatment of bacteria-containing sewage in hospitals, electroplating treatment of cyanide-containing wastewater, and can also be used for disinfection of swimming pools, drinking water, and domestic sewage disinfection, food processing plant and medical equipment, restaurants, public canteens, tableware and drinking utensils.



## Ultraviolet Generator

### Application:

Ultraviolet generator is applied for disinfection of purified water such as drinking water, pure water, industrial and commercial water, etc.



## Membrane Bioreactor

- **Capacity : 50-500 m<sup>3</sup>/day**
- **Technology: MBR**

**Application:**

Hotel, restaurant, sanatorium, hospital; residence community, small village and town; bus & train Station, airport, Seaport; Factory , mining field, military camp, scenic spots; High organic industrial wastewater similar with domestic wastewater.

Item	Inlet	Outlet
PH	6-9	6-9
COD(mg/L)	≤500	≤50
BOD(mg/L)	≤300	≤10
SS(mg/L)	≤100	≤10



## Dissolved Air Flotation

- **Treatment capacity: 10-80 m<sup>3</sup>/h**
- **Scraping motor power: 0.37-0.75 kw**
- **Air compressor power: 1.5-3 kw**
- **Material: SS304, C.S.**

**Application:**

Mainly used to remove solid suspended matter, grease and various colloidal substances in all kinds of industrial and municipal sewage, also can be used in oil refining, chemical engineering, brewing, vegetable oil production, slaughtering, electroplating, printing and dyeing and other industrial wastewater and municipal sewage treatment.

**Features:**

Compact structure, less footprint;  
 Lower energy consumption, saving 50%;  
 Lower chemical consumption, saving 50%;  
 High consistency scum, up to 4%;  
 Higher effluent quality, SS removal rate ≥95%, insoluble COD removal rate ≥70%.



## Landfill Leachate Treatment

### Treatment Process :

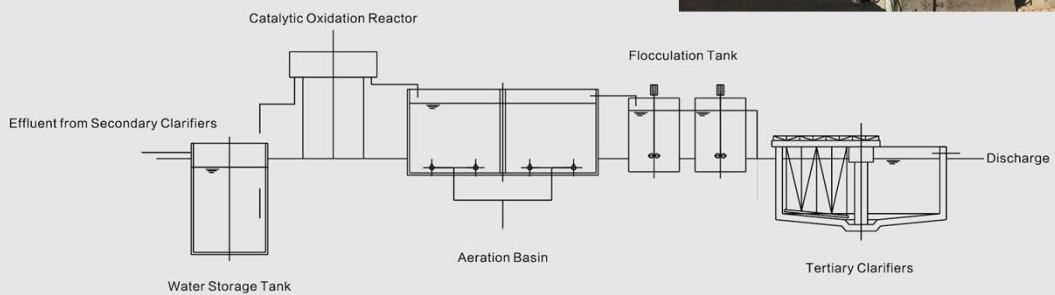
Landfill Leachate treatment include physical chemical treatment, biological treatment, advanced treatment and post treatment. The physical and chemical treatment include activated carbon adsorption, chemical precipitation, density separation, chemical oxidation, chemical reduction, ion exchange, membrane dialysis, wet air oxidation, etc. Biological treatment includes aerobic biological treatment, anaerobic biological treatment and a combination of both aerobic and anaerobic. The advanced treatment methods include: Nano filtration, reverse osmosis, adsorption filtration, and advanced oxidation, to remove suspended solids, dissolved matter and colloidal substances in water. The post—treatment process is to treat various sludge produced after treatment as well as concentrates produced by Nano filtration and reverse osmosis.



## Fenton Reactor

### Application:

Widely used for pre-treatment or tertiary treatment of all kinds of industrial wastewater treatment plants, aim to meet continuous increasing discharge standard and improve effluent stability.



Middle-Stage Effluent Advanced Treatment Flow Chart

## Sand Filter

### Application :

Sand Filter is used to remove sand, colloid, heavy metals and organics, is primary or preliminary filter for water treatment. With features of non-polluting and lower running cost, our sand filter is widely used in many fields. Two kinds of material for common usage: 304 stainless steel and carbon steel.



## Activated Carbon Filter

### Application:

Applied as a pre-treatment of desalination process of water treatment, the main function is to absorb residual chlorine that cannot be removed in the Pre-stage filtration, and ensure a longer service life of following equipment, which improve effluent quality and prevent residual chlorine toxic contamination of the reverse osmosis membrane and ion-exchange resin.



## Sewage Treatment Plant

- **Capacity: 50-500 m<sup>3</sup>/day**
- **Technology: SBR**

### Application :

Medium and small sized domestic sewage and industrial wastewater treatment; Require higher quality discharge water place, such as tourist zone; Water resources shortage place; Land shortage place; Retrofit of continuous flow sewage treatment plant; Intermittent discharge industrial wastewater treatment.



## Screw Press

- **Capacity: 2-9.0 m<sup>3</sup>/h**
- **Screw diameter: 200-400mm**
- **Rotation Speed: 7-8 rpm**
- **Power: 1.1-4.0 kw**
- **Input water Content: 90-95%**
- **Output water content: 65%**

### Application :

Towns and planned residential sewage treatment plants; Water supply plant; Municipal sewage treatment plant; Grid slag treatment of sewage pump station.



## Plug—flow Agitator Aerator

- power: 5.5-37 kw
- Working depth: 2-8.5 m
- Working distance: 8-70 m
- Air intake: 210-700 m<sup>3</sup>/h
- Oxygen capacity: 60-20 kg/h

### Product Features :

Higher oxygen conversion rate; Mounted & floated installation; Smaller footprint ; Stable performance & easy maintenance.



### Application :

With function of Aeration, Plug-flow & mixing, Air, water and sludge can fully mixing and constitute a circulation flow, widely used in Carrousel Oxidation Ditch, and Orbal oxidation ditch in municipal sewage treatment project and various industrial wastewater treatment plants.



## Submersible Aerator

- **Power: 1.5-22 kw**
- **Water depth: 3-20 m**
- **Air intake: 150-1300m<sup>3</sup>**
- **Oxygen input depth: 45-400 kg/hr in 5m depth**
- **Working diameter: 2-25 m<sup>2</sup>**

### Application:

Identified as one of the best mixing type aerator and widely used in aeration system of municipal sewage treatment plants and various industries wastewater treatment plants, repair and upgrade of all kinds of aeration equipment of existing biochemical system.



### Product Features :

Higher oxygen conversion rate ; Fast install without empty aeration basin; 100% no clogging; High and stable dynamic efficiency; Underwater working, noiseless; Longer life service.

