

NF Electromechanical Vibrating Feeders

Positive drive components ensure quiet operation at reduced energy cost.

Innovative technology results in larger loads driven by less energy.

With Jeffrey Rader NF electromechanical vibrating feeders, burden and dampening actually boost feeder performance. That's because our feeders are precision-tuned near their own natural frequencies. They are "in tune" with the materials they carry.

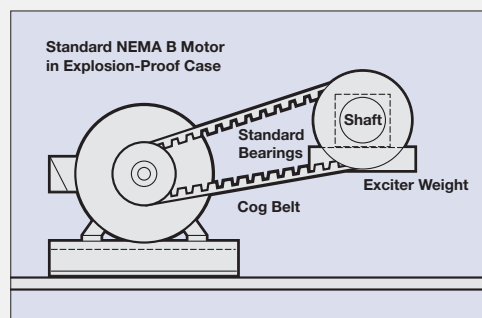
These sub-resonant tuning characteristics ensure efficient material transference, promote quieter operation, and reduce energy and maintenance costs.

Rugged deck design

Computer-designed deck with rugged drive structure handles large lumpy materials with greater reliability.

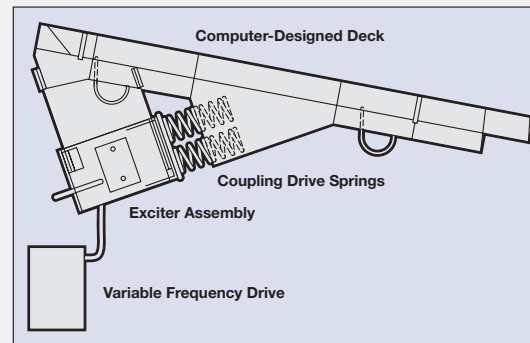
Positive drive cog belt

The positive drive cog belt eliminates high-tension friction and reduces wear commonly associated with V-belt drives. Maintenance costs are reduced because frequent belt adjustments or replacements are not required. Constant belt tension prevents slippage, extending bearing life.



Steel coil, coupling drive springs

Steel pre-compressed coupling drive springs ensure constant spring rates for greater operation stability. Steel springs feature a low dampening coefficient, as well as consume less power compared with rubber or other type drive springs.



Exciter assembly

Totally enclosed in a rugged steel housing, the exciter assembly transmits vibrating forces, inducing conveying action in materials. It features standard, premium motor, motor-driven shaft with eccentric weight, plus heavy-duty, long-life, standard flange bearings which are externally mounted for ease of maintenance.

Standard inverter duty motor

The standard, heavy-duty motor reduces downtime, requires less maintenance, and has off-the-shelf availability.

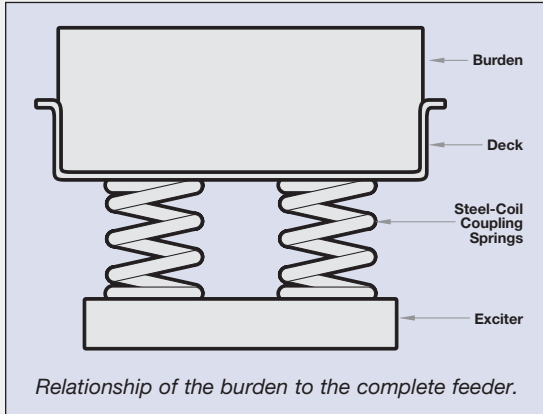
Frequency controls

Remote or local controllers, with automatic manual control circuits, provide for the use of plant PLC's for batching and inventory control.



Minimum drive, maximum load

Precision sub-resonant tuning drives large mass with minimal horsepower. The burden is critical to the design, and it can actually improve the performance of the unit. Burden has a mass effect and a dampening effect on the mechanical vibration system of the feeder.



Minimum stroke variation

Maximum stability under varying load requirements. This stability is the result of minimal stroke variances between empty and loaded conditions with a properly designed hopper. Jeffrey Rader has achieved this stability by engineering counteracting mass and dampening effect into the system. Adjusting the exciter frequency creates a smooth, effective variation of capacity (conveying speed). A simultaneous increase or decrease of exciter frequency and stroke can be achieved by adjusting motor speed.

Feeder capacities and dimensions

Jeffrey Rader's innovative design features allow for increased capacities.

Smaller, more efficient feeders can be specified with systematic application of throat opening to deck length. Under these circumstances, we can advise changes in hopper design for optimum performance.

Precisely engineered combinations of throat opening, deck length, angle of repose, and desk slope applied to a particular application can result in larger capacities in reduced operating costs.

Applications

Electromechanical vibrating feeders are ideal for bulk material feeding:

- Coal
- Aggregates
- Minerals
- Industrial materials
- Various blending materials for steel manufacture

Other features

- Reduced energy cost
- All components made in North American
- CE compliant



USA: Corporate Headquarters
 Jeffrey Rader Corporation
 398 Willis Road
 Woodruff, SC, USA 29388
 Phone: 864.476.7523
 Toll-Free (North America): 800.615.9296
 Fax: 864.476.7510

CANADA: Montreal, Quebec
 Jeffrey Rader Canada
 2350 Place Trans-Canadienne
 Dorval, Quebec
 H9P 2X5 Canada
 Phone: 514.822.2660
 Fax: 514.822.2699

CANADA: Vancouver, BC
 Jeffrey Rader Canada
 Unit 2, 62 Fawcett Road
 Coquitlam, BC
 V3K 6V5 Canada
 Phone: 604.299.0241
 Fax: 604.299.1491

SWEDEN: Stockholm
 Jeffrey Rader AB
 Domnarvsgatan 11
 163 53 Spånga
 Stockholm, Sweden
 Phone: +46 8 56 47 57 47
 Fax: +46 8 56 47 57 48