

## ▶ Carbon-lifting Pump

### Technical Parameters

Model	Head (m)	Flow (m <sup>3</sup> /h)	Rotating Speed of Main Shaft (r/min)	Diameter of Discharge Pipe (mm)	Motor Model	Motor Power (kW)	Weight (kg)	Remarks
TB-3	3	5.76	516	50	Y100L1-4	2.2	630	Type 50I
TB-7	7		817		Y112M-4	4	640	Type 50II

## ▶ Carbon Screen

### Technical Parameters

Model	Diameter of Screen Frame (mm)	Length of Screen Frame (mm)	Sieve Size/ Mesh	Weight (kg)
SY100	100	1000	28	10
SY125	125	1000	28	13
SY200	150	1000	28	14
SY250	200	1000	28	16
SY300	300	1000	32	24
SY500	500	1000	32	35

## ▶ High-Efficiency Low-consumption Rapid-desorption Electrowinning System

### Principle

Add some anion more easily absorbed by activated carbon to replace  $\text{Au}(\text{CN})_2^-$  and realize the desorption of gold. The pregnant solution from desorption of gold loaded carbon will be recycled by the ionization method, so as to get the solid gold.

### Features

High temperature, high pressure, cyanide-free desorption, automatic control, high efficiency, low energy consumption, and fast operation;

High efficiency: When the grade of the gold loaded carbon reaches 3000g/t, the desorption rate can reach above 96%. The grade of barren carbon can be reduced by 3-4 times than that of the conventional desorption electrolysis device.

Rapid: The temperature of the desorption electrolysis can reach 150°C (30-55°C higher than that of other models at the first stage), and the working pressure of the system can reach 0.5(MPa) (0.2-0.5(MPa) higher than that of other models at the first stage). Therefore, the time for desorption electrolysis is very soon, which is generally 12 hours, with nearly 3 times shortened.

Low consumption: The temperature of desorption electrolysis is the same with no need to heat. As the operation is fast, the total power consumption is 1/2-1/4 of the conventional system.

Cyanide-free: No sodium cyanide is added for desorption electrolysis to realize low costs and no pollution.

High grade of all slime without anti electrolysis with easy extraction of gold mud.

Automatic control: Specially set liquid level control system, temperature control system and automatic control system.

Safe: With triple safety protection measures, namely, self intelligent system, automatic pressure limiting and release system and safety valve.



### Application

It is used for the extraction of solid gold from gold loaded carbon by cyanidation.

### Capacity List

Capacity of Standard Process (kg/d)	Capacity of Overloading Process (kg/d)	Recommended Model (kg/batch)
300	750	XH-200
450	1000	XH-300
650	1700	XH-450
750	1800	XH-500
900	2200	XH-600
1130	2700	XH-750
1500	3600	XH-1000
1800	4500	XH-1200
2250	5500	XH-1500
2700	6500	XH-1800
3000	7500	XH-2000
3750	9000	XH-2500
4500	11000	XH-3000
5200	13000	XH-3500
6000	15000	XH-4000
7500	18000	XH-5000

### Technical Parameters

Model	Suitable Scale		System Equipment List	System Instrument List	Operation Parameters
	Mine Scale (t/d)	Raw Ore Grade (g/t)			
GJD-200	< 150	2~8	S1 Desorption Column S2 Filter S3 Electrolytic Tank S4 Circulating Pump S5 Electric Heater S6 Carbon Ejector S7 Air Compressor S8 Desorption Solution Tank S9 Clarified Water Pump S10 Acid Storage Tank S11 Magnetic Pump S12 Carbon Storage Tank S15 Control Cabinet S16 Silicon Rectifier Cabinet S17 Pickling Tank	B1 Electric Resistance Remote Transmission Diaphragm-Seal Pressure Gauge B1 Pressure Indication Adjusting Meter B2 Diaphragm Pressure Gauge B3 Vortex Shedding Flowmeter B3 Flow Integrating Instrument B4 Thermal Temperature Meter B5 Temperature Sensor B5 Temperature Indication Adjusting Meter P6 Diaphragm Pressure Gauge B7 Level Meter B9 Temperature Sensor B9 Temperature Indication Adjusting Meter	Desorption Solution: PH ≥ 13.5 Time of Application: Infinite Electrolysis Start: 100-110℃ Electrolysis Ending: 150℃ Electrolysis Current: 350-1250A Electrolysis Pressure: 2-4V Pressure at 150℃ : Upper of Desorption Column: 0.50-0.57MPa Electrolytic Tank: 0.45-0.52MPa
GJD-300	150~300				
GJD-450					
GJD-500	300~500				
GJD-600					
GJD-750					
GJD-1000	500~1000				
GJD-1200					
GJD-1500					
GJD-1800					
GJD-2000	1000~2000				
GJD-2500					
GJD-3000					
GJD-3500	2000~3000				
GJD-4000					
GJD-5000					
Especial	> 3000	2~20			

Note: No pickling tank in economic process.