

Multi Frequency Screen's Instruction



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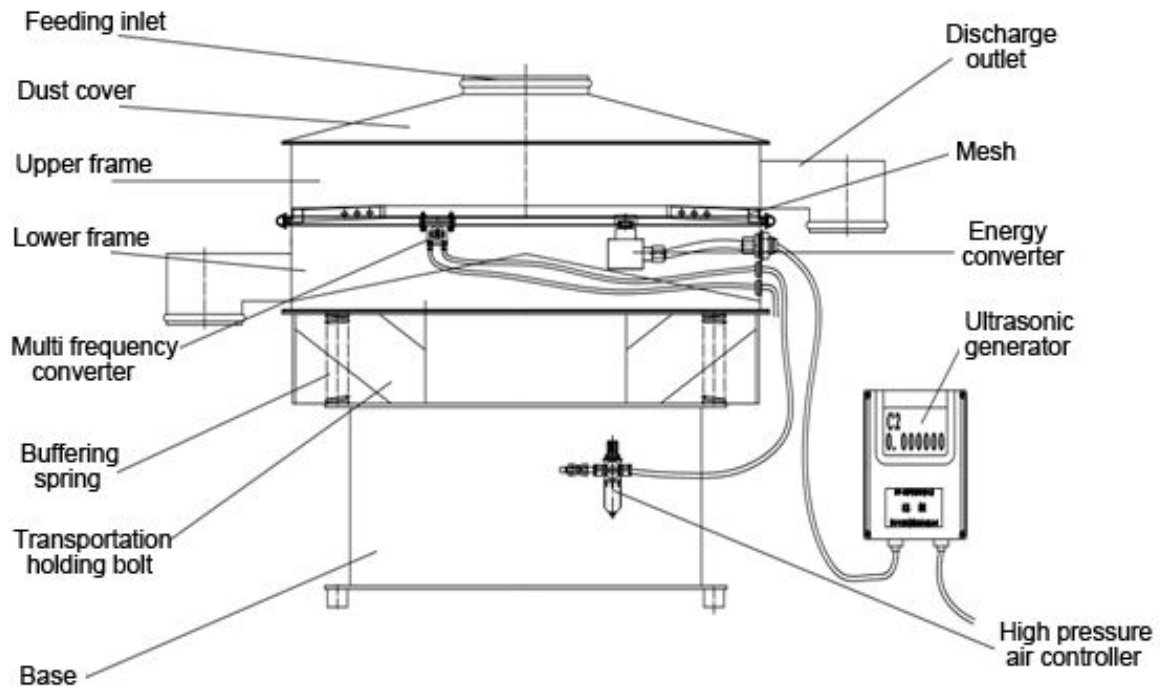
II. Description

The multi frequency screen makes the screen machine with two or more than two vibration sources to produce different vibration frequency, so that the screen machine produces different frequency and amplitude , and makes the movement phase angle between the materials changeable in the screening process. The screen machine is provided with a low frequency (24-48Hz) and the relative large amplitude of the excitation force, and multi frequency generator will produce a force with high frequency (190-210Hz) small amplitude acting on the screen, at the same time, the machine increases an ultrasonic frequency (36-38KHz) in the screening cloth. Three different frequency of vibration superposed and interacted, eliminating the sticky and electrostatic generation of material, improving the acceleration of the screen material at the peak, so as to improve the screening efficiency and reduce the blocking hole, and improve the output and quality of the product. Very suitable for the screening of 1mesh to 500 mesh fine powder and ultra-fine powder industry.

III. Application

This machine uses the latest cleaning way at home and abroad. It can improve the capacity 5-10 times than ultrasonic cleaning. It is widely used in chemical , building, rubber, fossil oil, ceramics, foodstuff, medicine, cement, cast, metallurgy, mine, machinery, electron, fabricate industry etc.

IV. Components



V. Detail introduction of ultrasonic device

1. Net rack

Net rack is composed of resonant ring, a support and a transducer base. When stick the net, it should be pulled evenly, gelatinize the outer circle first and then the inner circle, because when we found the subnet is loose, we can pull the screen cloth evenly. However, if we first gelatinize the inner circle, the screen cloth will be break easily when pulling it.

2. Energy Transducer

Its screw is 20mm, wrench is 30mm, power is 100w, data lines using high temperature and Wear-resisting lines.

3. Controller

some situations should be paid attention:

- 1) When connected to the cable plugs must pay attention to positive and negative,

red is positive, black is negative, it would lead to leakage if reverse .

2) Controller has five operating modes for choosing, used to adjust the size of the current. C1 operating mode is strongest, C2 followed, C4 weakest, C5 is pulse state. Each time you press, the operating mode will change under working condition , the conversion cycle from C1 ~ C5.

4. Common troubles and treatment

No.	Fault phenomenon	Reasons	Treatment method
1	After the power is turned on, the controller is not shown, and the machine is not working.	<ol style="list-style-type: none"> 1. The junction box is short of power. 2. Short of voltage. 3. The power cord break 4. Insurance tube of controller burn out 	<ol style="list-style-type: none"> 1. Check the power supply. 2. The power supply voltage measurement. 3. Replace or repair the power cable. 4. Check the insurance tube.
2	Controller display error shows E1	High current of controller	Cut off the power of the controller and then re energized, if the fault cannot be ruled out, please report to our company.
3	Controller display error shows E2 and no amplitude on screen cloth.	<ol style="list-style-type: none"> 1. Transducer without locking. 2. There is impurities or dirt between transducer and base . 3. Connecting line plug into the water or into the conductive material is breakdown. 4. Connecting cable insulation is not enough. 5. Resonant ring has a crack 6. Resonance ring frequency offset. Transducer fault. 	Restart the controller, if the fault cannot be eliminated, you should: <ol style="list-style-type: none"> 1. Lock transducer with wrench . 2. Removal of debris from the base. 3. Check the connection plug, if 1, 2 pin insulation value is less than 10M, replace the plug. 4. Check the cable insulation value, if less than 10M, the replacement of cable. 5. Welding crack or repair to our company. 6. Check the transducer, if there is a fault, repair or replace it.
		Restart the controller, if the fault remains, it may be caused by the following reasons: <ol style="list-style-type: none"> 1. No connection between 	<ol style="list-style-type: none"> 1. Check the connecting line with the meter, if there is a break, repair it in time. 2. Check the plug, see if there is break circuit or short circuit.

4	Controller display error shows E3 and weak amplitude on screen cloth.	controller and transducer . 2. Wire plug damage 3. Transducer fault	3. With the use of the meter resistance gauge block measurement of the resistance between the 2 pin and the shell of the shell, if the resistance is too large, indicating that the internal line of the transducer. Maintenance or replacement.
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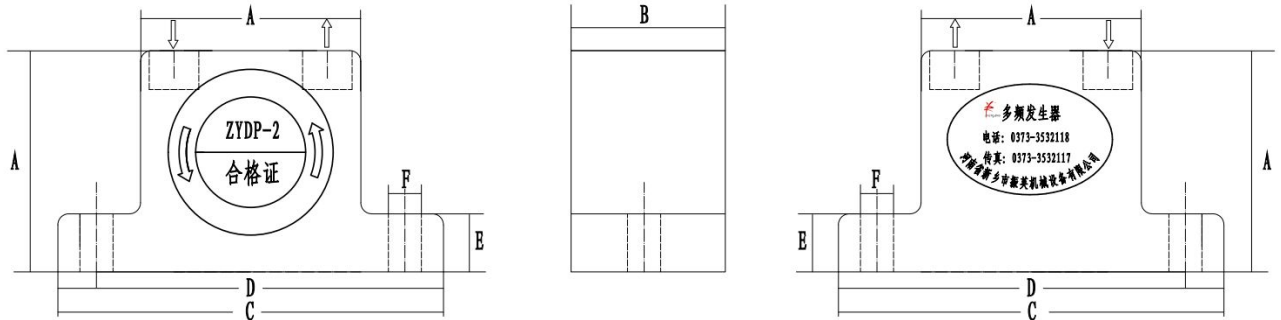
VI. Detail description of multi frequency generator

The highest working temperature is 120 °C. Its noise ranges at 60-75 dBA . High speed and high eccentricity make the multi frequency generator produce a powerful vibration energy. Vibration force and vibration frequency is adjustable. It works reliable, durable, pollution-free and explosion-proof. The shell is made of 304 stainless steel.

1. Performance Parameter

Model	Frequency			Vibration Force (N)			Air Consumption (L/Min)		
	2Bar	4Bar	6Bar	2Bar	4Bar	6Bar	2Bar	4Bar	6Bar
ZYDP-2	11500	12000	12500	130	175	210	33	58	83

2、Installation Dimension



Model	A	B	C	D	E	F	G	Weight		G/H
								Kg	Lbs	
ZYDP-2	mm	mm	mm	mm	mm	mm	mm	0.160	0.35	BS
	40	28	70	56	10.5	6	24	0.14	0.03	

3、Attentions

1. Vibrator has damage to the equipment, such as excessive force. Please adjust to the appropriate pressure and avoid damage to equipment.
2. When fixed the vibrator, it must be fixed with the high tension screw, flat washer and spring washer.
3. The supply air must be clean. Because pollution air will accelerate grinding of piston loss and cause the bad seal and vibrator doesn't work. The instrument air need add oil sprayer, put clean engine oil or lubricating machine and transfer to the mist state, making the work air clean and lubrication. Reducing friction of the piston and the housing wall to achieve the best effect and increase service life.

VII. Motor Tech. Parameters

1. Power, rated current, exciting force

(Model)	Power	Rated current	Max. Exciting force
400	0.18KW	0.75A	3000N
600	0.25KW	1.5A	5000N
800	0.55KW	1.68A	8000N
1000	0.75KW	1.9A	10000N
1200	1.1KW	2.6A	15000N

2. Vertical motor

Temperature	15°C<t<40°C
Working Temperature	Motor<80°C Bearing <95°C
Insulation grade	B or F Grade
IP Grade	IP55
Working mode	Continue working
Relative temperature	<90°C
Connect line mode	Star connect Y
Motor axial movement	0.5mm<H<1.5mm
Motor rotation speed	4 grade 1450r/min
Motor insulation resistance	0.5Ω
Noise	82db

3.Bearing

Model	Bearing Name	Model	Manufacture	Material	Unit	Quantity
400	Fully sealing, free grease bearing	6304	USA Torrington	Bearing steel	set	2
600		6307				
800		6309				
1000		6313				
1200		63311				

VIII. Technical support

Exciter to be introduced firstly, it is the heart of the vibrating screen. Screening efficiency, time using and maintenance work of life all depends on the exciter. we supply energy-saving and safe vertical exciter. The biggest advantage of the exciter is fully free-oil sealed bearing, low noise and longer life of the machine.

Second,

1. the material for the equipment we adopts fully stainless steel 304 , both side polishing, meet GMP certificate. Mesh cloth use stainless steel 304, wire diameter and sieve pore can meet international standard.
2. High quality cold-rolled carbon steel sheet is used for the base. After process of sand blasting and spraying paint. It has good resistance to water and corrosion, and wear resistant. Many manufacturer may not take the process of industrial sand-blasting and to spray paint directly to save the cost and reduce the production time.

Third,

1. Standardization of tooling equipment makes the same parts can use in the other machine. Production parts are all made of mechanical processing, no handwork make the product



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to the largest conform to the requirement of vibration mechanics. The parts would not crack in the area of mechanical processing and welding parts. It ensure the whole equipment with no liquid leakage.

2. Good polishing. The steel sheet surface get a protective film; Improving the corrosion resistance. Smooth in inner and outer surfaces. The material can run smoothly through inlet and outlet.
3. Vibrating screen motor, using the United States imported full sealed bearing without oil type, stable operation, low failure rate.