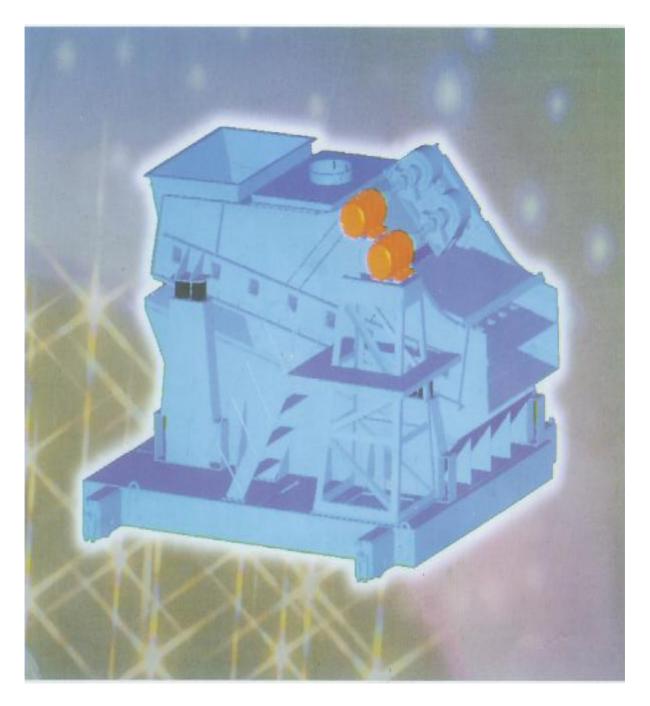
# BTS 系列矿用筛安装使用说明书

# INSTALLATION AND OPERATION INSTRUCTIONS FOR BTS SERIES MINE-USED VIBRATING SCREEN



中国河南太行振动机械股份有限公司 MANUFACTURED BY HENAN TAIHANG VIBRATING MACHINERY CO., LTD OF CHINA.

-1- 1

#### ■ 用途

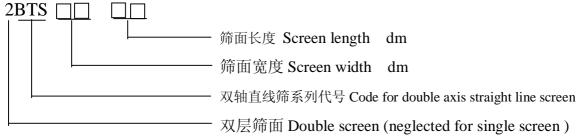
BTS 系列振动筛是我公司与北京科技大学合作,在我公司获奖产品 TZS 系列振动筛的基础上。进一步改进的新型直线振动筛。具有处理能力大,筛分效率高。工作可靠等优点。2BTS1842 型振动筛于 1995 年通过了冶金工业部和河南省科委的鉴定,鉴定为该筛属国内首创,主要性能处于国内先进水平。已广泛应用于高炉槽下,烧结厂,煤矿等各企业。

## Use

BTS Series Mine-Used Vibrating Screen are improved straight line moving types developed from TZS series vibrating screen which is granted the title of excellent products by Machinery Ministry. The development is the result of the cooperation between Taihang Company with Beijing Science and Technology University.

BTS series Vibrating screens are ranked as excellent products, new line vibrating screen, which we more improve, possess advantages such as big dispose, high efficiency, reliable operation etc. 2BTS1842 vibrating screens were appraised by Metallurgy Industry Ministry and Science Committee of Henan Province in 1995. The appraisal shows 2BTS1842 is a technique-initiating inventions and its performances are in the lead of the same occupation in home. BTS series vibrating screen have been used widely in troughs of blast furnaces, sintering factories and coal, etc.

# ■ Type code explanation



### ■ 结构特点

该系列振动筛采用 WDZS 系列双轴振动器激振,振动器的双轴由两台电动机通过联轴器带动做同步反向旋转,电动机固定在支架上,电动机不参振。(图 1)

该系列筛的筛面有单层和双层两种,同样外形尺寸同样处理量的情况下,双层筛面可获得较高的筛分 效率。

筛箱可以支承在固定的底座上(图1)也可以支承在带走行轮和夹轨钳的走行底架上,由用户根据现场情况选用。

本系列筛主要传动形式如图 1 所示,也可以采用多电机驱动,电动机直接固定在激振器上的方案,如图 2 所示。这种结构省去了传动轴和电机支架,结构十分紧凑。由于这种结构筛的电动机也参与振动,配用的是耐振动的电动机。

# ■ Structure feature

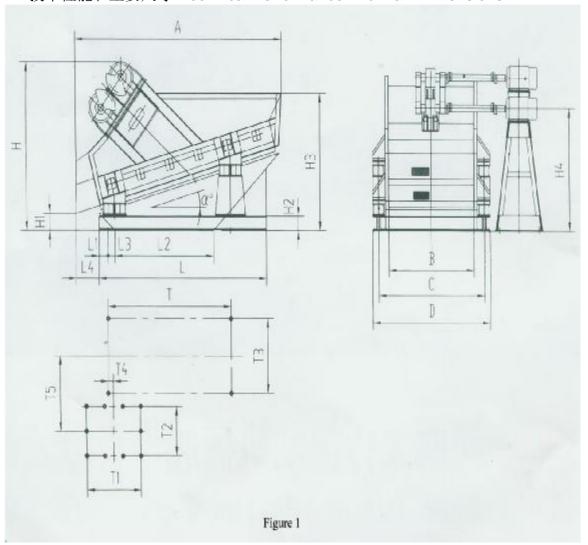
This series screen use WDZS series double-axe vibrator to drive. The axes of vibrator are driven to spin synchronously in different directions by two electric motors through coupling. Vibrating motors are fixed on bracket (as figure 1) and do not participate in the vibration. Vibrating screen can be made in single deck or double-deck and the double-deck screen can work more efficiently.

2

Screen box can be supported by immovable base (as figure 1) or by movable brace with wheels and trace-pinching stamp. Consumer can select the support type according to different circumstances of working site.

Main drive type of this series is showed in figure 1. This series can also use several motors to drive. While vibrating motors are fixed directly on vibrators (see also figure 2). The structure, which omitted transmission axes and motor bracket, is completely compact in space, and require vibration-resisting motors to participate vibration.

■ 技术性能和主要尺寸 Technical Performance And Main Dimensions



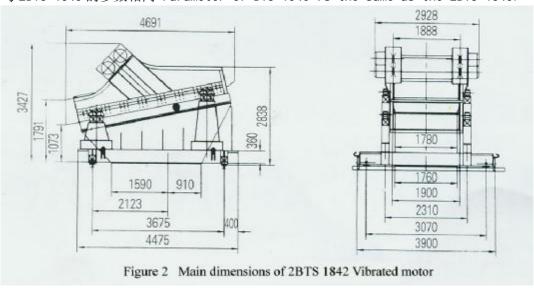
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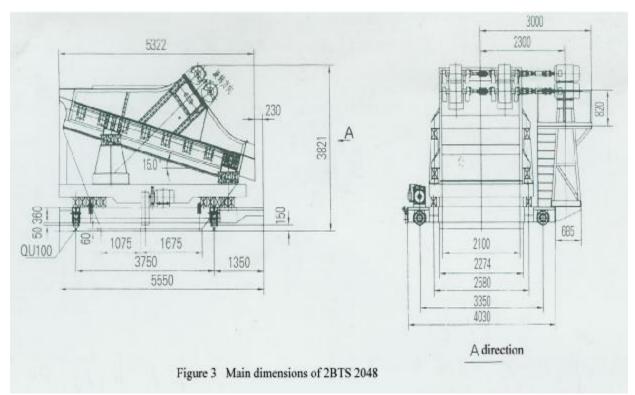
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Туре		screen surface		Feed grain	capacity	double freq-	Electric	motor	single point	single point max dynamic coad N 5000	
	deck	L*W mm	obliquity	≤mm	t/h	uency mm	type	power kw	dynamic load N		
BTS1224	1	1200 × 2400	15	150	100-120	6-9	Y132Mt-6	2 × 4	1000		
2BTS1224	2	1200 × 2400	12°	150	120-150	6-9	Y132M1-6	2 × 4	1200	6000	
BTS1230	1	1200 × 3000	15"	150	100 120	8-12	Y160M2-8	2 × 5.5	1500	7500	
2BTS1230	2	1200 × 3000	12'	150	120 150	8-12	Y160L-8	2 × 7.5	1600	8000	
2BTS1430	2	1400 × 3000	15'	150	150 200	8-12	Y160L-8	2 × 7.5	2200	11000	
BTS1530	1	1500 × 3000	15"	150	150-200	8-12	Y160L-8	2 × 7.5	2100	10500	
2BTS1530	2	1500 × 3000	10"	150	200-300	8-12	Y160L-8	2 × 7.5	2250	11250	
BTS1536	1	1500 × 3600	12"	150	150-200	8-12	Y160L-8	2 × 7.5	2200	11000	
2BTS1536	2	1500 × 3600	15"	150	200-300	6-9	Y160L-8	2 × 7.5	2500	12500	
2BTS1540	2	1500 × 4000	15"	150	200-300	8-12	Y180L-8	2 × 11	2250	11250	
BTS1836	1	1800 × 3600	15"	150	200-300	5-9	Y160L-8	2 × 7.5	2500	12500	
2BTS1836	2	1800 × 3600	15"	150	200-300	6-9	Y160L-8	2 × 7.5	2500	12500	
BTS1842	1	1800 × 4200	15"	150	250-350	8-12	Y160L-8	2 × 7.5	2700	13500	
2BTS1842	2	1800 × 4200	15"	150	250-350	8-12	Y160L-8	2 × 7.5	2700	13500	
2BTS1842*	2	1800 × 4200	12"	150	350	8-12	ZDS-108	4 × 4	6200	31000	
2BTS2048**	2	2000 × 4800	15"	150	450	8-12	Y200L-8	2 × 15			

Туре		Main dimensions mm															bolt hole					
	А	В	С	D	н	H1	H2	НЗ	H4	L	L1	L2	L3	L4	Т	n × T1	n×T2	ТЗ	T4	T5	d	of base plate
BTS1224	2470	1200	1550	1800	1811	390	130	1340	1334	2360	370	1400	70	200	1875	2×300	2 × 250	1756	300	1250	15	12-022
2BTS1224	2724	1200	1620	1800	2021	330	130	1453	1613	2308	250	1600	300	294	1808	2 × 300	1 < 300	1720	150	1350	12	10-ø25
BTS1230	3370	1200	1620	1820	2169	576	150	1810	1742	3000	100	2300	100	257	2800	1 × 550	1 × 330	1756	338	1300	15	8-022
2BTS1230	3588	1200	1620	1800	2396	510	150	1830	1974	2900	150	1550	490	400	2600	3 × 300	2 × 350	1620	358	1800	12	14-ø25
2BTS1430	3423	1400	1750	1945	2242	225	190	1830	1636	2500	150	1639	114	372	2037	3 × 300	2 × 330	1895	86	1455	15	14-ø25
BTS1530	3423	1500	1960	2200	2418	498	180	1905	1718	2890	100	1778	150	428	2690	2 × 400	2 × 300	1960	312	1800	15	10-ø25
2BTS1530	3587	1500	1980	2180	2239	241	170	1667	1633	2900	150	2123	120	502	2600	2 × 420	2×270	2100	292	2150	10	12-ø25
BTS1536	4020	1500	1960	2160	2786	954	250	2197	2203	3530	200	2332	363	440	3130	2 × 400	2×200	1960	429	1838	12	10-ø25
2BTS1536	4030	1500	1960	2160	2525	225	200	2000	1874	3800	310	2420	105	435	2700	2 × 400	2 × 300	2100	322	1650	15	10-ø25
2BTS1540	4000	1500	1960	2160	2690	402	200	2100	2083	3575	250	2457	195	225	2945	2 × 350	2 × 280	2030	420	1800	15	10-025
BTS1836	3772	1800	2380	2580	2563	648	180	2062	1957	3580	150	3180	450	187	3180	2 × 400	2 × 300	2520	556	1800	15	10-ø25
2BTS1836	3772	1800	2380	2580	2563	242	180	2062	1957	3580	150	3180	450	370	3180	2 × 400	2 × 300	2520	556	1800	15	10-ø25
BTS1842	4440	1800	2260	2520	2649	510	210	2060	2030	4090	100	2720	241	350	3880	3 × 300	2 × 250	2480	805	1920	15	14-ø25
2BTS1842	4440	1800	2260	2520	2649	285	210	2060	2030	4090	100	2720	241	350	3880	3 × 300	2 * 250	2480	805	1920	15	14-ø25

- \*电机参振式 主要尺寸见图 2 Main dimensions of vibrated motor shows in figure 2.
- \* \* 2BTS 2048 的主要尺寸见图 3 Main dimensions of 2BTS 2048 shows in figure 3. BTS 1540 与 2BTS 1540 的参数相同 Parameter of BTS 1540 is the same as the 2BTS 1540.





#### ■ 安装和试运转

固定式筛安装时,将底架的槽钢固定在基础上,使同侧前后支承座的高差一致,同一端(入料端或出料端)两侧的支承面应在同一水平面内,误差在 2mm 以内。

带走行轮的底架安装时,将走行轮置于轨道上后,检查同一端两侧支承面应在同一水平面内,误差在 2mm 以内。

把橡胶弹簧(或复合弹簧)置于支承座上,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(或复合弹簧)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,利用在弹簧支座下加减垫片的方法调节筛箱倾角和筛箱横向处于水平状态。÷

所有弹簧应处于垂直状态,不得有扭斜。如有扭斜,应调整弹簧下部支腿的位置。

振动器和电动机与底座之间的固定螺栓必须可靠的拧紧。振动器两根轴的旋转方向必须相反。

振动筛出厂后,如超过 6 个月才安装,则安装前必须将振动器内的轴承拆下清洗,注入新润滑脂(2 号锂基润滑脂)。振动器经重新安装后,用手转动偏心块,不得有阻力过大或卡死现象,否则应及时查清原因加以调整。

安装完毕应检查全部螺栓的紧固情况。

空负荷试运转 4-6 小时,试运行后应检查振动器轴承的工作温度。要求轴承最高温度不超过 75 度。还应检查筛面和振动器的紧固情况,发现松动应及时拧紧。

# ■ Installation and trial run

Make channel-section steel of basement fix on base when immovable foundation screen is fixed. Two height between front and back supporting bases should be accordant, make sure the supporting surfaces of the supporting bases in two sides of same end should be kept in the same horizontal plane same level, error within in 2mm is permitted.

During installing base frame with movable wheel, check whether the supporting surfaces of the supporting bases in two sides of same end should be kept in the same horizontal plane after putting the movable wheel. Error within 2mm is permitted. Put rubber springs (or complex springs) on supporting bases, and make sure the prominences of supporting bases are inserted into the holes of springs. Then lift screen box, let the holes of rubber springs (or complex springs) hold the prominences of supporting plate respectively, put down uprightly screen box with the help of crane till the prominences on supporting board insert the spring holes. Add or remove gaskets to adjust obliquity of screen box and screen frame cross direction to keep horizontal.

Keep all springs in upright status without skew and every skew should be corrected by adjusting spring legs.

The fixed bolts and nuts between vibrator and electric motor must be reliably tightened. The rotation directions of two vibrator axes must be contrary.

In case that equipment is fixed after 6 months since its leaving manufacture, the bearings inside vibrators should be washed and injected fresh lubricant (No. 2 lithium lubricant) prior to installation. Then push eccentric mass by hand after vibrator is fixed, avoid occurring resistance and jamming, otherwise immediately check malfunction and adjust bearing again.

Make non-load experiment for 4-6 hours, check the temperature of vibrator bearings after trying operation. The highest temperature should not be more than 75 degrees. Secondly, bolts and nuts on screen and vibrator must be checked, all over connecting fastening bolts are checked whether they are loose, and must tighten immediately in case looseness is found.

#### ■ 使用和维护

振动筛的起动顺序是:如有除尘装置应先开动除尘装置,然后启动振动筛,待运转正常后才允许向筛面均匀给料。停机顺序与此相反。

运转过程中要注意检查筛箱运动是否平稳,如发现运转不正常或有异常响声, 应及时停筛检查,找出原因,排除故障。

振动器轴承采用 2 号锂基润滑脂,正常情况下,每 8 小时加注一次润滑脂,正常使用 6 个月后,检查油脂情况,如发现变干或硬块时,应清洗更换新油脂。轴承应每年清洗检查一次。

#### ■ Use And Maintenance

The starting sequence of vibrating screen are as follows: run dirt-removing device, then start vibrating screen, feed materials to equably screen after it work normally. The closing sequence is exactly the contrary.

Check whether the motion of the screen is steady when it works. If abnormal motion or sound is observed, please shut down immediately to examine. Find out the cause and eliminate malfunction.

No. 2 lithium lubricant is injected into the bearing of vibrator, and inject the lubricant once every 8hour under natural conditions.

After the vibrator operation for 6 months, should check the lubricant conditions. Must clean them to replaced by new flush lubricant if finding the lubricant become dry or block up. All bearings must be examined once one year.

- 6 - 6