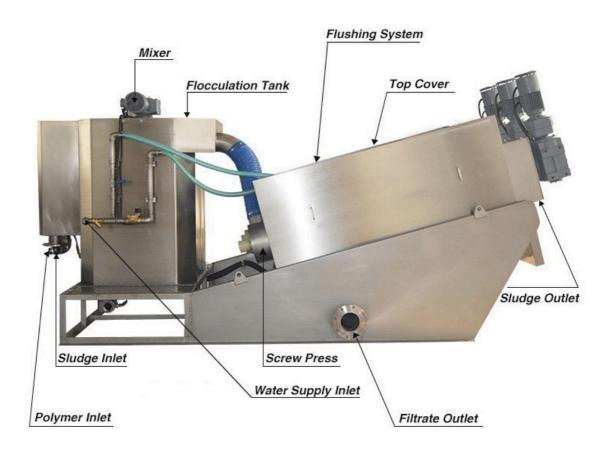
# **APS Sludge dewatering equipment**

## **Product Description**

The sludge dewatering equipment has long service life, small space occupation, convenient maintenance, low operating cost, and can achieve 24-hour full-automatic operation. At the same time, the characteristics of low concentration treatment make the equipment to a certain extent reduce the sludge storage tank (concentration tank) laziness, which can save investment for new sewage projects.

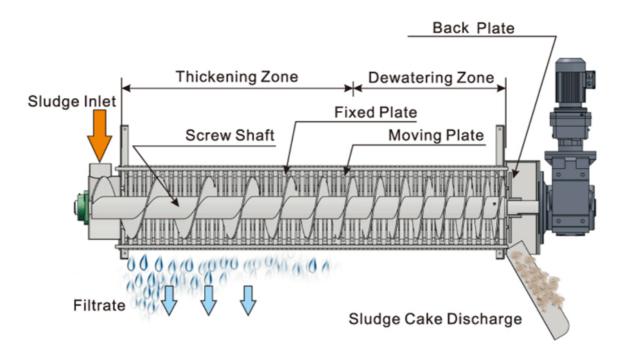


## **Applications**

The screw sludge dewatering machine has a wide range of applications, such as petroleum, municipal, chemical, aquaculture, pharmacy, textile printing and dyeing, machinery manufacturing, etc. It can be used in many industries, and can also be partly used in the finished products industry.

#### **Structure**

The main body of snail stacking consists of fixed and movable rings overlapping each other, and the front section is concentrated and filtered. The back section is extruded mud. The spiral shaft penetrates and drives the movable ring in the annulus to rotate so as to achieve the purpose of dehydration step by step. The clearance of the spiral shaft decreases continuously, which makes the pressure of the spiral shaft increase continuously, and finally makes it fully dehydrated. To achieve the goal of reducing water content and sludge discharge, it also plays the role of cleaning the ring in the process of ring rotation and extrusion.



## **Product characteristics**

## 1. Widely used

It can be widely used in sludge dewatering of municipal sewage, food, beverage, slaughter and breeding, printing and dyeing, petrochemical industry, paper making, leather, pharmaceutical and other industries.

Unique dewatering principle makes the equipment suitable for high and low concentration sludge, starting from 2000 mg/L, pioneering the direct

dewatering of low concentration sludge; Innovative structural design makes the equipment suitable for all types of sludge with high and low viscosity, especially oily sludge, which can be regarded as a sharp tool for oily sludge dewatering.

#### 2. Not easily blocked

The unique structure of the dynamic and static ring filter joint makes the equipment not easy to clog, and does not need a lot of cleaning to prevent the clogging of the filter joint, completely reduces the amount of water used for flushing, reduces the burden of internal circulation, and solves the troubles caused by the clogging of traditional dewatering equipment to enterprises.

### 3. Continuous automatic operation

The laminated screw sludge dewatering equipment uses automatic control to extract sludge, inject medicinal liquid and discharge sludge cake. Through the electric control cabinet, it links with the dosing system, the mud pump and so on. It does not need personnel to operate the equipment, and the operation will not occur blockage, deviation of the filter or other phenomena affecting the process safety. The daily maintenance is simple, and it can be operated continuously without anyone for 24 hours. For the first time, the continuous and fully automatic operation of sludge dewatering has been realized.

## 4. Save operating costs

Integration of the overall design, compact design, greatly saving operating costs. The low-speed screw extrusion technology makes the power consumption greatly low; the equipment is not blocked, and the water for washing is greatly reduced; the 24-hour fully automatic unmanned operation reduces the labor cost greatly. Therefore, the equipment has really become a new type of energy-saving and environmental protection equipment in line with the national policy.



#### 5. No secondary pollution.

The rotational speed of the screw shaft is about 2-3 rpm, no vibration and very low noise; its lamination has self-cleaning function, no clogging problem, only a small amount of water is needed to wash, and no secondary water pollution; in addition, the sludge operates at such a slow working condition, and the odor does not diffuse, thus creating a very good operating environment!

## 6. The body is light and durable.

Due to the direct use of mechanical extrusion dehydration, without the need for large bodies such as drums, the machine is designed to be quite lightweight; almost all of the body is made of stainless steel, and the replacement parts are only screw shafts and moving rings, with long service life and durability.

## 7. Save engineering investment

The laminated screw sludge dewaterer has the function of sludge concentration, which can directly treat the aerobic sludge in the aeration tank without the need of concentration and storage unit, thus reducing the overall space and construction cost of sewage treatment facilities.

## 8. Improving phosphorus removal capacity

Sludge dewatering under aerobic conditions will not result in phosphorus release from sludge under anoxic or anaerobic conditions in traditional sludge concentration or storage tanks, thus improving the phosphorus removal function of the whole sewage treatment system.