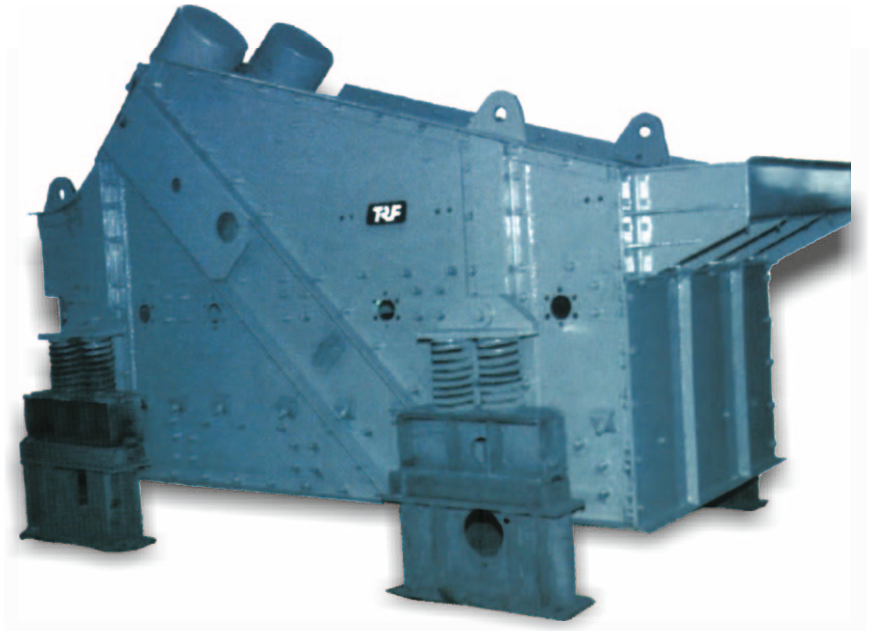
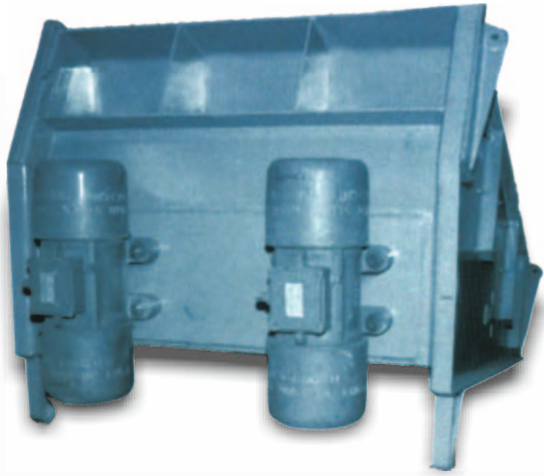


Unbalance Motor Feeders & Screens



TECHNICAL SPECIFICATIONS

- Stroke and slope adjustment feature
- Uniform motion throughout ensures accuracy of output
- Robust and reliable
- Minimum downtime for replacement of unbalance motor

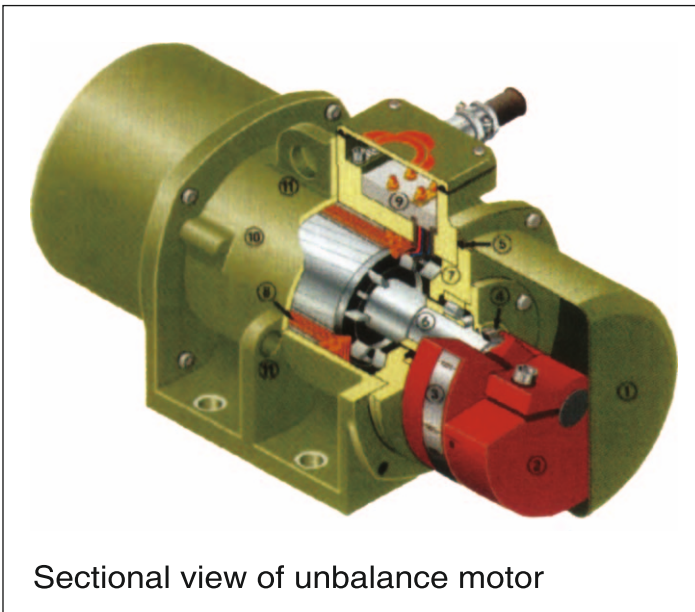
Unbalance Motor Feeders & Screens

General

TRF Vibrating Feeders with unbalance drives are economical conveying means for all bulk material. They are used where products are to be fed either continuously or in batches, for instance-

- Despatching bulk materials from bins.
- Feeding crushers, mixers, furnaces and scales,
- Feeding conveyor belts, bucket elevators, vibratory screens, loading and sorting plants.

Compared to other conveying means, TRF's Vibrating Feeders with unbalance motors have low energy consumption and cause little pollution. A trough is provided with wear resistant liners and they do not influence the quality and character of the product they handle.



Unbalance drive

The feeder and screen are driven by two heavy duty unbalance motors which are firmly fixed to the Feeder & Screen trough in a specific angle. The major advantages of unbalance drives are -

- Increased centrifugal forces in relation to their dead weight.
- Simple to connect and operate.
- The feeders and screens with unbalance motors operate with linear oscillations as explained in the principal of operation. The unbalance forces can be altered, when the machine is not in operation, either by displacement, removing or by adding unbalance weights.
- Unbalance Motors provided with the Feeder or Screen are robust, reliable in operation, have a high loading capacity and do not require maintenance. They have generously dimensioned special heavy duty cylindrical roller bearings, vibration proof winding, totally enclosed with IP-55 degree of protection and are suitable for weather proof outdoor application.

Principle of Operation (Referring Fig No. 1)

The oscillating motion of the Feeder/Screen is imparted by the unbalance masses mounted on the extended shaft of the two motors rotating at the same speed but in opposite directions. These motors are placed symmetrically about a line at right angle to the motor 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 line of action. The total displacement in either direction is called "stroke".

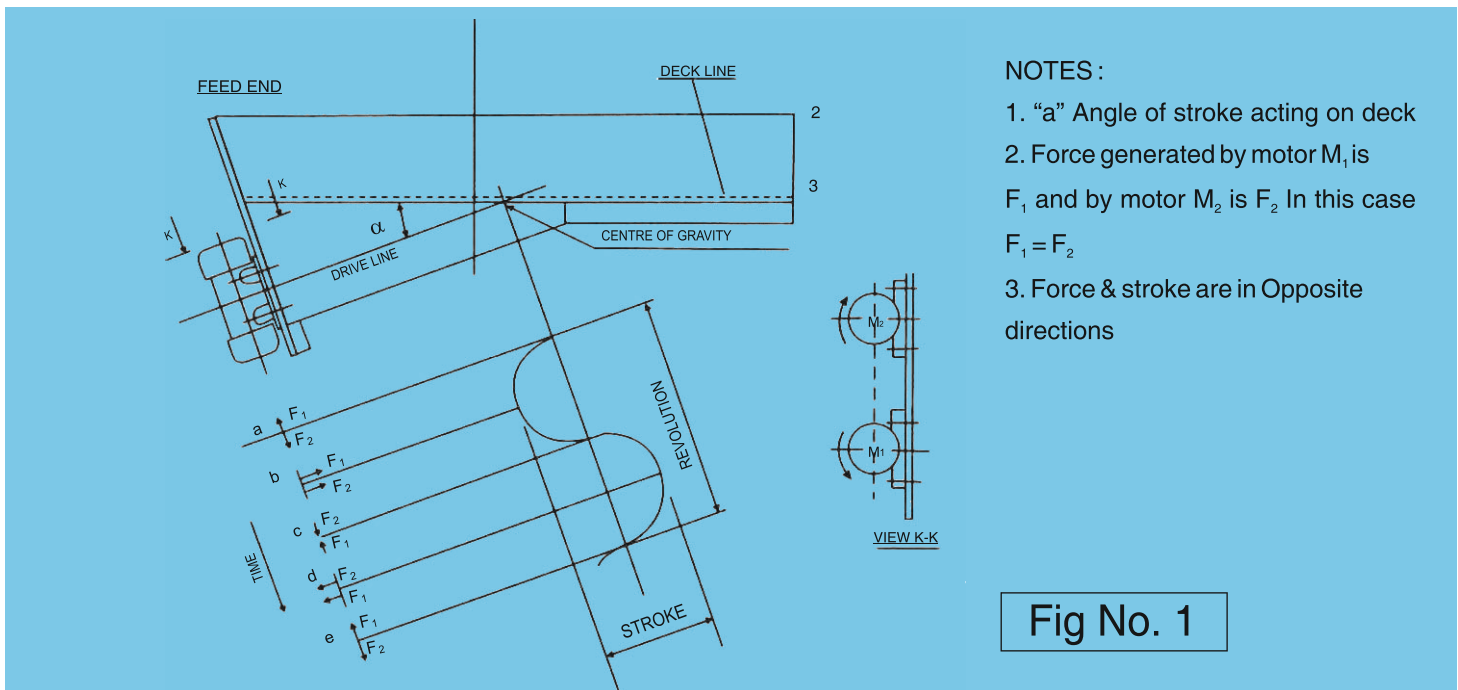
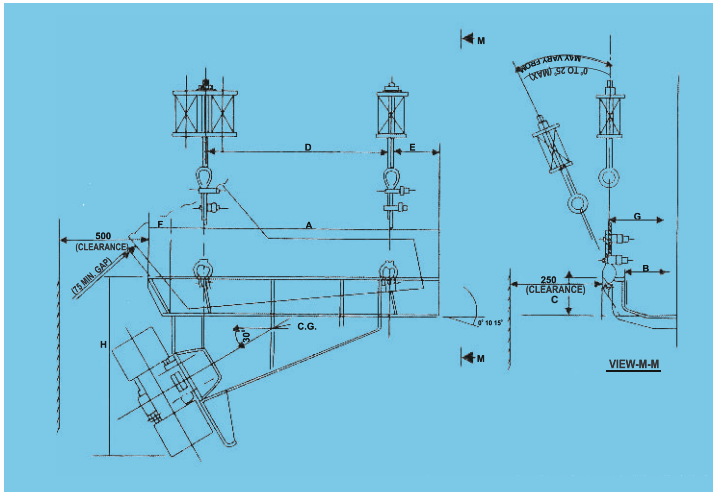


Fig No. 1



Vibrating Feeders (Suspended Type)

Dimension (mm):

FEEDER SIZE W L	A	B	C	D	E	F	G	H
600x1200	1200	600	200	775	275	115	760	915
600x1500	1500	600	200	975	375	115	760	965
750x1500	1500	750	200	975	375	115	900	980
900x1500	1500	900	250	975	375	144	1100	1050
1000x1800	1800	1000	250	1170	450	173	1200	1150
1200x1500	1500	1200	300	975	375	173	1400	1150
1200x1800	1800	1200	300	1170	450	173	1400	1150
1200x2000	2000	1200	300	1300	500	173	1400	1200
1400x2000	2000	1400	300	1300	500	173	1600	1250
1500x2000	2000	1500	300	1300	500	173	1700	1250
1500x2500	2500	1500	300	1625	625	173	1700	1390
1800x3000	3000	1800	300	1950	750	173	2000	1500
2000x3000	3000	2000	300	1950	750	173	2000	1550

Note : 1. The dimensions are approximate and should not be used for construction purposes. Certified drawings will be furnished on receipt of the order.

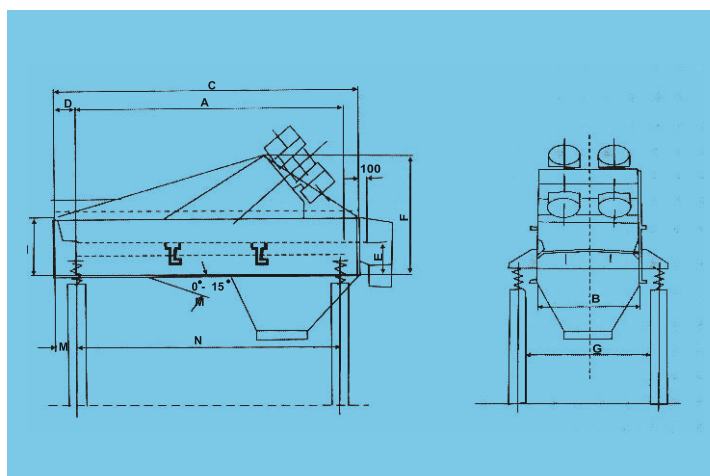
2. If desired, foot mounted type Feeders can also be supplied.

General (For Screen)

In industries where bulk materials, solids and powders are processed, TRF Vibrating Screen is synonymous with high quality and efficiency. TRF Vibrating Screens are rugged and designed for a long life time and minimum operating cost with low maintenance. Due to wide choice of available TRF vibratory units. It is possible to select and deliver the most efficient and advantageous Screen for each particular application.

The correct drive selection is very important for constant screening efficiency, long life, low operating cost and highest possible output. The small to medium size Screens for fine screening applications are provided with unbalance motor drive unit.

This straightforward drive unit produces circular or linear motion vibrations depending on number of drive units.



Single Deck with Dual Motors

Two unbalance motors mounted on the Screen structure & rotating in opposite direction produce linear vibrations.

Due to linear vibrations the Screen can operate without any declination, hence head room required for the Screen installation is considerably reduced.

All Screens & Feeders are despatched only after satisfactory no load trial run at TRF works.

Single Deck with Dual Motors

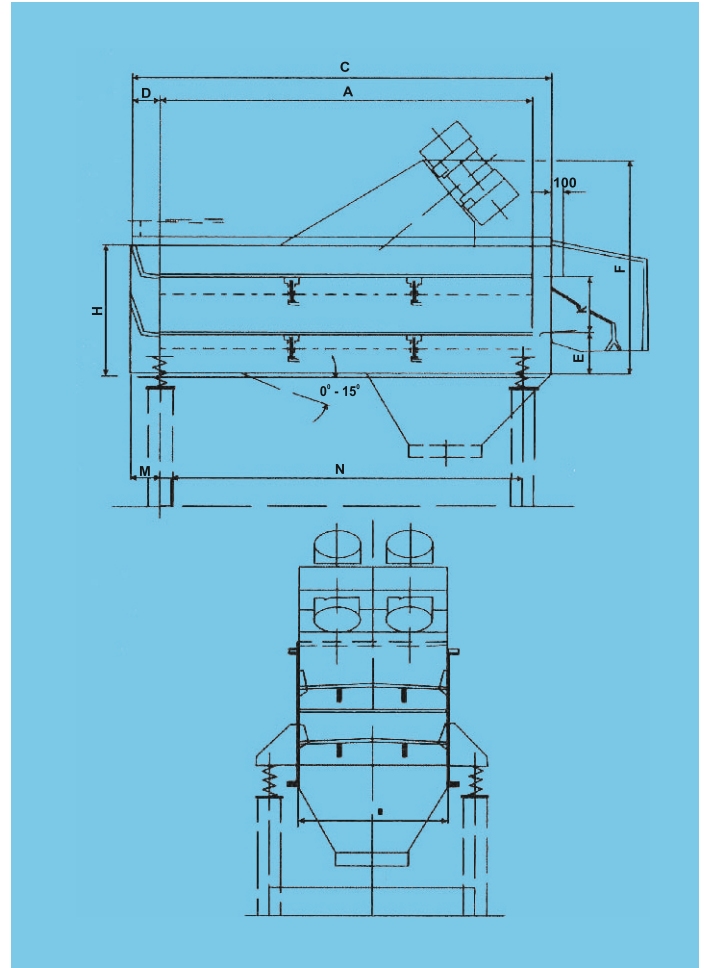
Dimension in mm												
SIZE	B	A	C	D	E	F	G	H	M	N	W	K
W L											(Kg)	(Kw)
500 x 1000	500	1000	1180	100	180	720	900	400	120	940	370	2X0.8
x 1500	500	1500	1680	100	160	750	900	400	120	1440	400	2X0.8
x 2000	500	2000	2180	100	180	750	900	400	120	1940	580	2X0.95
600 x 1500	600	1500	1680	100	180	750	1000	400	120	1440	590	2X0.95
x 2000	600	2000	2180	100	180	820	1000	400	120	1940	850	2X1.4
x 2500	600	2500	2680	100	180	820	1000	400	120	2440	920	2X1.4
800 x 1500	800	1500	1770	150	200	820	1200	400	170	1450	900	2X1.4
x 2000	800	2000	2270	150	200	930	1200	400	170	1950	930	2X1.4
x 2500	800	2500	2770	150	220	980	1200	450	170	2450	1180	2X2.2
1000 x 1500	1000	1500	1770	150	220	980	1400	450	170	1450	1100	2X2.2
x 2000	1000	2000	2270	150	220	980	1400	450	170	1950	1250	2X2.2
x 2500	1000	2500	2770	150	260	1030	1400	500	170	2450	1400	2X2.2
x 3000	1200	3000	3270	150	260	1030	1400	500	170	2950	1750	2X3.0
1200 x 2500	1200	2500	2770	150	300	1120	1600	550	170	2450	1700	2X3.0
x 3000	1200	3000	3270	150	300	1120	1600	550	170	2950	1900	2X3.0
x 3500	1200	3500	3770	150	300	1120	1600	550	170	3450	2050	2X3.0
x 4000	1200	4000	4270	150	350	1220	1600	600	170	3950	2300	2X4.0
1400 x 3000	1400	3000	3270	150	300	1220	1800	600	170	2950	2200	2X4.0
x 3500	1400	3500	3770	150	350	1220	1800	600	170	3450	2350	2X4.0
x 4000	1400	4000	4270	150	350	1270	1800	650	170	3950	2600	2X6.0
1800 x 4000	1800	4000	4000	600	300	1480	2270	700	600	2800	3650	2X4.0

Note 1. The dimensions are approximate and should not be used for construction purposes. Certified drawings will be furnished on receipt of the order.

Double Deck with Dual Motors

Dimension in mm														
SIZE		B	A	C	D	E	F	G	H	K	N	G	N	
W	L											(Kg)	(Kw)	
500 x 1000		500	1000	1180	100	180	1100	900	750	350	120	920	600	2X0.95
x 1500		500	1500	1680	100	180	1176	900	750	350	120	1440	770	2X1.4
x 2000		500	2000	2180	100	180	1280	900	750	350	120	1940	950	2X1.4
600 x 1500		600	1500	1680	100	180	1280	1000	750	350	120	1440	940	2X1.4
x 2000		600	2000	2180	100	180	1280	1000	750	350	120	1940	1070	2X1.4
x 2500		600	2500	2680	100	180	1280	1000	750	350	120	2440	1270	2X2.2
800 x 1500		800	1500	1770	150	200	1330	1200	800	370	170	1450	1200	2X2.2
x 2000		800	2000	2270	150	220	1330	1200	800	370	170	1950	1340	2X2.2
x 2500		800	2500	2270	150	220	1370	1200	800	370	170	2450	1520	2X2.2
1000x1500		1000	1500	1770	150	220	1330	1400	800	370	170	1450	1600	2X3.0
x 2000		1000	2000	2270	150	220	1370	1400	800	370	170	1950	1800	2X3.0
x 2500		1000	2500	2770	150	220	1370	1400	800	370	170	2450	1950	2X3.0
x 3000		1000	3000	3270	150	220	1370	1400	800	370	170	2950	2550	2X6.0
1200x2500		1200	2500	2770	150	250	1440	1600	870	400	170	2450	2450	2X6.0
x 3000		1200	3000	3270	150	250	1500	1600	870	400	170	2950	2750	2X6.0
x 3500		1200	3500	3770	150	250	1500	1600	870	400	170	3450	2800	2X6.0
x 4000		1200	4000	4270	150	250	1500	1600	870	400	170	3950	2950	2X6.0
1400x3000		1400	3000	3270	150	250	1500	1800	870	400	170	2950	2900	2X6.0
x 3500		1400	3500	3770	150	250	1570	1800	870	400	170	3450	3100	2X6.0
x 4000		1400	4000	4270	150	250	1570	1800	870	400	170	3950	3850	2X9.5

Note 1. The dimensions are approximate and should not be used for construction purposes. Certified drawings will be furnished on receipt of the order.



Double Deck with Dual Motors

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