

## SYTECHS MINING TECHNOLOGY



## SYTECHS ST-ZSW SERIES GRIZZLY FEEDERS



## SYTECHS VIBRATING GRIZZLY SCREENS

### Description

The Sytechs ZSW Series Vibrating Feeder is designed based on the principle of exciting forces generated by two eccentric shafts. It is mainly used for continuous and even feeding before primary crushing. Besides feeding, at the same time, it works as pre-screening. The pre-setting gap between grizzly bars avoid unnecessary power consumption of the following crusher equipment, which improves the crushing efficiency. The ZSW Series Vibrating Feeder is widely used in feeding process of metallurgy, mining industry, construction, chemical industry and construction aggregate .

### Features

The gap between grizzly bars can be adjusted ,so it has wide application and makes good pres-creeening performance.

The feeding for the primary crushing can be controlled by adjusting the power speed.

Stable vibration and low noise make it safe and reliable when start and stop the machine.

It is optional to add the extra high side plate and extra liner .It is optional to change whole plate and steel plate with drilled-holes instead of grizzly bars in the pre-screening part , so it can be used in different working conditions.

### Working Principle

The exciter works as the vibration source of the vibrating feeder which is composed of two eccentric shafts (driving shaft and driven shaft) and gears. The electric motor drives the driving shaft to rotate at high speed, the gear of the driving shaft engages with the driven shaft, and then the two shafts rotate together in the reverse direction which results in vibration forces, angled to the feeder and pointing towards the discharge end. This action of the vibrator forces the material towards the discharge end while segregating the material, causing the finer particles to drop to the bottom of the load.

VSD (Variable Speed Drive) drives are used to limit inrush current associated with electric motor startup. Soft-start drives lower the initial voltage by adding solid-state series impedance and ramp up until full speed is achieved. Doing this extends the life of the motor and mechanical components that are connected to it. The SSD also eliminates high inrush current on large electric motors which places a high demand (Power Surge) on the electrical supply system and often results in extra cost and larger power generators.

| Model         | Max. Feed Size | Rotating Speed | Capacity   | Power | Dimension      |
|---------------|----------------|----------------|------------|-------|----------------|
|               | (mm)           | (r/min)        | (t/h)      | (kw)  | (mm)           |
| ST-ZSW380×95  | 500            | 500-800        | ~ 150      | 11    | 3970×2259×1882 |
| ST-ZSW420×110 | 580            | 500-800        | 150~280    | 15    | 4392×2519×2004 |
| ST-ZSW490×110 | 580            | 500-800        | 150~350    | 18.5  | 5090×2545×2015 |
| ST-ZSW600×130 | 850            | 500-800        | 400~600    | 37    | 6124×2863×2052 |
| ST-ZSW600×150 | 900            | 500-800        | 400~700    | 45    | 6271×2369×2698 |
| ST-ZSW600×180 | 1050           | 600-850        | 400 ~ 1000 | 55    | 6268×2653×3090 |





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