

LZ sand washing & recycling machine





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Luoyang Longzhong Heavy Machinery Co., Ltd is a high technology enterprise in Luoyang city, which is a professionally corporate enterprise that engaged in mine crushing machinery and , industrial grinding mill researching, development and manufacturing. The company is located in beautiful Luoyang, in the middle of China, which covers more than 50000 square meters with modern and professional technical team, equipped with advanced CAD computer aided design system and computer simulation test system. All of these good facilities keep our products in high quality.

Our main products are Crusher, Sand making machine (Vertical Shaft Impact Crusher), Vibrating Screen, Vibrating Feeder, Sand Washing Machine, Sand Recycling Machine, Belt conveyor, industrial mills etc. What's more, the Sand Recycling Machine has been awarded the reputation of Luoyang high-tech achievements transformation project. We have become the main production and export base of Sand making and grinding mill machine.

LZ sand washing & recycling machine is designed based on sand washer and sand recycling system and adopted foreign advanced technology. This machine main parts include: XSD wheel sand washer, high frequency dewatering screen, high pressure cyclone, cleaning tank, return box, high pressure wearable slurry pump, motors, etc. The machine has simple structure and multiple function, and is widely used for crushed sand, river sand, lake sand or sea sand washing, screening, recycling and dewatering.





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● Features:

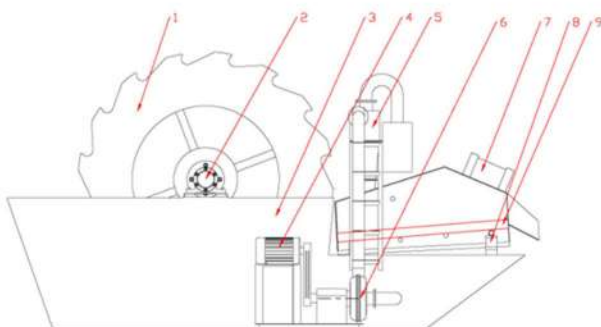
1. Higher sand quality, lower moisture content.
2. Recycled fine size 0.16-3mm sand, lower mud content
3. Compact structure and easy installation
4. High productivity and 95% of fine particles in the material can be recycled
5. Solve cleaning problem of sedimentation tank and improve economic performance at the same time.

● Working conditions:

*Washing: The bucket is driven by the motor through the reducer and rotates in circle. There are many sand storage web grooves and bucket screen for sand storage and primary dewatering. When the bucket moves, sand can be put out by sand storage web groove after being cleaned in the cleaning tank and primary dewatered on the bucket screen.

*Recycling: Flowing slurry water is extracted by slurry pump, fine sand is collected by the centrifugal force of the cyclone, then fed to the polyurathane screen from the apex spray. The 0.16-3mm fine sand and water are efficiently separated through the vibration screen.

*Dewatering: coarse sand (3-10mm) and fine sand (0.16-3mm) are fed onto polyurathane vibrating screen for dewatering.



- 1.bucket (single, double or triple)
- 2.LYC bearing
- 3.cleaning tank
- 4.electric motor
- 5.cyclone
- 6.slurry pump
- 7.vibrating motor
- 8.rubber spring
- 9.polyurethane screen



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● Installation:

- 1.The equipment is supplied in a whole set by our factory, customer examines it after receiving the equipment to eliminate the injury that could be collided during the transportation.
- 2.Installer should be familiar with the equipment structure, capacity and technical requirement, set out suitable installation process rules in advance.
- 3.Installation site should have enough lifting equipment, in order to protect screen frame, the equipment is not allowed to hauled on the ground.
- 4.Sand washing and recycling machine should be installed in strong reinforced concrete, the height, strength and area of base should be calculated according to the soil condition and use condition, it also can installed in steel frame, the installation size can refer to foundation drawing. (shown in sand washing and recycling machine foundation drawing)
- 5.The foundation must be steady and horizontal.
- 6.Drainage hole should be lies in suitable position of returned water box (its cross section should greater than 3 times as large as water inlet).
- 7.The connection way of sand washing machine and reducer must be small wheel pushes large ones.
- 8.The drainage hole of water tank (pipe which diameter is 120mm) should be consistent with slurry pump pipe.
- 9.All the motors should be waterproof, dustproof and ground connection.

● Debugging & commissioning:

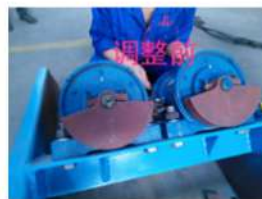
- 1.The direction of water pump must be rated (shown in picture1), ensure that motor's rotary direction must be the same with water pump' s direction before connecting motor with water pump (different direction will lead to serious consequence).



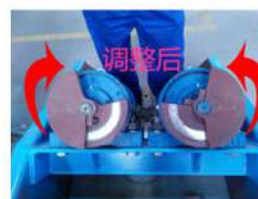


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2. The belt of slurry pump must be have a degree tightness, ensure that it does not slip. The groove of driving gear and drive gear must be one-to-one.
3. Adjusting the 2 vibrating motor eccentric block to the same scale when adjusting motor eccentric block, in addition rotary direction of the 2 motors should on the contrary. (shown in picture 2)



Before



After

4. Examining if the vibrating motor eccentric block is in the same scale or not or examining the spring support is consistent or not if dewatering screen is not stable, jump amplitude is larger.
5. Raising the discharge hole height or opening hole in feeding hole baffle makes redundant water flow into water tank.
6. If the processing effect of separator is not good, change the underflow exit, ensure the discharging sharp is umbrella-shaped.
7. Adjust returned water yield and balance the supply and demand on the situation that water shortage leads to water pump exhausted and can't provide reliable pressure, then causes the processing effect is not good.
8. Pouring lubricating grease in slurry pump before testing machine, lubricating oil in reducer to prevent it get stuck.
9. Rotating slurry pump wheel and sand washing machine wheel by hands, guarantee it turns flexibly and non-obstruction before testing machine.

● Specifications:

Model	Power (kw)	Specs(mm)	Feed size (mm)	Sand Production (t/h)	Water(m ³ /h)	Weight(t)	Overall Dimension (L x W x H)(mm)
LZ26 - 35	28.4	350	≤10	20 - 50	50 - 80	6.18	6200×2150×2670
LZ26 - 55	31.9	550	≤10	30 - 60	60 - 130	6.68	6200×2150×2670
LZ30 - 65	47	650	≤10	50 - 120	70 - 150	9.3	7200×2900×3070
LZ36 - 120	83	1200	≤10	120 - 150	150 - 300	16	9800×2400×3670

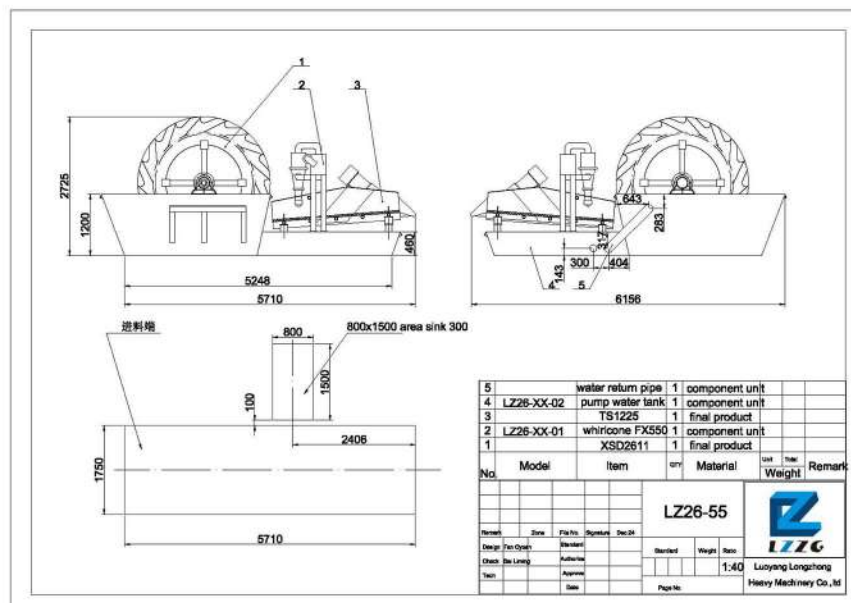


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● Safety operation:

1. Close down the equipment and examine if the equipment perform abnormally, cut off the power before examination.
2. Electrical equipment should connect ground, electric wire should reliable insulation, and installed in flexible conduit.
3. Starting the equipment in no-load condition, strictly prohibit to work overload, it is allowed to stop the equipment after the materials of washing tank all discharged, it is not allowed to adjust, wash or examine the equipment when it operates.
4. Normally, adding lubricating grease each 8 hours, examining the equipment totally every month, examination content including the bolt fasten condition, if the side plate and beam breaks or not, the use condition of spring, condition of belt and the electric switch.
5. Replace the screen of sand washing machine immediately when the screen is worn away so as not to influence the product quality.
6. Operators should have safe guard consciousness, ensure security work.
7. Communicate with technicians if all of the above can't solve problems.
8. If the equipment is not maintained properly by customer, this company will not undertake the responsible caused by user.

● LZ26-55 Foundation drawing:





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● Trouble shooting:

Problem	Possible causes	Correction
Spray no sand	Spray only clean water, no sand	1.cleanslurry pump 2.cleanspray
Vibrating screen doesn't work or little vibrating frequency	1.vibrating motors broke 2.electrical components damage 3.Under voltage 4.heavy material piles on the screen 5.motors eccentric block not even or loose 6.motor grease is getting sticky or blocking	1.replace components 2.replace electric components 3.change power supply 4.cleanscreen materials 5.adjust eccentric block, fasten bolts 6.cleans vibration part, change grease
Materials flowing unusually	1.screen box horizontal level is not correct 2.support springs damage 3.screen sieve damages 4.feeding unevenly 5.screen support plate broke	1.adjust frame height 2.adjust springs 3.change screen sieve 4.feeding evenly 5.change screen support plate
Noise	1.vibrating motors bearings broke 2.screen bolts loose 3.slurry pump inside blocks	1.change bearings 2.fasten bolts 3.cleanslurry pump
Separating ratio is not perfect	1.spray is wearing 2.slurry pump is lack of water supply	1.change spray 2.check slurry pump water supply

**Notice

1. Forbid using hammers to remove vibrator or pull it.

2.Fasten high strength bolts with spanner.

M16 ----250N/mm

M20 ---- 550N/mm



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● Part of the case:



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