

O-Sepa新型高效水平涡流选粉机

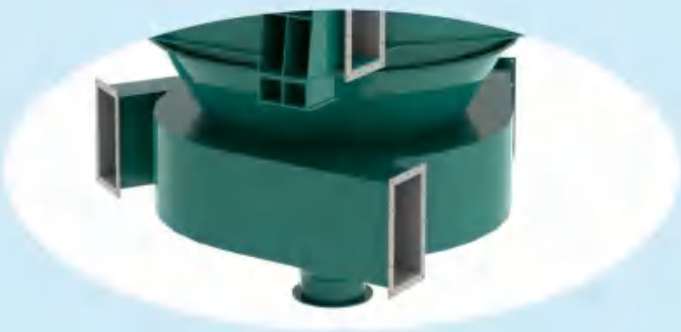
O-Sepa high-efficiency horizontal vortex powder concentrator



O-Sepa新型高效水平涡流选粉机主要适用于水泥、矿渣粉磨的闭路系统中的分级设备、也可用于石灰石、生石灰等物料的分级。

The O-Sepa high-efficiency horizontal vortex powder concentrator is mainly suitable for the grading equipment in the closed-circuit system of cement and slag grinding, and can also be used for the grading of limestone, lime and other materials.

新型下锥体
New type of lower cone



工作原理 Working Principle

物料由选粉机上部喂入，经撒料盘和缓冲仓充分分散后进入切向管和分选气流中。在分选区间，由于笼式回转调节叶片和水平分料板的作用，形成水平涡流，物料首先在此粗选，细粉被排出收集。粗粉在导向叶片涡旋向下运动时，受到来自含尘空气管和二次风管的空气清洗，然后经相对独立的三次风有效地二次漂洗，最后从底部排出机外。

The materials are fed from the upper part of the powder concentrator, fully dispersed by the scattering plate and the buffer bin, and then they enter the tangential pipe and the sorting airflow. In the separation area, due to the action of the cage-type rotary adjusting blade and the horizontal separating plate, a horizontal vortex is formed. Materials are roughly sorted here, and the fine powder is discharged and collected. The coarse powder is cleaned by air from the dust-containing air pipe and the secondary air pipe when the guide vane vortex downward, and then effectively rinsed by a relatively independent tertiary air flow, and finally discharged out of the machine from the bottom.

设备特点 Equipment Features

1、物料撒料均匀

物料在随撒料板转动产生惯性离心力击打到缓冲挡料板的过程中，首次将结团粒子打散，进入分级区后，又在涡流剪切力作用下被二次分散，故撒料均匀，分散性好，为高效选粉创造了条件。

2、分级精确，选粉效率高，含尘气体不影响选粉效率

物料至上而下经过界限分明的分级区，多次反复分选，因而分级精确彻底。成品由系统配置的高效除尘设备收集，既提高了选粉效率，又可以在增产的同时改善磨机通风。利用含尘气体选粉几乎不影响选粉效率，故选粉机风源可从扬尘点吸取，有利于净化车间环境。

3、操作简单

利用方向相反的惯性离心力和气流离心力平衡来进行物料分级，所以当风机风量确定后，只需改变选粉机转速，即可改变产品的临界分离粒径，操作相对简单。

4、新一代新型下锥体提高选粉效率

全新一代O-SEPA选粉机采用新型蜗壳式下锥体，将滑落到灰斗内的物料中的细粉有效携带进入分级面，提高选粉效率5~10%。

5、维护简单，成本低

选粉过程也是水泥降温过程，无需另置冷却设备，机体小，叶片磨损小，维修简单等。

1. It enables even spread of materials

When the material is hit by the inertial centrifugal force generated by the rotation of the spreading plate to the buffer baffle plate, the agglomerated particles are first scattered. After entering the grading area, they are re-dispersed under the action of eddy current shear force. Therefore, the materials are evenly distributed and have good dispersion, which creates conditions for high efficiency of powder separation.

2. It has the advantages of accurate grading and high efficiency of powder separation, which cannot be affected by dust-containing gas

From top to bottom, the materials are repeatedly sorted through a plurality of powder sorting areas with clear grading boundaries, so that the grading is accurate and thorough. The end product is collected by the high-efficiency dust removal equipment of the system, thus not only improving the powder separation efficiency, but also improving the ventilation of the mill while increasing the production. The dust-containing gas hardly affects the powder separation efficiency, so the air source of the powder concentrator can be located at the dust point, which is beneficial to purify the workshop environment.

3. Its operation is user-friendly

The material grading is carried out by utilizing the inertial centrifugal force and the centripetal force of the airflow in opposite directions, so that after the air volume of the fan is determined, the critical separation particle size of the product can be changed only by adjusting the rotating speed of the powder concentrator, so the operation is relatively simple.

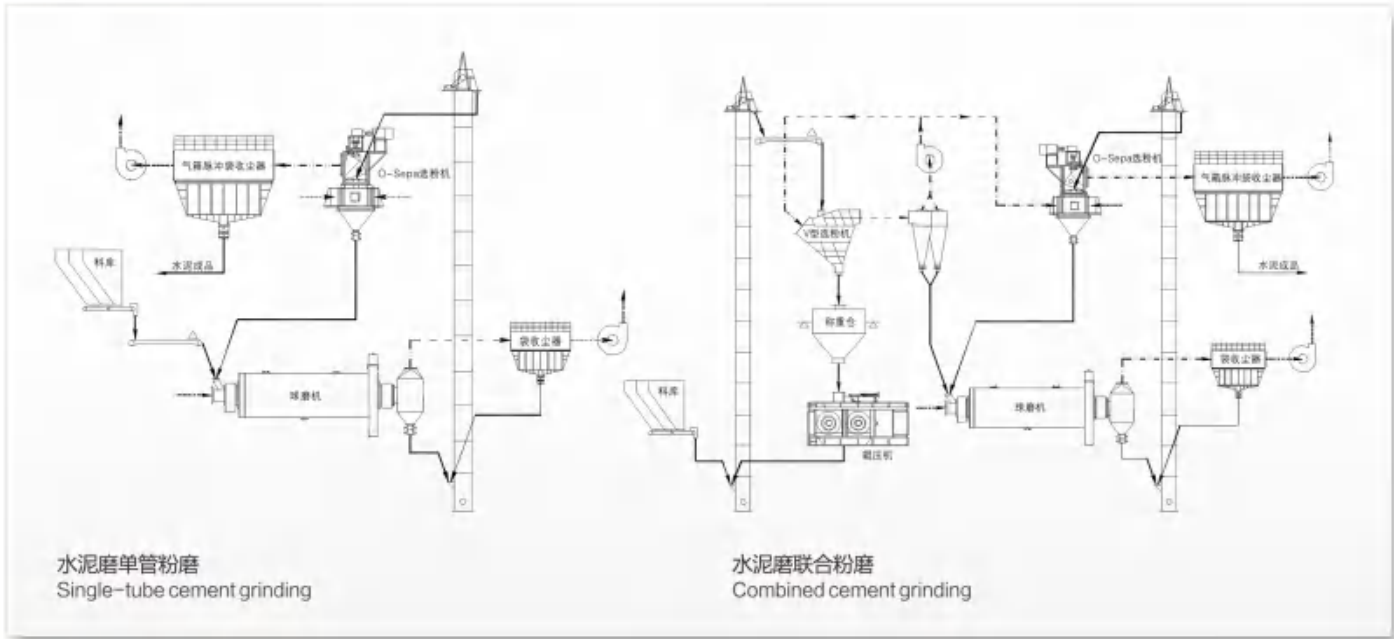
4. It uses new generation of lower cone to improve powder separation efficiency

A new generation of O-Sepa powder concentrator adopts a new volute-type lower cone, which can effectively carry the fine powder falling into the ash hopper to the grading surface and improve the powder separation efficiency by 5~10%.

5. It is easy for maintenance and its cost is low

The process of powder selection is also the process of cement cooling, so there is no need to install additional cooling equipment. It has small body, wear-resistant blades and the maintenance is simple.

分级工艺系统
Grade process system



主要型号与技术参数
Main models and technical parameters

型号 [Model]	产量 [Yield]	处理量 [Handling capacity]	风量 [Airflow]	主电机 [The main motor]		减速机 [Reducer]	
	t/h	t/h	m³/min	型号 [Model]	功率 [Power]	型号 [Model]	速比 [Ratio]
N-250	9~15	45	250	Y180M-4	18.5	SKP-250P	2.8
N-350	12~21	63	350	Y180M-4	18.5	B2SV-02B	5
N-500	18~30	90	500	Y180L-4	22	B2SV-02B	5
N-750	27~45	135	750	Y200L-4	30	B2SV-02B	5
N-1000	36~60	180	1000	Y225M-4	45	B2SV-04B	5.6
N-1250	45~75	225	1250	Y250M-4	55	B2SV-04B	5.6
N-1500	54~90	270	1500	Y280S-4	75	B2SV-04B	6.3
N-2000	72~120	360	2000	Y315S-4	110	B2SV-05B	7.1
N-2500	90~150	450	2500	Y315L1-4	132	B2SV-06B	7.1
N-3000	108~180	540	3000	Y315M-4	160	B2SV-06B	8
N-3500	126~210	630	3500	Y315L1-4	160	B2SV-07B	10
N-4000	144~240	720	4000	Y315L2-4	200	B2SV-08B	10
N-4500	162~270	810	4500	Y315L2-4	200	B2SV-08B	10
N-5000	180~300	900	5000	Y355M-4	250	B2SV-09B	11.2
N-5500	198~330	990	5500	Y355M-4	250	B2SV-09B	11.2
N-6000	216~360	1080	6000	Y355L-4	280	B2SV-10B	11.2
N-6500	234~390	1170	6500	Y355L-4	280	B2SV-10B	12.5
N-7000	260~420	1260	7000	Y355L-4	315	B3SV-11B	12.5
N-7500	270~450	1350	7500	Y355L-4	355	B3SV-11B	14

注:上表数据是在选定涡流选粉机的产品比表面积3200~3600cm²/g的前提下确定的。
Note: the data in the above table are determined on the premise that the specific surface area of the end product of the powder concentrator is 3200~3600 cm²/g.

实际案例
Actual case



铜仁海螺盘江水泥有限公司
Tongren Conch Cement Co., Ltd.

系统配置
System configuration

名称 [name]	参数 [parameter]
辊压机	170 × 120
磨机	4.2 × 13m
选粉机	N-4000
风机风量	250000m³/h
产量	245t/h
细度	3400~3600cm²/g
电耗	26.5kWh/t

系统中控
Central control system



部分业绩
Partial performance

客 户	选粉机型号
拉法基 (厄瓜多尔) OTAVALO项目	N-3000型O-Sepa高效水平涡流选粉机
新疆天山水泥吐鲁番熟料分公司	N-4500型O-Sepa高效水平涡流选粉机
印尼海螺水泥SB1项目	N-4500型O-Sepa高效水平涡流选粉机
中国航空技术北京公司 (土耳其项目)	N-4500型O-Sepa高效水平涡流选粉机
江苏鹤林水泥有限公司	N-6000型O-Sepa高效水平涡流选粉机
安徽海螺水泥有限公司宁国水泥厂	N-5000型O-Sepa高效水平涡流选粉机
云南文山海螺水泥有限公司	N-5000型O-Sepa高效水平涡流选粉机
四川峨胜水泥股份有限公司	N-4500型O-Sepa高效水平涡流选粉机
华润水泥 (安顺) 有限公司	N-4000型O-Sepa高效水平涡流选粉机