# **FB SERIES** DRY MORTAR MIXING PLANT



# McNally Sayaji NFLG Construction Equipment Co. Pvt. Ltd.









# **PIONEER** of mixing concept

- High Efficiency
- Low Energy Consumption
- Environment Friendly





#### FB Series Dry Mortar Mixing Plant

#### Main Technical Parameters

Structure Mode	Model	Mixer	T/h	Annual output	
Tower	FBT600	FJD600	5~10	5	For fine dry mortar production, relatively large investment.
	FBT1200	FJD1200	10~20	10	
	FBT2000	FJD2000	20~40	20	For fine/coarse dry mortar production, large investment.
	FBT3000	FJD3000	30~60	30	
	FBT4500	FJD4500	40~80	40	
Ladder	FBJ2000	FJD2000	20~40	20	For fine/coarse dry mortar production, relatively large investment.
	FBJ3000	FJD3000	30~60	30	
	FBJ4500	FJD4500	40~80	40	
Station	FBZ600	FJD600	5~10	5	For dry mortar production, simple and flexible, relatively small investment.
	FBZ1200	FJD1200	10~20	10	
	FBZ2000	FJD2000	20~40	20	
	FBZ3000	FJD3000	30~60	30	
	FBZ4500	FJD4500	40~80	40	

Various types of configuration: According to user's product recipe and investment, NFLG customizes the best and the most economical project solution.

Stable and reliable system performance: Strong R&D team and quality parts & components are the guaranteed insurance of the stable system running.

Green: Optimal configuration design, stable and reliable system performance are the inportant guarantee of the plant running economically, at the same time dust collecting devices can nearly remove all the dust, this effectively ensures the running of the plant in energy-saving and green mode.

Excellent service: Service team are available all around in India and the world, technical experts take care of your plant carefully, this ensures excellent running performance of the plant, at the same time, effectively lowering the maintenance cost thereby maximizing output and profit.

#### Advanced Mixer Design





#### Excellent Mixing Performance

Excellent advance mixing theory and core technology effectively boost the mixing ability and lengthen the running life of the mixer.

- a. The application of up to date concept of coulter mixer theory and core technology, together with scattering mixing of high speed turning cutter increases the mixing speed (the mixing time is 90-180s subject to the recipe) and mixing efficiency.
- b. High accuracy of mixing, all materials are mixed homogeneously with no reduction. The mixing ratio can reach 1:10000, meeting the engineering requirement to the maximum.
- c. Unique single discharge door, ensures no dead area, no residue, no leakage and short mixing time. Just simple cleaning is needed while changing the recipe of the coloured dry motar.
- d. Manual sample hole is available for users to examine and adjust the mixing time according to the result of the examination to keep the plant working in the highest productive way.
- e. The mixing drum, mixing paddle and high speed cutter are all made of wear resistant material to ensure longer running life of the mixer.



#### Heating Equipment

- a. Oil burner: Compact dimension, high energey efficiency.
- Furnace: High coal burning efficiency. Relatively low cost, suitable not only for common mortars, but also for specific ones.

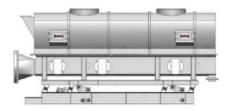


#### **Drying Equipment**

In response to the growing inportance of energy effciency and enviornment friendliness, NFLG developed LHC variable frequency vibrating bed of high frequency and high amplitude intended for production of dry motar. It is distinguished by its energy efficiency, low operating cost, little space consumption, high heat efficiency and easy operation.

In comparison with drying drum:

- Vibrating bed seldom malfunctions and thus in comparison with drying drum, reduces a lot of maintaince cost.
- b. Vibrating bed requires nearly half of the space required by Drying
- Starting and stopping of Vibrating Bed consumes comparatively less time.
- d. Vibrating bed can save energy by 30-60 % in comparison to drying drum.







#### Accurate Reliable and Stable Weighing System

- a. Adopt pressure load cell, analog input PLC Processing mode.
- Unique double travel gate valve / butterfly valve and air blowing device can effectively control the accuracy of the weighing system. It is of high quality and anti jamming capability.
- Gravity center of the scale is designed precisely along with anti vibration and anti abrasion design and connected with soft ventilated connections to ensure weighing accuracy.



#### Sand Screen System

Optimal combination of vibration angle, screen inclination and abundant screen area ensure high screening efficiency. This screen is distinguished by its good design and convenience on replacement of screening sieve. Vibration created by unbalanced motor of reputed make.



#### **Dust Collecting Device**

Dust collecting device of drying system adapts two stage dust collection namely weight dust collection and bag dust collection. The dust can also be recycled.

The transportation of the materials is also equipped with different types of collecting device thereby controlling the dust spillage and meeting the environment friendly standard requirements.



#### High Efficiency, Energy Saving Drying Drum

- a. Shaft mounted geared motor is used for driving the drying drum.
- Energy saving double walled structure, Optimized material lifting vane and efficient outer drum design there by resulting in saving heat loss and energy by 20% - 30%.
- Stainless steel drums covered by heat insulating materials ensure minimal heat loss.
- Heat treated driving rollers and roll ring lengthen the running life of the drying drums.





#### **Energy Efficient System**

Proper engineered layout and efficient burning system helps the plant run in an energy saving way resulting in cost competitive output.



#### Bulk and Bag Packaging System

The plant is equipped with bulk and package diverter for user to select according to the product type and quantities. It is low energy consumption and the conveying system is pneumatic.



#### **Bulk Material Packaging Head**

Bulk material packaging head has two options: first is SZT300B and second SZT300A. Both of them are fitted with integrated dust collector. They are characterized by following properties: excellent retractable mechanism, campact structure, long ratraction distance, wide application, ability to adapt to height of delivery truck to enhance reliable and safe operation, intermediary material guiding mechanism adopts metallic cylinder, which is designed for long service life and simple maintenance.



#### Reliable Control System

NFLG make FB series concrete mixing station adopts double computer synchronous control system of which the main hardware consists of two advanced industrial computers, high performance PLC, human machine interface, precise weighing units and low voltage electronic elements of best brands. This system is integrated with the company's self designed control software and can achieve automated control of dry mortar production.









#### **Principal Characteristics**

The double computer synchronizing control system has two computers which can control and manage the entire production process. If one of the two computer malfunctions, the other one takes control, thus maintaining production process without manual interference and reducing production suspension rate.

Password protected load control program and scale calibration reliably ensure security of important production data.

Full animated production process demonstrating crucial production data such as weighing value, target value and error value in real time.

Preset production task and reset production sequence available.

Possible to systematically assign batch output in accordance with batch volume and mixer capacity.

All speed frequency regulator can be modified anytime, online.

Functions available include falling error auto calibration trend estimation, negative value auto calibration, zero position auto tracing and push button tare deduction.

Auto balance deduction will be conducted if the weight is lower or higher than required. The limit for measuring can be adjusted individually.

Data management system is provided to enable user to conveniently carry out inquiry, browsing and printing of production data.







#### High Performance Hardware

- a. Industrial computers.
- b. High performance and long service life PLC supports high running speed.
- c. Main low voltage electronic components are of reputed brands like Schneider, ABB, Omron, equivalent etc.



#### **Easy Operation**

The equipment's production status can be comprehensively detected in real time. If any malfunction occurs, the system can point out the location and prompt the operator to perform checks.



### FOCUS ON INNOVATION AND SPECIALIZATION

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