# alluvial placer gold washing plant machine for gold mining with 200 tons per hour capacity in African countries

# **Basic Information**

- Place of Origin:
- Brand Name:
- Certification:
- Model Number:
- Minimum Order Quantity: 1 set
- Price:
- Packaging Details:
- Delivery Time:
- Payment Terms:
- Supply Ability:



## Product Specification

- Product Name:
- Capacity:
- Applicable Industry:
- Warranty:
- Application:

Gold Washing Plant 10 To 200 Ton Per Hour Energy&Mining 1 Year Energy & Mining

Henan province, China

USD 3500-30000 Per set

7-10 working days

T/T, Western Union

10 set per month

GST20 GST50 MGT100 MGT200

Water and rust proof in wooden box or

Ascend

ISO9001

cotainer



### More Images



### Portable Alluvial Placer Gold Washing Plant

Gold washing plant is a complete set of equipment used for gold beneficiation, mainly used to extract gold from placer gold mines or gold-containing ores. Its core equipment includes feeders, trommel screen, shaking table, gold centrifugal concentrator, etc., which can efficiently recover gold particles through screening, gravity separation and centrifugal separation. The gold washing plant has the characteristics of large processing capacity, and high recovery rate. It is suitable for scenarios such as placer gold mines, rock gold mines and tailings re-selection. It has good environmental performance, does not require chemical agents, relies on physical methods to separate gold, and is widely used in small and medium-sized gold mines and placer gold mining operations.





### Trommel screen:

The trommel screen is specifically designed for mineral processing and is primarily used for washing and screening placer gold/alluvial gold ores. It consists of a semi-covered rotary screen, a diesel or electric motor, water pumps and pipes, and other equipment such as a hopper and a mobile trailer.



### **Knelson Centrifugal Concentrator:**

Knelson gold centrifugal concentrator is to use the gravity centrifugal force to collect the gold concentrate in the river sand or soil. It is suitable to collect the gold mesh size from 200 mesh to 40 mesh, and it's capacity is about 1 to 80 tons per hour. Application shows, the recovery rate for free gold particles can reach as high as 99%.



### Sluice chute:

The specifications of our sluice chute can be customized as customer's needs. We can customize the length, width, metal mesh and the carpet materials as customer's needs. We can also customize the cover on top to prevent gold being stolen.



Shaking table: After collecting gold concentrate from gold centrifugal concentrator and sluice chute, it is most commonly placed on a shaking table to further improve the gold grade. The shaking table sets the vibration intensity according to the density/weight of the metal for screening. Our shaking table have the advantages of high recovery rate and low production cost.



Mercury Amalgamation Barrel Or Small Ball Mill: The gold ore concentrate collected from the shaking table will be put in the small ball mill, or we call it mercury amalgamation barrel. Then it can mix with the mercury and form the gold and mercury mixture.



Electric Gold Melting Furnace: After get the mixture of gold and mercury, we can put it in the electric gold melting furnace and heat it, then we will get the pure gold bar.



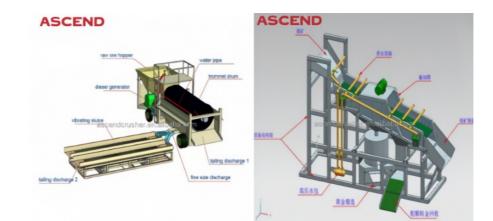
### Gold mercury distiller separator:

The mercury distiller separator is the device to separate mercury and gold. It is widely used in small gold mining plants to evaporate the Hg from the Hg+ gold mixture, and refining the pure gold. Since the mercury gasification temperature is lower than the melting point and boiling point of gold. We usually use distillation method to separate gold from amalgam.



### Working Principle:

After finishing installation of the whole plant. Use excavator to dig the raw material and feed into the hopper of the washing trommel, big stone larger than 20mm will be screened out from the grate bars of the hopper, small size less than 20mm will go into the trommel screen. (The mesh size can be customized according to the customer's need.) The clay or mud in the raw material will be washed away from the rotary trommel screen, and then the gold particles will be feed into the gold centrifugal concentrator or swing vibrating sluice, (usually we recommend concentrator, because it can achieve high recovery rate for different gold particle sizes from 40 mesh to 200 mesh). Following the concentrator is gold sluice with gold blanket, the gold concentrate sediment in the bottom of the gold blanket, which is used to recover the remaining gold in the concentrator. The tailing gold will be collected again from the fixed sluice box to further improve the recovery rate.



### Specifications:

SPECIFICATIONS OF GOLD EXTRACTION EQUIPMENT FOR WASHING GOLD SEPARATOR MACHINE				
Model	GTS20	GTS50	MGT100	MGT200
Parameters				
Size /mm	6000*1600*2499	7000*2000*3000	8300*2400*4700	9800*3000*5175
Capacity	20-40 tph	50-80 tph	100-150 tph	200-300 tph
Power	20 kw	30 kw	50 kw	80 kw
Trommel Screen /mm	φ1000*2000	φ1200*3000	φ1500*3500	φ1800*4000
Sluice Box	2 sets	2 sets	3 sets	4 sets
Water Supply /m <sup>3</sup>	80m <sup>3</sup>	120 m <sup>3</sup>	240 m <sup>3</sup>	370 m <sup>3</sup>
Recovery Rate	95%	98%	98%	98%

### Advantages:

(1) It is easy to move and install inside the mining area.

(2) It is an economical and viable option for material processing from small to large quantities.

(3) The screen is equipped with various filters for different heavy-duty drums, ensuring complete separation of fine materials.
(4) The design provides the end user with the flexibility to change the screen according to the mesh size.

(5) Multi-layer screening improves the selection process.(6) It has replaceable screen plates to facilitate the replacement of wear parts.

(7) The trommel screen has high efficiency and big capacity for different volumes of materials.
(8) The trommel screen adopts a unique design to achieve higher capacity, extend the service life of the screen, and avoid material clogging.

### Packing & Delivery





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