



SCREW PRESS SCREEN

The screw press screen is an essential component of the screw press machine, playing a crucial role in the solid-liquid separation process. It enables continuous dewatering, efficiently achieving the separation of solids and liquids.

The working process is as follows:

- ① First, the water-containing material enters the screw press screen through the feed end of the screw press machine. Under the influence of gravity, larger liquid particles in the material are initially discharged through the screen, achieving preliminary dewatering.
- ② Next, the rotating screw rod applies pressure to the material, further squeezing out more liquid. During this pressing process, the moisture in the material continuously diminishes, eventually forming relatively dry solid material.

After being pressed and dewatered, these dewatered solid materials are discharged from the outlet end of the screw press screen. This continuous pressing and discharging process ensures the stable progression of the entire solid-liquid separation process.



Technical Information

Material: stainless steel 304/316L/321/310S, duplex steel 2205/2507

Screen Slots: Regular 0.3 mm, 0.5 mm, 0.75 mm, 1 mm, and customized slots **Screen Inside Diameter:** Regular 254 mm, 260 mm, 280 mm, and customized I.D.

Screen Length: Regular 260 mm, 520 mm, L600 mm, and customized I.D.

Flow direction: FITO Screen Welding type

- Reverse rolling support wires and joint welding
- Continuous support wires spiral welding

Structure Characteristics

We produce precision screw press screens with strict tolerance ranges, and dimensions and parameters can be customized based on the machine's model and specifications. Compared to the previously used reverse-wound welded screen cylinders, our continuous zigzag welded pressure screens offer more significant advantages.

We mainly produce one-piece welding screen products. This one-piece welding process ensures the structural stability and lifespan of the screen. Compared to traditional spliced screens, our one-piece welding screens have the following advantages:

- ullet Using 6 imes 8 mm water-drop-shaped support wires with a one-piece spiral rising structure, this process significantly reduces raw material and material loss.
- Utilizing 3 x 6.5 mm wedge wires, which are less prone to clogging. Pulp
 can be evenly screened from top to bottom without thickening, keeping
 impurities away from the screen drum, thus effectively preventing drum
 clogging.
- Both ends are welded in parallel for 2–3 turns, enhancing the screen's resistance to high loads and ensuring continuous production.
- Screens of the same specification are manufactured with the same mold, ensuring excellent roundness, uniform screen slots, and high precision, which helps improve screening efficiency and accuracy.
- Due to the high pressure of the pulp entering the screen tangentially, the initial separation of fibers and coarse impurities occurs under centrifugal force before entering the screen drum, improving screening efficiency.



Water-drop-shaped support wire



Triangle wedge wire



3 turn parallel welding on the port



Overall details

Applications

Food & beverage

It is used for solid-liquid separation and concentration processes.

• Pulp & paper

It is used for screening and separating pulp and pulp residue.

Chemical

It is used for the separation, filtration, and dewatering of solid particles, such as the separation of granular chemical products and solid-liquid separation in wastewater treatment.

Mining

It is used for solid-liquid separation in processes such as ore leaching, tailings treatment, and mineral water production, effectively removing solid particles and impurities from ores to improve ore grade and purity.

Pharmaceutical

It is used for the separation and dewatering of pharmaceuticals, allowing the separation and removal of solid particles to obtain pure pharmaceutical products.

• Environmental protection

It is used in wastewater treatment, sludge dewatering, and other processes to effectively separate solid particles from liquids, thereby purifying water and reducing waste.

