

### BARODA IRON & ENGINEERING CO. PVT. LTD

INNOVATIVE TECHNOLOGY for **C**RUSHING



# BIEPL Vibrating Screen

#### Application

Baroda Iron Screens are an excellent choice especially if your output and productivity demands are stringent. Baroda Iron circular motion screen is a versatile sieving machine capable of handling wide range of material It is widely used for Stone, Sand, Gravel, Slag, Sinter, Coal, Limestone, Coke, Chemicals, Clay, Brick, Pottery, Refractories, NPK, Urea, Rock Phosphate and in other various application.

#### **Operating Principle**

The screen frame or basket along with vibrating mass are supported on set of springs mounted on rigid base frame. The eccentric mass mounted on a rotating horizontal shaft or eccentric shaft located close to the CG of the basket impart oscillation circular motion to the basket due to centrifugal force. It produces a steep angle of throw to particle lying on the screen deck which is having downward slope of 150 to 220.

While oversize particles move over the screen deck towards discharge end, the undersize particles escape through the opening below. Multiple deck arrangement separates required particles size in accordance with the screen opening through multiple chutes arranged at the discharge end and below. Parameters like size distribution, shape, bulk density, moisture, separation size, capacity etc. are important for selection and performance of screen.

#### **Constructional Features**

The basket is having two vertically parallel side plates connected through flanged cross beams or pipes bolted with them. A flanged tubular housing bolted with side plate near the CG of basket is containing the eccentric shaft with eccentric masses at both ends. It is mounted on vibration duty grease or oil lubricated self-aligning spherical roller bearings through flanged bearing housing bolted to side plate.

The basket is supported by 4 set of mechanical coil spring in parallel or "V" orientation. Screen deck panels made of wire mesh (Carbon steel or spring steel) having suitable opening are mounted tightly against a number of cross and longitudinal support, so orientated as to give a gentle curvature for tight sitting by side stretching or longitudinal tension device. The rubber or poly-urethane panels are mounted on specially design flat deck frame. Maximum number of decks can be four and half.

The drive is through V belts with motor supported on hinged spring loaded frame or by cardan shaft. Specially designed eccentric V pulley in phase with basket motion is also provided to ensure a smooth drive

#### Key Features

- All bolted construction, either with HT bolts or with Huck bolts
- Vibration duty self-aligning spherical roller bearings are used
- Stress relieving wherever required.
- High workmanship with quality material of BIEPL screen provides long service life with minimum maintenance
- Full dust cover is available in certain size.

## **Technical Data Sheet**

| Type of screen  | No. of deck      | Min size       | Max size    |
|-----------------|------------------|----------------|-------------|
| Circular motion | One              | 0.8m x<br>1.7m | 2.5m x 6.6m |
|                 | Two              | 0.8m x<br>1.7m | 2.4m x 6.0m |
|                 | Three            | 0.8m x<br>1.7m | 2.4m x 6.0m |
|                 | Four             | 1.0m x<br>2.5m | 2.0m x 5.0m |
|                 | Four and<br>Half | 1.0m x<br>2.5m | 2.0m x 5.0m |

Note:

Baroda Iron & Engineering Co. Pvt. Ltd. reserves the right to make changes to the information on this data sheet without prior notification to users.



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