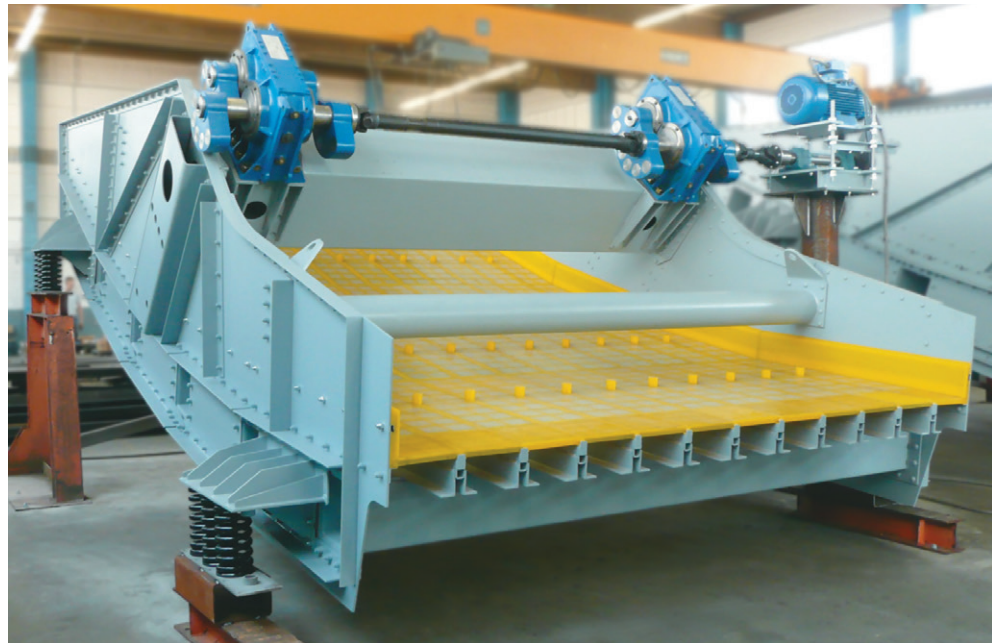


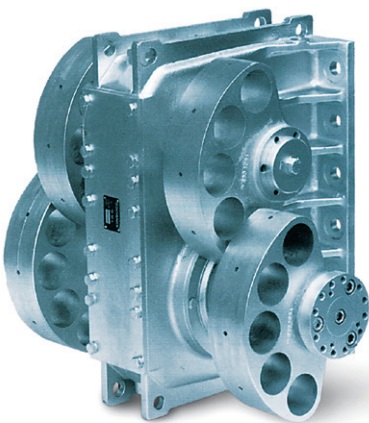


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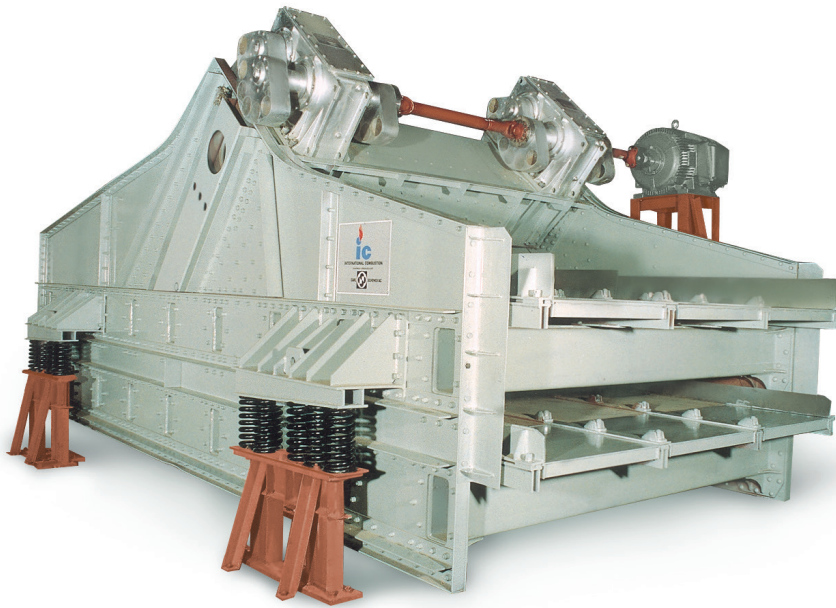
DIRECT FORCE EXCITERS



IC Directional Force Exciters (Vibrators) are known for their long service life, their unexcelled quietness of operation and their high adaptability. They have been used for many years very successfully to drive vibrating machines. IC offers a closely graded series of directional force exciters.



Direct Force Exciters



For all directional force exciters suitable universal joint shafts are available. If required by the application, braking devices and frequency converters can be used for infinite variability of speed.

Advantages

- Long service life
- Quiet operation
- Favourable price/performance ratio
- Large setting range of exciter force – good adaptation to application
- Speeds of 750 rpm and 1000 rpm permit the selection of optimum speed and amplitude (of particular importance in the case of vibrating screens)
- Closely graded series. For each application the optimum exciter.
- Unsymmetrical installation of additional masses – change of directional force
- Most simple maintenance

Application

IC DF Directional Force Exciters are predominantly used to drive vibrating conveyors, feeders and screens, but also, for instance, for strength tests of components and complete structures.

Principle of operation

The IC DF Directional Force Exciter generates a force (F) with sinusoidal course acting along line (a - a).

It has two shafts fitted with unbalanced masses, which are caused to rotate by integrated gear in opposed directions at the same speed. The centrifugal force components F_1 & F_2 acting in direction (a - a) add up to the resultant force (F)

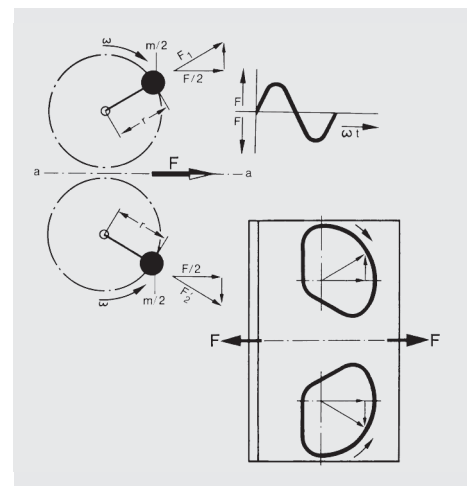
The components occurring in a vertical direction to (a - a) cancel each other.

Construction

The Directional Force Exciter is driven from an external standard electric motor via a universal joint shaft. If an appropriate drive exists, the speed can be infinitely varied during operation. When the machine is shut down, the unbalanced masses can be changed by removal or installation of additional masses (unbalance weights of steel or lead). The force generated by the exciter and the vibration amplitude of the vibrating machine change accordingly and thus can be adapted to the material flow, or application.

Anti-friction bearings and gearing are accommodated in a housing with massive noise damping and oil immersion lubrication.

Maintenance is limited to an occasional check of the oil level, or oil change at prescribed intervals.



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REGISTERED OFFICE

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