## 6-S shaking table



### 1. Application

The 6-S shaking table is one of the main equipment of gravity concentration, it is widely used in separating tungsten, tin, tantalum, niobium, gold and other rare metals and precious metal ore. Can be used for roughing, concentration, scavenging different operations, separating coarse sand (2-0.5mm) (0.5-0.074mm), fine sand, clay (-0.074) of different grain grade It can also be used to separate iron, manganese ore and coal. When processing tungsten, tin ore, the table effective recycling particle size range for the 2-0.22 mm.

### 2. Performance

The shaking table is in the beneficiation process is complex a tilt bed plane, ore particle swarm from the bed surface angle to the trough into, at the same time by lateral flushing water supply to the water tank, and the mineral particles in gravity, lateral flow momentum, bed reciprocating asymmetric motion produced by the inertia and friction effects next, according to the proportion and hierarchical granularity, and along the bed surface for longitudinal movement along the inclined bed surface and transverse motion. Therefore, specific gravity and particle size of different mineral particles along the direction of movement of the respective gradually by the A side to side B fan-shaped shed, concentrate and tailings from the end side of the discharging end is divided into different, concentrate, middling and tailings.

Jiangxi yishan International Mining Machinery Manufacturing Co.,Ltd Engineer: Baron Mobile\Whatsapp\WeChat:008613687977827 baron@jxyishan.com 6-s has a double high rich ore ratio, high separation efficiency, safeguards easily, convenient for adjusting the stroke. In change cross fall and stroke is still maintain the surface of bed movement balance, the spring is placed in the box body, compact structure, and can in turn draw final concentrate and tailings.

### 3. Classification

- 1) According to the different position of ore, shaker can be divided into right and left type cradle type cradle two forms. The right type cradle for the ore location for the rocking mechanism is on the right side, left type cradle to mine is located in the left.
- 2) 6-S shaker can be divided into fixed shaking table, channel bar shaking table, big channel steel shaking table.
- 3) According to the concentration particle size, divided into coarse sand table, sand table and slimmer three.

### 4. Structure

This table is mainly composed of a bed head, motor, adjustable slope, the bed surface, mine shafts, sink, and reflex and lubrication system of eight components.

The surface of bed longitudinal reciprocating motion through a crank connecting rod type driving mechanism to realize. The electric motor through the belt drive to make the big belt wheel drives the crankshaft to rotate, the rocker made subsequently moves up and down, rocker downwards, elbow board drive rear axle and the reciprocating rod moves backwards, the spring being compressed. The bed surface is through linkage seat and a reciprocating lever connected, so this is also so the bed surface for backward movement, when the rocker upward movement, due to the tension spring drive, the bed surface will move forward.

#### 5. Specification

Name		Coarse sand surface of table	Fine sand surface of table	Ore slime surface of table	
Dimension	Length (mm)	4450	4450	4450	
	Transmission end width (mm)	1855	1855	1855	
	crude ore width (mm)	1546	1546	1546	
Max. feeding size (mm)		2	0.5	0.15	
Feed amount (t/h)		30-60	10-20	15-25	
Feed density (%)		25-30	20-25	15-25	
Stroke (mm)		16-22	11-16	8-16	
Frequency (f)		45-48	48-53	50-57	
Water quantity added(t/h)		80-150	30-60	10-17	
Horizontal obliquity (°)		2°30′-4°30′	1°30′-3°30′	1°-2°	
Longitudinal obliquity (%)		1.4	0.92	-	
Dressing Area (m <sup>2</sup> )		7.6	7.6	7.6	
Cross-section Shape of table		Rectangular	Saw tooth	triangle	
Motor Power (kw)		1.1	1.1	1.1	
Transmission Mechanism		Eccentric linkage			

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### 6. Installation and cautions

- 1) On the basis of drawing, reserved anchor screw holes or pouring good foundation plate, drilling, hole expansion, the construction of concrete foundation.
- 2) The shaker frame placed on the basis, make each place, calibration and pad frame beam level.
- 3) The Department of anchor screws tightening, the cradle is fixed on the basis of.
- 4) Mounted on the drag device, bed surface, bedside and bed and the bed surface connecting rod, attention should be to the front to bedside flywheel.
- 5) Connect the switch of the motor insurance, check whether the motor leakage, and then good motor wire.
- 6) The bed surface is not strong beat, collision; not in high temperature and heavy pressure; avoid oil pollution and sun and rain, prevent degeneration.
- 7) After the installation, a detailed examination, the confirmation, removal of equipment and surrounding sundries.
- 8) Roller with 10-20 G oil, not to splash as well. The seat sliding rack injection oil to drown the sliding bearing and the lower bearing contact fit; lever type rocking frame bearing has been manufactured with good lithium grease.
- 9) Put the washing water air machine test machine operation, observation and examination: starting and 10) operation, the moving parts are not loose fever or unusual sounds.

Empty test machine to normal, can load test machine, according to the selected minerals, inspection and adjustment of the stroke, stroke, springs, bed longitudinal slope and transverse slope so as to achieve the optimal separation effect. After normal cleaning, it can be put into production.

### 7. operation and maintenance

- 1) Feeding volume and concentration of proper, if give mine too large volume, concentration, recovery rate.
- 2) The bed surface transverse slope large, flushing water should be smaller; slope is small, flushing water shall be selected.
- 3) Stroke and frequency of stroke should be adjusted properly. Stroke is too small too big, affected grain stratification. To change the diameter of a motor belt pulley, adjustable stroke Adjusting spindle and the set of eccentric combination, can have different stroke,

### 8. Main assembly and wearing parts

### Main assembly

Number	Name	Specification	Count
1	crankshaftoilseal	Ф74*Ф48*12	1
2	reciprocating stem seal	Ф60*Ф36*12	2
3	cone roller bearing	7310#	2
4	triangle belt	A type 2025	2

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