> XC **Hydrocyclone**

Principle

Under the effect of pressure, the slurry enters the shell through the square feeding pipe in involute direction, and does rotary motion in the shell. The coarse or the dense particles get to the periphery of rotary current because of the centrifugal force and turns into riffling through the dust-setting nozzle; because of the smaller centrifugal force, the fine particles will be in the middle of the rotary current, move up along with flow, and finally become overflow being discharged from overflow pipe.

XC IV hydrocyclone designed by Xinhai has achieved the world advanced level . All the over-current parts are made of wear-resistant rubber. This hydrocyclone has not only a reasonable structure, but also a special designed adjustable tube near the dust-setting nozzle. With this tube, the length of dust-setting nozzle can be precisely adjusted. It makes the hydrocyclone especially suitable for the fine materials classifying and dewatering, and easy to operate with low fluctuation index.



Features

With a special designed adjustable tube near the dust-setting nozzle, the outlet resistance and the classification index of the cyclone can be precisely adjusted.

Reasonable structure design, high classification index and low fluctuation index

Especially suitable for fine materials classifying and dewatering.

Technical Parameters

| Model | Spec. | Processing Capacity (m³/h) | Partition Size (μm) | Diameter of Overflow Port (mm) | Diameter of Dust- Setting Nozzle (mm) | Inlet Pressure (MPa) |
|-----------|-------|----------------------------|---------------------|-----------------------------------|--|-------------------------|
| XC IV 75 | 75 | 5~15 | 25~50 | 10~32 | 5~15 | 0.04~0.3 |
| XC IV 150 | 150 | 15~70 | 30~60 | 20~50 | 15~32 | 0.04~0.3 |
| XC IV 230 | 230 | 20~150 | 35~80 | 58~90 | 20~58 | 0.04~0.3 |
| XC IV 300 | 300 | 40~250 | 40~90 | 76~120 | 30~72 | 0.04~0.25 |

▶ High Weir Spiral Classifier

Principle

The grinded slurry is fed into water tank from the inlet located in the middle of depression area, and the slurry classification depression area is under the inclined water tank. The spiral with low speed rotation stirs the slurry, so that the fine particles suspended in the upper flow into overflow weir and overflow. Meanwhile, the coarse particles sink to the bottom of tank, and then they are delivered to the outlet by the spiral and discharged as sand return. The location of overflow weir is above the bearing center which is under screw shaft, and underneath the upper border of overflow end.



Features

A sand return automotive lifting device is added on sand return end, and the configuration of big spoon bit is canceled for ball mil.

1-1.5 degrees of electricity can generally be saved per ton of ore.

Frequent maintenance of big spoon bit is avoided.

Uneven impact on large and small gear is retarded.

Application

Fit for coarse size classification.