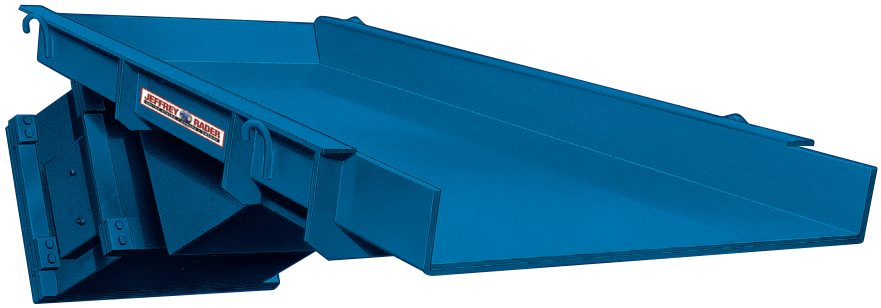
NF Electromechanical Vibrating Feeders

TERRASOURCE GLOBAL

HANDLING A WORLD OF MATERIALS

JEFFREY RADER NF Electromechanical Vibrating Feeders

Innovative technology results in larger loads driven by less energy.



Features/Advantages

With Jeffrey Rader brand NF Electromechanical Vibrating Feeders, burden and dampening actually boost feeder performance because these feeders are precision tuned near their own natural frequencies. In other words, NF feeders are “in tune” with the materials they carry.

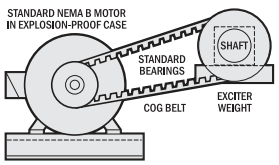
These sub-resonant tuning characteristics ensure efficient material transference, promote quieter operation and reduce energy and maintenance costs.

Rugged Deck Design

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

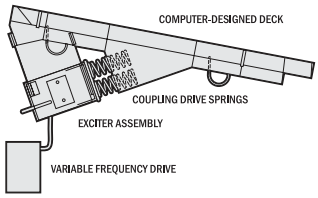
Positive Drive Cog Belt

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 other types of drive springs.



Exciter Assembly

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

Standard Inverter Duty Motor

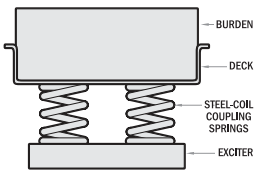
The standard, heavy-duty motor reduces downtime, requires less maintenance and has off-the-shelf availability.

Frequency Controls

Remote or local controllers, with automatic manual control circuits, enable plant PLCs to be used for batching and inventory control.

Minimum Drive, Maximum Load

Precision sub-reasonant 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.



Relationship of the burden to the complete feeder.

OUR FLAGSHIP BRANDS

GUNDLACH CRUSHERS · JEFFREY RADER · Pennsylvania Crusher

www.terrasource.com ■ info@terrasource.com

TERRASOURCE GLOBAL
HANDLING A WORLD OF MATERIALS

JEFFREY RADER NF Electromechanical Vibrating Feeders

Minimum Stroke Variation

Maximum stability under varying load requirements is the result of minimal stroke variances between empty and loaded conditions with a properly designed hopper. This stability has been achieved 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.

Applications

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

Other Features

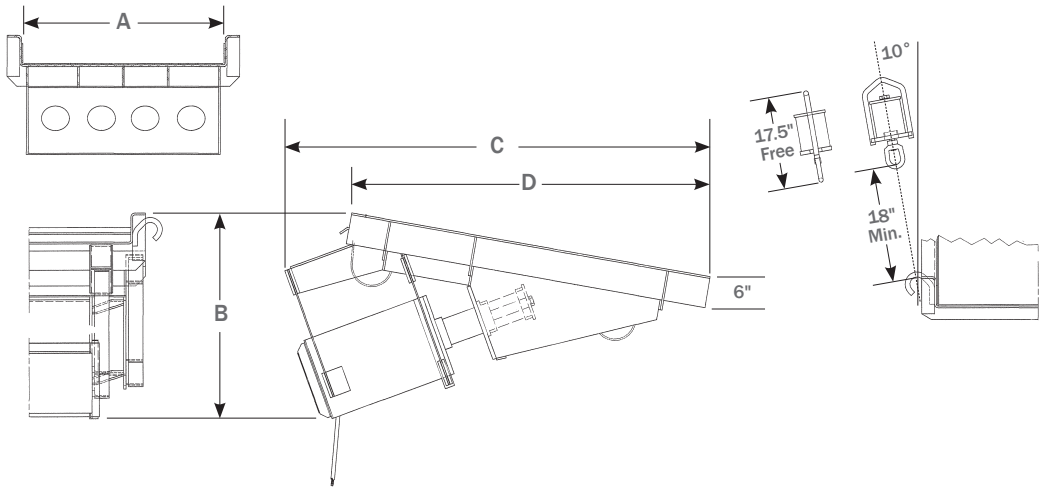
- Reduced energy cost
- CE compliant

Feeder Capacities and Dimensions

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, TerraSource Global engineers can advise changes in hopper design for optimum performance.

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

Dimensions and Weights



APPROXIMATE LAYOUT DIMENSIONS* AND SHIPPING WEIGHTS IN. (MM)

MODEL NO.	CAPACITY (IN STPH)	SLOPE	HP	A	B	C	D	LBS (KG)
NF 2405	240	10°	2	24" (610)	40" (1016)	85.75" (2178)	60.5" (1537)	1,285 (583)
NF 3005	300	10°	3	30" (762)	40" (1016)	87.5" (2223)	58.25" (1480)	1,465 (665)
NF 3606	480	10°	3	36" (914)	42" (1067)	88" (2235)	68.5" (1740)	1,680 (762)
NF 4207	600	10°	3	42" (1067)	44.5" (1130)	103.5" (2629)	76" (1930)	2,585 (1,173)
NF 4807	725	10°	3	48" (1219)	44.5" (1130)	103.5" (2629)	76" (1930	2,885 (1,309
NF 5408	810	12°	5	54" (1372)	45.75" (1162)	110.75" (2813)	96.25" (2445)	3,450 (1,565)
NF 6008	900	12°	5	60" (1524)	45.75" (1162)	110.75" (2813)	96.25" (2445)	3,970 (1,801)
NF 7208	1200	12°	5	72" (1829)	51" (1295)	117.75" (2991)	115" (2921)	4,235 (1,921)
NF 8410	1500	15°	7.5	84" (2134)	51" (1295)	117.75" (2991)	115" (2921)	5,950 (2,699)
NF 9610	1800	15°	10	96" (2438)	51" (1295)	117.75" (2991)	115" (2921)	6,965 (3,159)

Certified drawings will be furnished for installation. Installation supervision is available.

www.terrasource.com ■ info@terrasource.com