⊙ Vibration Inclined-plate High-efficiency Thickener

Features

Integrated mode of inclined-plate thickening channel integration patterns: Each sedimentation channel with the same feed, grading concentration, sand discharge and overflow function, and the same size of structure, ensures the stability and identity of each grading concentration channel operation.

Modularization of the inclined plate set: By the combination and integration with the same modules of the inclined plate set, the required equipment total subsidence area is formed, which can easily realize the large-scale equipment.

The variant design of inclined plate channel is according to the property differences of the slurry and different partition size, which ensures the optimal performance of the equipment.

The thickening processes complete respectively within each independent inclined plate channel. The fine particle size overflow or clean water is discharged crosswise and directly from the spillwag chute of each channel, which shortens the overflow discharge path, effectively solves the short circuit of the fine particle size and circulation problem in the process of the overflow discharge, and guarantees the high equipment grading thickening efficiency that can reach 70% or above in general.

The interval high frequency micro-vibration of inclined plate set modules ensures automatic cleaning regularly, makes the material on the inclined plate orderly decline, and guarantees no stacking materials on the inclined plate and no blocking among plates, so as to ensure the long-term steady work efficiency of the equipment.

A special material removal device set in thickening cone hopper avoids the accumulation of materials, and realizes forced ore discharge with high concentration underflow up to 70% or above according to users' needs, so as to meet the requirements of dry-tailing stacking and discharging.

This device can be used for both concentration and backwater, also for classification and desliming, and the slurry pretreatment by adding flocculant. It also can be used as a high-efficiency thickener. Small floor space, low power consumption, and low costs on operation and maintenance.

Main technique indexes

Feed concentration: 1-20%; Feed size: ≤ 2.0 mm.
Feed flow: Depending on the material sedimentation velocity, generally ore concentrate: 0.5-1.5 m^3/h·m^2, and tailings: 0.3-0.8 m^3/h·m^2; underflow concentration: ≥ 10-75%.
Backwater rate: ≥ 75%.

Technical Parameters

Model	Subsidence Area (m^2)	Cone Hopper Number	Length (mm)	Width (mm)	Height (mm)
ZQN16	16	1	3690	1100	4360
ZQN31	31	1	3760	2460	4360
ZQN50	50	1	3690	3300	5260
ZQN63	63	1	5560	2460	5630
ZQN100	100	1	5560	3560	5500
ZQN125	125	1	5510	4400	5660
ZQN150	150	1	7710	3760	7890
ZQN200	200	1	7710	4880	8160
ZQN250	250	1	7710	6000	8500
ZQN300	300	1	8000	7020	7890
ZQN400	400	1	7710	9260	7890
ZQN500	500	1	7710	11500	8500
ZQN600	600	1	14880	7020	7890
ZQN800	800	1	14880	9260	8160
ZQN1000	1000	1、2、4	14880	11460	8500
ZQN2000	2000	4、8	14880	22920	8500