

TZS 系列矿用振动筛 安装使用说明书

INSTALLATION AND OPERATION INSTRUCTION FOR TZS MINE-USED VIBRATING SCREEN



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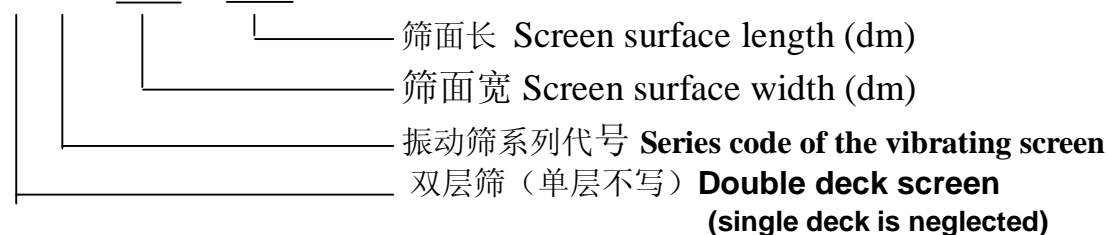
■ 用途 Application:

TZS 系列矿用振动筛曾荣获国家级科技进步奖和河南省科技成果奖。该系列筛采用振动电机激振、橡胶弹簧减振、高耐磨材质筛板、密封式筛箱等国内外先进技术及先进的自同步振动原理，具有寿命长、噪声低、筛分效率高等特点，适用于烧结矿、自然矿、焦炭及其它粉状物料的筛分。已广泛用于冶金、矿山、煤炭、建材等行业。

TZS series Mine-used Vibrating Screen awarded state level Science and Technology Medal and Henan province science achievement prize. Which adopts advanced technique at home and abroad and self-synchronous vibration principle, such as using vibrating motor to excite, rubber spring to reduce vibration, as well as screen plate with high wear- resistance and closed screen box. The series screen possess many advantages such as long service life, low noise, low weight and high efficiency. Moreover they are suitable for sieving the sintering ore, natural ore, coke and other granule materials. So they have been widely used in metallurgy, mine, coal and building material industry and so on.

■ 型号说明 Type Explanation

2TZS □□ □□



■ 工作原理和结构 Working Principle and Structure

筛箱依靠两台相同的振动电机做相反方向自同步旋转，使支承在减振器上的整个筛机做直线振动，物料从入料端落入筛箱后，迅速前进、松散、透筛，完成筛分作业。

本机由筛箱、振动电机、减振系统及底架等组成。筛箱由筛框、筛板、衬板等组成。

本系列筛机采用高性能、高寿命的 TZDC 系列振动电机为激振源，调节振动电机激振力的大小，可以改变筛机的振动幅。调整方法可参看 TZDC 系列振动电机说明书。

减振系统由橡胶弹簧和卡箍、支承座等组成。底架由料仓及底盘等组成。本系列振动筛振动电机安装方式可分为上振式和下振式，减振器安装方式可分为座式或吊挂式。还可以根据用户需要进行设计制造。

The screen box is driven to make self- synchronous rotation in reverse directions by two same vibrating motors so as to the whole screen machine supported on the vibration damper make linear vibration. In this case, material are

quickly transported, diffused and sieved to complete the screening operation after they are fallen into the screen box.

The screen machine consists of screen frame, vibrating motor and vibration isolation system and base frame and the screen box consists of the screen frame, screen plate and lining plate, etc.

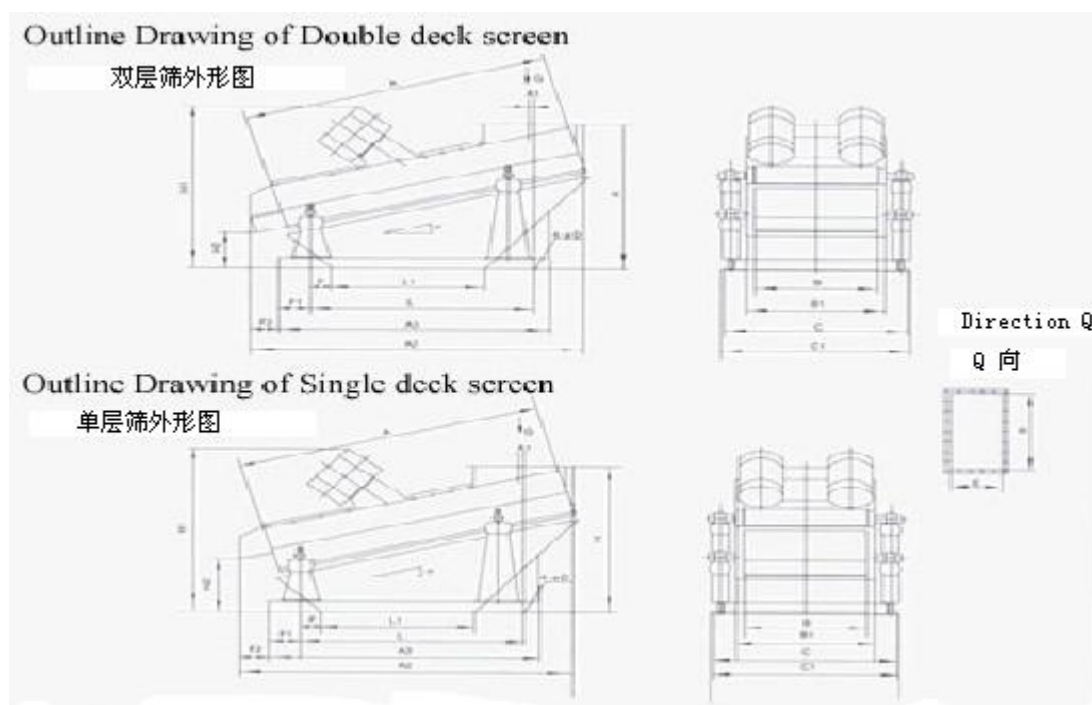
The series screens take TZDC series Vibrating Motor with high performance and long service life as its exciting resource. User not only adjusts exciting force of the vibrating motor, but also changes the amplitude of the screen machine. For the adjustment method in details, please refer to the TZDC Series Vibrating Motor Manual.

Vibration isolating system mainly includes rubber spring, collar clamp and supporting base. Base frame is made of bin and chassis. Installation of Vibrating Motor on the series screen can be classified into two modes, top vibration and bottom vibration. Fixing manner of the vibration damper includes base or suspension mode.

Moreove we can design and manufacture for various kinds of mode screen according to the user requirement.

■ 技术性能 Technical performance:

型号 Type	筛面规格 specification L×W mm	筛面 层数 Deck	颗粒 Grain ≤mm	筛孔尺寸 Screen aperture mm	振幅 Amplitude mm	倾角 Obliquity	振动电机 Vibrating motor			Overall dimensions L×W×H mm
							型号 Type	功率 Power kw	转速 Speed r/min	
TZS-60-150	1500×600	1	≤150	3 5 10 15 20 25 50	5-7	0 - 15 degrees 可调 Adjustable	TZD-31-6C	2×0.75	1000	2035×1070×1340
2TZS-60-150		2					TZD-31-6C	2×0.75		2035×1070×1430
TZS-90-180	1800×900	1					TZD-41-6C	2×1.5		2200×1420×1570
2TZS-90-180		2					TZD-41-6C	2×1.5		2200×1420×1660
TZS-120-240	2400×1200	1					TZD-51-6C	2×2.2		2793×1800×1770
2TZS-120-240		2					TZD-52-6C	2×3		2793×1800×1860
TZS-120-300	3000×1200	1					TZD-61-6C	2×3.7		3250×1800×2200
2TZS-120-300		2					TZD-61-6C	2×3.7		3250×1800×2290
TZS-150-300	3000×1500	1					TZD-71-6C	2×5.5		3400×2220×2130
2TZS-150-300		2					TZD-71-6C	2×5.5		3400×2220×2130
TZS-150-360	3600×1500	1					TZD-71-6C	2×5.5		4050×2160×2120
2TZS-150-360		2					TZD-71-6C	2×5.5		4050×2160×2210
TZS-180-360	3600×1800	1	≤180		5 - 15 degrees 可 调 Adjustable	TZD-81-6C	2×10		4000×2520×2210	
2TZS-180-360		2				TZD-81-6C	2×10		4000×2520×2300	
TZS-180-420	420×1800	1				TZD-81-6C	2×10		4861×2600×2200	
2TZS-180-420		2				TZD-81-6C	2×10		4864×2600×2500	



主要尺寸表 mm Main sizes table

型号 Type	A	B	A1	A2	A3	B1	C	C1	L	L1	F	F1	F2	H	H1	H2	E	Dia. ΦD	α
TZS-60-150	1500	600	-60	2015	1500	680	1040	1070	1300	1050	70	100	290	1040	1395	390	450	17	10°
2TZS-60-150	1500	600	-60	2015	1500	680	1040	1070	1300	1050	70	100	290	1080	1430	205	450	17	10°
TZS-90-180	1800	900	71	2250	1800	1060	1384	1420	1600	1100	170	100	265	1250	1570	400	600	17	10°
2TZS-90-180	1800	900	71	2250	1800	1060	1384	1420	1600	1100	170	100	265	1320	1640	230	600	17	10°
TZS-120-240	2400	1200	120	2793	2300	1380	1756	1800	2000	1500	80	200	253	1460	1830	520	800	21	10°
2TZS-120-240	2400	1200	20	2890	2300	1380	1756	1800	2000	1500	80	200	253	1550	1860	350	800	21	10°
TZS-120-300	3000	1200	12	3380	2700	1380	1756	1800	2350	1500	240	200	360	1950	2130	700	800	21	15°
2TZS-120-300	3000	1200	-12	3300	2700	1380	1756	1800	2350	1500	240	200	280	2040	2220	500	800	21	15°
TZS-150-300	3000	1500	250	3390	3000	1700	2160	2220	2540	1650	250	300	280	1730	2180	660	900	25	10°
2TZS-150-300	3000	1500	170	3460	3000	1700	2160	2220	2540	1650	250	300	280	1820	2390	400	900	25	10°
TZS-150-360	3600	1500	-95	4090	3500	1700	2100	2160	2700	2420	-105	310	415	1840	2220	440	1000	25	15°
2TZS-150-360	3600	1500	-73	4088	3500	1700	2100	2160	2700	2420	-105	310	435	1930	2340	225	1000	25	15°
TZS-180-360	3600	1800	25	4000	3200	1980	2480	2520	2950	2364	125	125	380	1770	2230	575	1000	25	10°
2TZS-180-360	3600	1800	25	4000	3200	1980	2480	2520	2950	2364	125	125	380	1850	2250	400	1000	25	10°
TZS-180-420	4200	1800	196	4864	4000	1980	2480	2520	3800	2840	96	496	404	1960	2400	900	1200	25	10°
2TZS-180-420	4200	1800	196	4864	4000	1980	2480	2520	3800	2840	96	496	404	2050	2490	600	1200	25	10°

■ 安装与调试 Installation and Debugging

把底架的槽钢固定在基础上，使同侧前后支承座高差一致，同一端（入料端或排料端）两侧的支承座板在同一水平面内，误差均为 2mm 以内。

橡胶弹簧在出厂前已进行静刚度测试，应选择刚度相同（或相近）的弹簧配置在同一台振动筛的不同支承位置。安装时把橡胶弹簧置于下支承座上，使支承座上的凸台进入弹簧的内孔，然后吊装筛箱，一定要使橡胶弹簧的内孔上下均与支承板的凸台对中，将筛箱垂直下落，置于橡胶弹簧上，此时各支承点橡胶弹簧的高度应一样，误差不得大于 2mm。

用户需要调整筛面倾角时，可松开卡箍的固定螺栓，转动上支承座，同时加高（或降低）后支承座，调整前后支承座的距离，使筛面倾角符合要求。

筛机各部分联接必须牢固可靠，所有螺栓不得有任何松动，各零部件不得有任何异常声响，筛机上参振部分与周围固定物之间的最小间隙为 30-50mm。

筛机出厂时，双振幅调为 5-7mm，用户可调整振动电机的两偏心块间的夹角，调整激振力的大小，进而调整筛机振幅的大小。

Firstly attach the channel steel to the foundation to ensure height difference of the front support coincides with rear support' s at the same side, then make two second support plates on the same end (either inlet or outlet) to be in the same level, moreover the allowable error is within 2mm.

Since static stiffness of rubber spring has been tested prior to leaving, operator should select the spring with same stiffness (or similar stiffness) to arrange at the different supporting position of the same vibration screen.

While installing, rubber springs are fixed on the lower support so as to make the flange enter into internal hole of the spring, then lift screen box up, pay attention to make internal hole both up and down of rubber spring aim at flange of supporting plate. After vertically falling down, the screen box is fixed on rubber spring. In this case, rubber spring height should keep same at each supporting point; furthermore the error must be no more than 2mm.

While it is necessity to adjust the screen-surface obliquity, users may unclamp the set bolt of the collar clamp in order to rotate the upper support and meanwhile increase (or reduce) the rear support. Then adjust the distance between front and rear support so as to the screen-surface obliquity accords with the specified requirements.

Couplings of each part on the screen machine must be tightened firmly and reliably, thus ensure that all bolts are tightly connected and all parts have no any abnormal noise. Moreover, the minimal clearance between participation vibration

parts on screen machine and ambient fixity is within the range of 30 to 50mm.

The double amplitude is 5-7mm while the screen leaves factory, however user may adjust the exciting force by means of adjusting two eccentric masses included angle of vibrating motor, thus obtain the amplitude adjustment of the screen machine.

■ 维护与操作 Operation and Maintenance

在启动筛机前，应检查周围是否有妨碍筛机运转的障碍物，各处联结螺栓是否紧固，尤其是振动电机、支撑座、筛板的固定螺栓要重新紧固一遍。

检查两台振动电机的转向是否相反，如转向相同，应变更一台电机的电源接线，使两台振动电机的转向相反。

筛机运转时，先空负荷启动，运行，停车一次，观察有无异常现象与声响，空运转时应平稳正常。

连续运转 4 小时后，测量轴承温度，轴承温度不得超过 75 摄氏度。

连续空运转 4 小时后，将各部位联接螺栓重新紧固一次，以后再重复进行 2-3 次。带料运转时，给料要均匀，使物料匀布筛面，如物料跑偏，应调整给料点。

筛机停车前，应先停止给料，筛面物料走完后，再停车。停车后要及时清理筛面上的物料和杂物。

振动电机使用 3 个月后加油一次，每半年小修一次，每年大修一次，并按 TZDC 系列振动电机说明书对振动电机进行维护、保养。

Operator should inspect whether there is any obstruction to impede running and each bolt is tightened prior to screen start-up, especially tighten these set bolts of vibrating motor, support screen and plate once again.

Inspect whether two vibrating motors rotate in reverse direction, if in the same direction, should change power source wiring of one motor to make the rotary directions of two vibrating motors to be reverse.

The screen machine is started and run under no-load conditions, and halt this screen once, then inspect whether the screen can work normally. If abnormal motion or sound is observed, should stop immediately to inspect for the purpose of eliminating malfunction.

After the screen without load runs for 4-6 hours, inspect the bearings temperature, and make sure that the highest temperature is no more than 75 degrees.

All Bolts of connecting parts must be tightened once again after the vibrating motor runs continuously for 4 hours, then tighten 2-3 times every week.

While running with load, evenly feed in order that material can distribute evenly on the screen surface. Operator should adjust feed position in case of material deviation.

Should halt the material feed prior to stopping. The screen machine cannot be stopped until all material is sieved completely, then materials and sundries on screen surface may be removed after stopping.

The supplement of the grease is made generally once at intervals of 3 months. Generally operating for 6 months, perform a current repair, and a major repair is made annually. User should maintain and service vibrating motor according to the TZDC series vibrating motor manual.