

Single layer shaking table/6-S Shaking Table

Gravity Separation 6-S Shaking Table

Which is also called table concentrator, is a mine separation device for fine minerals working by gravity. They are effective in processing precious and base metal, rare metal and non-metallic minerals, widely used in separation for Gold, Silver, Tin, Columbium, Tantalum, Titanium, Barium, Tungsten, Iron, Chrome, Manganese, Zircon, Lead, Zinc, Mercury, Copper, Aluminum, etc.

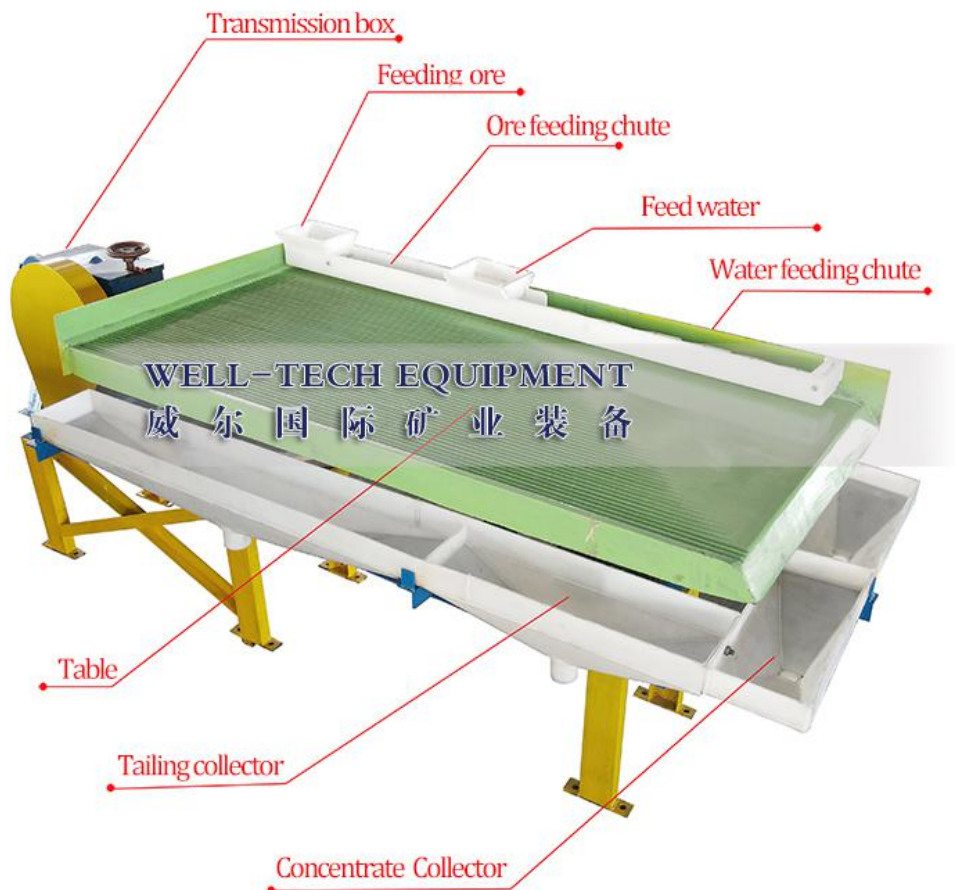
Put the raw materials into the feeding launder, and put some water in to make it into slurry of concentration of 20% to 25%, and gravity flow to the deck. The particle group become loose and layered because of the rinsing of water and shaking of the deck in the bed ditch. After the layered, the upper particle and the bottom particle move in different direction because of the different pressure of flowing water and the friction of the bed surface. The upper light particle moves downward along the transverse of bed surface result of the stronger flowing water., this side called tailing side. The heavy mineral particles which located in the bottom of bed layer was influenced by differential movement of bed surface, thus them move to the opposite of the drive end, and we call this point concentrate side. Because of the different density, granularity, and the directions of movement, the groups of mineral particles spread in Fan-shaped along the diagonal of the feeding launder. The production discharge along the edge of bed surface, the discharge line is so long, so that

shaking table could produce many kinds of different quality product precisely.

Separating precisely is the prominent advantage of shaking table. We can get some final concentrate, final tailings and 1 or 2 kinds of middling product after the first separating from raw mineral. The enrichment ratio of concentrate is very good, when dealing with low grade tungsten ore and tin ore, the enrichment ratio could reach about 300 times. Besides, the range of separating particle size effectively in dealing with metallic ore is 2 to 0.02 mm.

Features

- ◆ **High recovery ratio**
- ◆ **High concentration ratio**
- ◆ **Easy installation**
- ◆ **Simple operation**
- ◆ **Deck constructed of fiber glass**
- ◆ **Seven different decks to choose**
- ◆ **Long working life**
- ◆ **Adjustable stroke length and speed**



Shaking table Construction

Mechanical features

Head Motion Gandong shaking tables are furnished with a totally enclosed self-oiling head motion of heavy cast iron to contain an oil reservoir for perfect splash lubrication. This feature protects the moving parts, reducing operating and maintenance costs to a minimum.

Decks The decks are constructed of steel framework and covered 16mm fiberglass with emery, this cover its strength reaches as high as 70% of steel, the features of this design are stronger, wear-resistant, corrosion-resistant, and no distortion, it lengthens the working-life of machine and thus allows machine perform perfectly on different mineral and different weather condition.

Support types Traditionary type, 10# channel steel support or 20# channel steel support are

available.

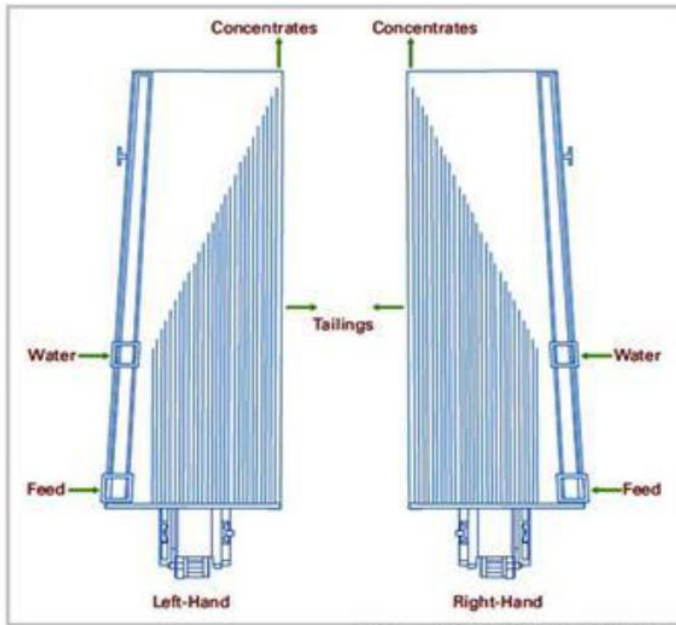
Feed and Water Box A wooden feed distributing box with hopper and a long water box are attached to the iron of the deck, giving a very even distribution of feed and water.

Technical Specification The Gandong Shaking Tables have three distinct deck designs available.

The coarse ore deck is designed for recovering particles size from 0.5 mm to 2 mm; the fine sand deck is designed for recovering fine particles in the range of 0.074 mm to 0.5 mm; the slime deck is designed for recovering super extremely fine particles in the range of 0.02 mm to 0.074 mm.

Model		6-S 7.6			6-S 4.08	6-S 1.95	6-S 0.5
Deck type		Coarse ore Deck	Fine sand Deck	Slime Deck	Three different kinds of decks are available		
Beneficiation area (m ²)		7.6	7.6	7.6	4.08	1.95	0.5
Deck Size	Length (mm)	4500	4500	4500	3000	2100	1100
	Transmission end width (mm)	1850	1850	1850	1320	1050	500
	Concentrate end width (mm)	1550	1550	1550	1100	850	430
Maximum feeding size (mm)		2	0.5	0.074	Sand -2 Slime -0.1	Sand -2 Slime -0.074	Sand -2 Slime -0.074
Capacity (t/h)		1-1.2	0.5-1	0.3-0.5	0.4-1.0	0.3-0.8	0.05-0.2
Feeding density (%)		20-30	18-25	15-20	10-30		
Stroke (mm)		16-22	11-16	8-16	6-30	12-28	9-17
Frequency of stroke (r/min)		220	250	280	210-320	250-450	280-460
Water consumption (t/h)		0.7-1	0.4-0.7	0.4-0.7	0.3-1.5	0.2-1	0.1-0.5
Groove shape of deck		Rectangular	Saw-tooth	Triangle	Available Rectangular, Saw-tooth, Triangle		
Power (Kw)		1.1	1.1	1.1	1.1	1.1	0.55

Table and Steel Support Types



Tables are offered in left or right-hand.

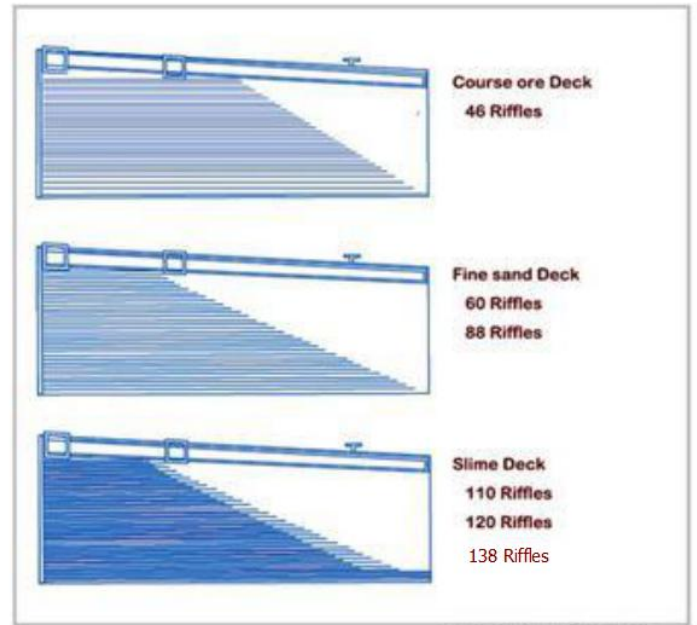
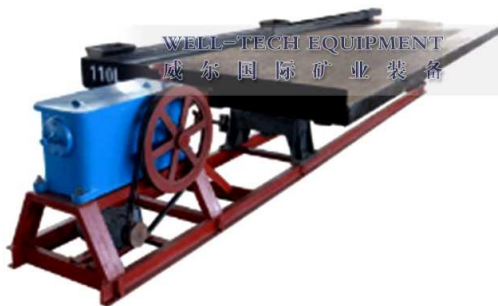


Table riffle configurations

Tables are offered in left or right-hand

Table riffle configurations

Shaking table Support Types



6-S Shaking Table (10# channel steel support)

The support is made up of 10# channel steel, this type has the same effect as the ordinary support. It has the following characteristic: it does not need the cement to bury the foot bolt in advance, installs and uses quickly, is easy to disassemble, may move, and the cost is relatively inexpensive.

	6-S Shaking Table (28# Channel Steel Support) The support is made up of 28# channel steel, this type has the same effect as the ordinary support. It has the following characteristic: it does not need the cement to bury the foot bolt in advance, installs and uses quickly, is easy to disassemble, and may move. Is suitable specially for in the surface uneven, not the solid sand and the empty superficial work.
	6-S Shaking Table (Traditionary) The type needs the cement to bury the foot bolt in advance, it's not easy to move in the future, but relatively is more cost savings for enterprises.

Processing details



The deck is constructed of steel framework and covered 16mm fiberglass with hard emery, the features of this design are stronger, wear-resistant, corrosion-resistant, and no distortion.



7Kinds of decks type as option



Foot of shaking table

The **gear box** contains a self-oiling pump for perfect splash lubrication, it protects the moving parts, reducing operating and keeps maintenance costs to a minimum.

Applications



ilmenite plant in Ghana



Zircon plant in Philippines



ilmenite/zircon plant in Somalia



Tungsten plant in Vietnam



Gold plant in Philippines



Tin plant in China



Gold plant in Ghana

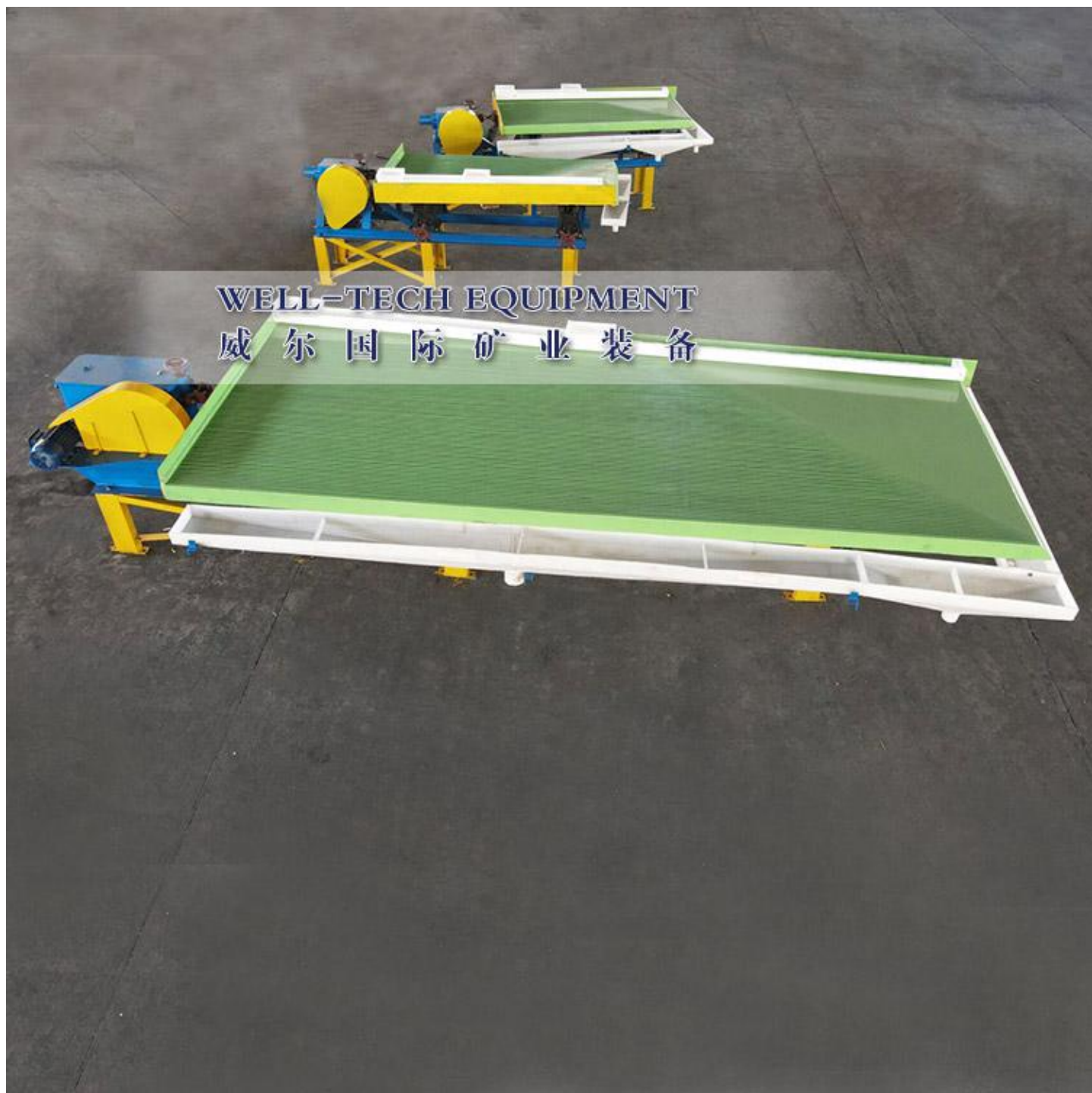


Gold and diamond plant in Liberia

Tantalum/niobium/Tin plan in Nigeria



Alluvial gold plant in PNG



Paint Another color shaking table



WELL-TECH EQUIPMENT
威尔国际矿业装备

Shaking table workshop