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HZS

Belt type Concrete Batching Plant

HZS系列皮带式混凝土搅拌站

Brief Introduction

HZS Belt type concrete batching plant consists of material batching, mixing and electric control system, etc, which produce high quality concrete because of more accurate material measurement.They are widely used in big and medium construction projects, road, bridge project, and concrete prefabrication factory.

HZS系列商品混凝土搅拌站是由配料、搅拌、电气控制等部分组成的全自动智能混凝土拌制成套设备，在配料机计量准确的情况下能够生产优质高效的混凝土，被广泛应用于大中型施工工程和商品砼生产。

Working principle

Concrete batching plant has 4 main parts: Material feeding, Material measurement, Concrete mixing and whole plant control system. The working procedure of automatic control system is: 1. Turn on control software, login to operation interface; 2. Set or access working parameters of concrete production, such as recipe number, concrete grade, slump, total production volume, etc. 3. Start production; 4. The software/PLC will give signal to each part of the plant, to finish the material feeding, measurement, loading into the concrete mixer, mixing and discharging; 5. If there are some problems during production, the software will detect the error and light up alarm lamp on computer screen or indicator display, so that the operator can stop the production till problems solved. 6. Regarding to the material feeding, the various of electric motors, butterfly valves and load cells will work automatically according to digital signal; 7. High-pressure air system will provide enough driving force for each unloading gates, such as aggregate bins, butterfly valve of scale hoppers, concrete mixer discharging gate, etc. 8. The software will control the whole system continuously produce concrete till the set-volume finished production, unless emergency stop or turn to Manual style.

混凝土搅拌站分为四个主要部分：物料给料、物料称量、混凝土搅拌和整站控制系统。 自动控制系统的工作程序如下： 1. 打开控制软件，登录到操作界面； 2. 设置或调取混凝土生产工作参数，如配比号、混凝土等级、塌落度、生产量等； 3. 开始生产； 4. 控制软件（ PLC ）会给信号到搅拌站的每个部分，去分别完成物料的给料、称量、搅拌和卸料； 5. 如果在生产过程中出现问题，控制软件会检测出问题所在点，并且在显示器上或者仪表盘上亮起警报灯，便于提示操作员及时停止生产，直至问题解决； 6. 关于物料给料，各种电机、蝶阀、传感器会根据数字信号自动工作； 7. 高压气路系统会给各个卸料机构提供足够的动力，比如骨料仓、各称量斗的蝶阀、搅拌机卸料门等； 8. 控制软件会操作搅拌站连续生产，直至完成设置的生产量，除非急停或者转到手动模式。

Technical Features

1.Driving system of concrete mixer adopts planetary gear, the gimbals transmission shaft insures circumgyrate at the same speed. 2.With its modularization structure, it is easy to transport, install and debug more quickly. It has various of foundation form to ensure accommodate different worke-site. Structural members are durable. 3.Mixing system choose YJS (or Italian SICOMA) twin-shaft forced concrete mixer, which has high efficiency and good mixing quality, scale board and mixing blades adopts high-rigidity and high tenacity wearable alloy steel, to prolong the working life. It can well mix dry concrete, semi-dry concrete, plastic concrete (etc) in certain time. 4.Scale components of measurement system are all from famous brand, computer controlled to ensure the weighing accurate and reliable performance, so that it can also meet the requirement of every high performance good concrete. 5.Aggregate feeding system adopts Belt Conveyor, can be assembled rainproof and tighten device for belt. Aggregate lifting appliance adopts frequency control, thus providing smooth and reliable operation. 6.Lubrication system adopts advanced centralized oil lubricating system, convenient for oil supplying, this system is equipped with overvoltage warning and low oil level warning, safe and reliable. 7.PC+PLC control system ensures the high simple and reliability, human-based intelligent control facilitates the continuously producing, but with dynamic display panel to make the operator clearly know the operation of each part. Abnormal operation and fault automatic detection, using text, sound, light, alarm, convenient maintenance and troubleshooting. The system can print the report at any time. 8.Assemble sidewalk and ladders for every maintenance and service part, assemble high-pressure water flushing device for concrete mixer clean, good maintainability. 9.All of powder material is feeding, batching, unloading, mixing in closed space., reduce the pollution to environment. Assemble dust-remover in main mixing building, and also pack the mixing building and belt conveyor.

1. 搅拌主机驱动系统采用行星式齿轮，万向节传动轴保证两个搅拌轴以同样的速度旋转。 2. 采用模块化结构，安装、拆卸迅速，运输方便。具有多种布置形式，能适应不同场地的要求。结构件质量稳定结实。 3. 搅拌主机采用YJS系列双卧轴强制式混凝土搅拌机，搅拌质量好，生产率高。衬板和搅拌臂采用高强度高韧性耐磨合金钢铸造，有效延长使用寿命。对于硬性、半干硬性、塑性及各种配比混凝土均能在理想时间内完成良好的搅拌。 4. 所有计量单元的计量元件及控制元件均采用进口元件，微机控制，完全保证计量准确且性能稳定，从而可以保证生产出合格的、高性能的混凝土。 5. 骨料上料系统采用皮带机上料（客户可根据需要自行选配防雨棚），并使用变频控制，有效保证运行流畅平稳。 6. 润滑系统采用先进的集中润滑油供应便于油料供应，这套系统还提供有过压保护和低油位警报，安全可靠。 7. 电脑加PLC控制系统保证操作简易稳定。基于人性化设计的智能控制使谁谁可以不间断的生产，但是动态面板显示，能使操作员清楚了解各部分的运行情况。异常工况及故障自动检测，采用文字、声、光、报警提示、方便故障的检修及排除。可进行报表打印管理。 8. 每个维修及保养部位都设有平台或梯子，主机清洗设有高压泵清洗装置，维护性能好。 9. 所有粉状物料，从上料、配料、计量、加料到搅拌出料都在密闭状态下进行，极大地降低了粉尘和噪声对环境的污染，环保性能好。

技术特点



Main configuration and parameters

主要配置与参数

型号 Model	HZS60	HZS90	HZS120	HZS150/180	HZS200/240
生产率 Capacity	60m³/h	90m³/h	120m³/h	180m³/h	240m³/h
搅拌系统 Mixing system	Twin-shaft concrete mixer 双卧轴搅拌机				
骨料上料 Aggregate feeder	Belt conveyor 皮带式				
卸料高度 Discharging height	3800mm	3800mm	3900mm	4000mm	4000mm
售后服务 After-sale service	Erection & commissioning, operator training 接线、调试、培训				
质保 Warranty	12 months after erection 安装后12个月				
搅拌主机 Concrete mixer	YJS1000/ SICOMA1000	YJS1500/ SICOMA1500	YJS2000/ SICOMA2000	YJS3000/ SICOMA3000	YJS4000/ SICOMA4000
搅拌周期 Mixing cycle	≤60s	≤60s	≤60s	≤60s	≤60s
骨料配料站 Aggregate batching machine	PLD1600	PLD2400	PLD3200	PLD4800	PLD4800
称量系统 Weighing system	Water, Cement, Fly-ash, Additive水、水泥、粉煤灰、添加剂				
称量精度 Weighing precision	±1%				
气路系统 Air system	Air compressor, etc				
控制系统 Control system Type	Computer auto-control module with PLC计算机自动控制模块PLC				
控制台 Control panel board	Buttons, lamps, indicators, CCTV, etc显示仪表、按钮、指示灯、监控系统等				
电子元件 Electric components	China CHINT, German SCHNEIDER中国正泰，德国施耐德				
控制房 Control room	With Air conditioner, ≈10m²含空调，约10平方				
文件 Documentation	Foundation layout, Electrical diagram, Operation manual, Spare parts list地基图、电路图、操作说明书、易损件清单				
Optional Items 选配项					
螺旋输送机及长度Screw conveyor diameter & length	Ø219mm/273mm/323mm, L=8000mm/9000mm				
粉料仓Cement silo capacity	30t/50t/100t/200t				
环保外包装Outer plant pack except aggregate bins	With dust collector 带主楼除尘器				

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