Other Vibrating Feeders & Screens

TRF Ultraflo Screens:

- Offer all benefits of horizontal mounting.
- Optimum utilisation of space due to minimum head room.
- Produce more tonnage at lower cost.
- Maximum clearance between decks eliminates the need for bulk materials.
- Easy maintenance: The exciter unit can be removed from the frame and maintenance can be carried out on the floor.

Technical Specifications:

- Squirrel cage induction motor: generally directly connected with the exciter unit by a cardan shaft. The exciter units can also be driven by V-belts and sheaves, if desired.
- An important characteristic of the exciter is the so-called static moment, which is the product of an unbalance mass and its radius of rotation.
- The static moment and with it the centrifugal force generated by the exciter can be gradually adjusted by adding or removing the unbalance weights. The magnitude of the static moment as a function of number and configuration of unbalance weights can be taken from the technical data.
- Two or three exciters are connected together side by side by a cardan shaft.
- The Screen size can vary from 915 mm to 2500 mm width.
- Screens are designed to suit all types of screening media and can be used with materials of different moisture and temperature conditions.

Truflo Vibrating Feeders & Screens:

- Circular motions: The traditional drive unit of screens consists of single shaft with counter weights. These are mostly used for medium to large size screens and for coarse separation. These screens are inclined and very versatile because of the available provisions for changing the stroke and rotation, if required.
- Elliptical motions: TRF Truflo Vibrators produce three-way motion with horizontal, vertical and elliptical components. These are used for rugged duty condition for medium to very large size screens. These are also very widely used for dewetting purposes.

Ultraflo Vibrating Feeders & Screens:

- Uniform motion throughout ensures accurate sized product.
- Flexibility in production capacity安稳.
TRF Vibrating Screens are synonymous with high quality and efficiency in all industries where bulk materials, solids and powders are processed. TRF Vibrating Screens are rugged and designed for a long lifetime.

Due to wide choice of available design of TRF Vibrating Screens, it is possible to select and deliver the most efficient and advantageous Screen for each particular application. Any type of screening problem can be solved on the basis of the vast experience gathered by TRF on account of large number of screens supplied for wide variety of materials.

**Ultraflo Vibrating Unit**

TRF Ultraflo vibrating units consist of one or two units, connected together by cardon shaft. Ultraflo type vibrating units produce linear vibrations. They are used for large and ultra-large Screens and for heavy duty applications. These are also used for dewatering purposes.

**General**

TRF Vibrating Screens are synonymous with high quality and efficiency in all industries where bulk materials, solids and powders are processed. TRF Vibrating Screens are rugged and designed for a long lifetime.

**Performance**

The exciter has two shafts equipped with eccentric weight. They rotate in opposite directions by means of built-in gear and produce linear motion.

There are five holes on the eccentric weight for making adjustment in static moment in assembly. The desired stroke can be achieved by removing or adding adjusting weight in these holes.

**Advantages**

Ultraflo Screen offers all benefits of horizontal mounting. Because of minimum head room, utilisation of space is optimum.

Ultraflo Screen produce more tonnage at lower cost. Maximum clearance between decks eliminates the blockages caused by surging of feed material. The exciter mounted on the top of the unit or under slung in case of the feeder causes no impediment to free material flow.

Easy maintenance - The exciter unit can be removed from the frame and maintenance can be carried out on the floor.

The complete range of models, types and sizes you ever need

The Ultraflo Screens are designed for varied duty conditions. Styles TUF-11, TUF-12, TUF-13 are designed in respect to the internal diameter of the double row spherical roller bearings. Fixed with the exciter shafts, such as TUF-7 for 70 mm, TUF-9 for 90 mm, TUF-11 for 110 mm, TUF-12 for 120 mm and TUF-13 for 130 mm ID bearings, respectively.

The Screen size can vary from 915 mm to 2000 mm with and length from 3 m to 9 m with single, double and triple deck arrangements.

Screens are designed to suit all types of screening media such as perforated plates, welded grids, mesh clothes, rubber or polyurethene panels. In case of dewatering application, stainless steel wedge wire panels are fitted.

**Vibrating Unit**

The correct selection of vibrating unit is very important for constant long life, screening efficiency, low operating cost and highest possible output. TRF has the solution due to the availability of the design of different types of drive units apart from Ultraflo unit.

**Ultraflo Vibrating Feeders & Screens**

The spindle cage induction motor is generally directly connected with the exciter unit by the cardon shaft. The exciter units can also be driven by V-belts and shafts, if desired.

**TUF-13**

TUF-13, TUF-9, TUF-7

They rotate in opposite directions by means of built-in gear and produce linear motion.

The magnitude of the static moment - as a function of number and configuration of unbalance weights-can be taken from the chart “Static Moment of Directed Force Exciters”. Number and configuration of unbalance weights are marked by white and black circles.

**Cardon Shaft Drive Arrangement**

Two or three exciters are connected together side by side by cardon shaft. The intermediate flanges bolted to the exciter segment are provided with split fitting. This ensures correct positioning of the cardon shaft.

**OTHER FEATURES OF TRF ULTRAFLO VIBRATING FEEDERS & SCREENS**

**Salient Features**

<table>
<thead>
<tr>
<th>Range &amp; Capacity</th>
<th>Range of Moisture Content</th>
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The spindle cage induction motor is generally directly connected with the exciter unit by the cardon shaft. The exciter units can also be driven by V-belts and shafts, if desired.

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Ultraflo Vibrating Feeders & Screens

General
TRF Vibrating Screens are synonymous with high quality and efficiency in all industries where bulk materials, solids and powders are processed. TRF Vibrating Screens are rugged and designed for a long lifetime.

Due to wide choice of available design of TRF Vibrating Screens, it is possible to select and deliver the most efficient and advantageous Screen for each particular application. Any type of screening problem can be solved on the basis of the vast experience gathered by TRF on account of large number of screens supplied for wide variety of materials.

Ultraflo Vibrating Unit
TRF ultraflo vibrating units consist of one or two units connected together by eccentric shafts. Ultraflo type vibrating units produce linear vibrations. They are used for large and ultra-large Screens and for heavy duty applications. These are also used for de-watering purposes.

Principal of Operation (Refer. Fig. No.1)
The oscillating motion of the vibrating equipment [Screen/Feeder] is imparted by the unbalance masses mounted on the two extended shafts rotating at the same speed in opposite direction. The exciters are placed symmetrically about a line at right angle to the exciter base passing through the centre of gravity of the frame. As the resultant force due to unbalance masses passes through this line, it is called drive line or line of action. The total displacement in another direction is called "stroke".

Performance
The exciter has two shafts equipped with eccentric weight. They rotate in opposite directions by means of built-in gear and produce linear motion. There are five holes on the eccentric weight for making adjustments in static moment in assembly. The desired stroke can be achieved by removing or adding adjusting weight in these holes.

Ultraflo Screen offers all benefits of horizontal mounting. Because of minimum head room, utilisation of space is optimum. Ultraflo Screens produce more tonnage at lower cost. Maximum clearance between decks eliminates the blockages caused by surging of feed material. The exciter mounted on the top of the unit or under stung in case of the feeder causes no impairment to free material flow.

Easy maintenance - The exciter unit can be removed from the frame and maintenance can be carried out on the floor.

The complete range of models, type and sizes you ever need
The Ultraflo Screens are designed for varied duty conditions. Stiles TUF-7, TUF-9, TUF-11, TUF-12 and TUF-13 are designed in respect to the internal diameter of the double row spherical roller bearings fitted with the exciters shafts such as TUF-7 for 70 mm, TUF-9 for 90 mm, TUF-11 for 110 mm, TUF-12 for 130 mm and TUF-13 for 150 mm ID bearings, respectively.

The Screen size can vary from 915 mm to 2500 mm width and length from 3 M to 6 M with single, double and triple deck arrangements. Screens are designed to suit all types of screening media such as perforated plates, welded grates, mesh clothes, rubber or polyurethane panels. In case of de-watering application, stainless steel wedge wire panels are fitted.

Vibrating Unit
The correct selection of vibrating unit is very important for constant long life, screening efficiency, low operating cost and highest possible output. TRF has the solution due to the availability of the design of different types of drive units apart from Ultraflo unit.

Saltent Features

| Range & Capacity | The range & capacity of any screen depend on sieve analysis, half side factors, % of fines, etc. TRF has a very advance system of screen selection which has been developed based on the vast knowledge base & field data. TRF screen can handle a vast range of material. Few examples are -
<table>
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<tr>
<td>Load In kg</td>
<td>0 - 4500 kg</td>
</tr>
<tr>
<td>Stroke</td>
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Materials
TRF screen has capability to handle entire spectrum of material having varied moisture (solid). Different technology used depends upon moisture content. Generally dry screening is used up to 10% moisture. More than 15%, wet screening is recommended.

Temperature
TRF has screen with special arrangement to handle high temperature material. The exciter assembly is suitably designed to handle high temperature.

Ultraflo Screen
Vibropulse Screen purposes. These are also very widely used for dewatering for rugged duty condition for medium to very large size.

TRF Truflo Vibrators produce three-way motion with inclined and very versatile because of the available provisions depending on the number of unbalance motors used. They are generally used for fine separation with high capacity.

(i) Circular motions

The traditional drive unit of screens consist of single shaft with counter weights. These are mostly used for medium to large size screens and for coarse separation. These screens are inclined and very versatile because of the fire available provisions for changing the stroke and rotation, if required.

(ii) Elliptical motions

TRF Truflo Vibrators produce three-way motion with horizontal, vertical and elliptical components. These are used for rugged duty condition for medium to very large size screens. These are also very widely used for dewatering purposes.

(iii) Unbalance Motor

These vibrating units produce circular or linear vibrations, depending on the number of unbalance motors used. They are generally used for fine separation with high capacity.

The correct selection of vibrating unit is very important for constant long life, screening efficiency, low operating cost and highest possible output. TRF has the solution due to apart from Ultraflow unit.