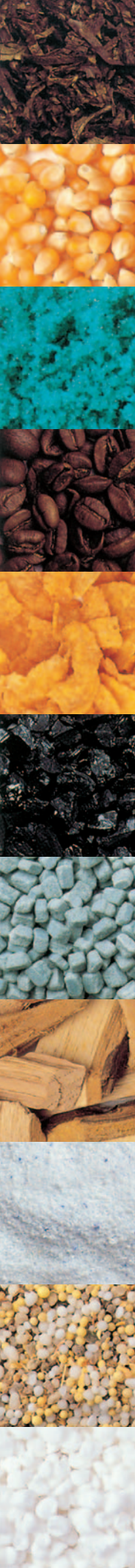


Solutions for the Mining Industry

We Make Your Work Flow

Carrier[®]
Vibrating Equipment, Inc.



TECHNOLOGY LEADER

Carrier Has the Right Technology to Fit Your Mining Application

Vibrating Screeners

Carrier's Vibrating Screeners feature a two bearing design that provides a Circular Motion, increasing the screening efficiency. Ideally suited for wet or dry screening, these machines are available in single, double or triple deck designs with grease or oil lubrication bearing systems. Capacities range up to 1,500 tons per hour.

Designed for the highest possible screening efficiency, Carrier's Vibrating Screeners are also available with Elliptical Motion drives that can solve difficult screening problems. This motion provides a high rate of travel at the feed end, providing a thin material bed and rapid stratification which separates the fines quickly. At the discharge end, the material flow is retarded, giving near-size particles additional time to pass the screen. Capacities range up to 500 tons per hour.

Direct Drive Feeders

Carrier's single mass Feeder Twin Drive units provide a linear motion for increased conveying speed. Simplicity of this drive design reduces maintenance cost and provides added reliability. Capacities range up to 800 tons per hour.

Natural Frequency Feeders

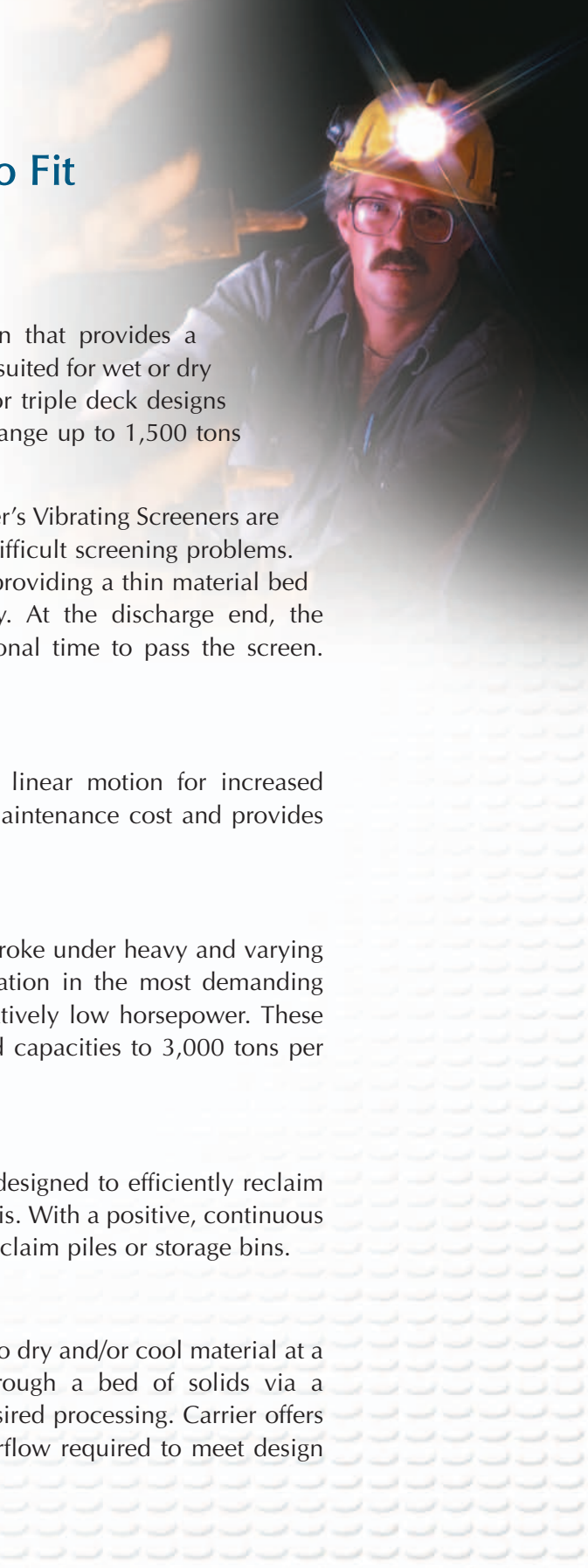
With a Natural Frequency Drive system that maintains its stroke under heavy and varying headloads, Carrier's vibrating feeders provide robust operation in the most demanding conditions. The natural frequency design also requires relatively low horsepower. These heavy-duty units are available in lengths up to 28 feet and capacities to 3,000 tons per hour.

Bin Dischargers and Storage Pile Dischargers

Carrier's Bin Dischargers and Storage Pile Dischargers are designed to efficiently reclaim product from storage piles and bins on a first-in, first-out basis. With a positive, continuous flow, these dischargers eliminate dormancy of material in reclaim piles or storage bins.

Vibrating Fluid Bed Processors

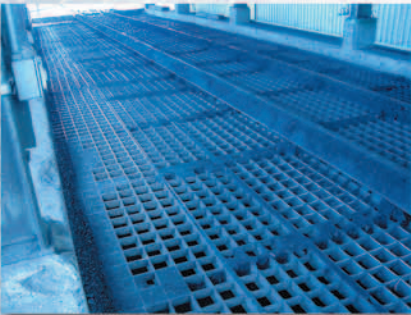
Custom designed Fluid Bed process equipment is designed to dry and/or cool material at a wide variation of feed rates. Process gas is directed through a bed of solids via a perforated plate to provide necessary airflow to achieve desired processing. Carrier offers extensive testing in our laboratory to determine optimal airflow required to meet design requirements. Customers are encouraged to witness testing.



FEEDERS



Mining application located in Jamaica, handling 1,000 MTPH of bauxite and limestone.



Feeders located beneath steel grating and storage hoppers at a rail car unloading station located outside Louisville, Kentucky.

Grizzly Feeders

At 72 inches wide by 20 feet long, Carrier's 30,000 pound Grizzly Feeder scalps material at 12 inches while receiving limestone rocks as large as 48 inches. The grizzly bars are fabricated from 1 inch thick AR400 steel for extended wear life.

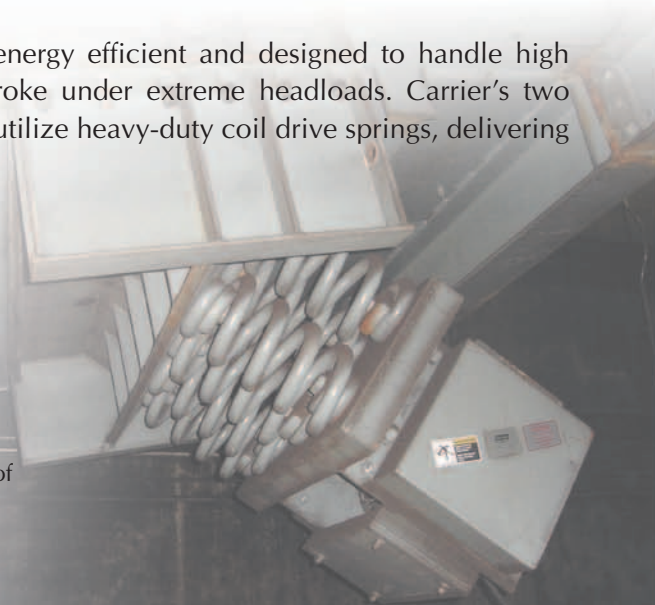
The load plate is lined with 3 inch thick steel-back rubber, designed to absorb material impact, while providing excellent wear life.



Vibrating Feeders

Natural Frequency Feeders are energy efficient and designed to handle high capacities, while maintaining stroke under extreme headloads. Carrier's two mass sub-resonant drive systems utilize heavy-duty coil drive springs, delivering a linear angle of attack along the full length of the pan, producing travel speeds up to 60 feet per minute.

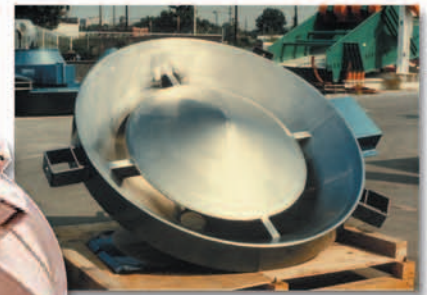
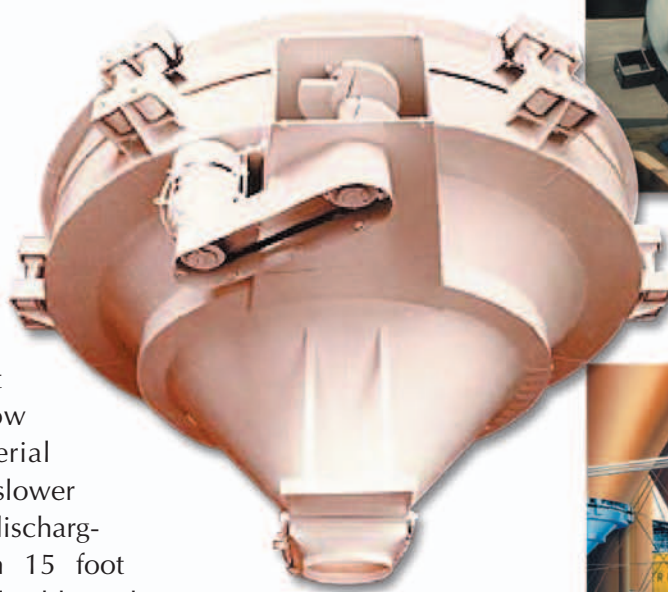
This application uses four 66 inch wide feeders delivering up to 700 TPH each of coal using only a 5 horsepower motor!



DISCHARGERS AND SCREENS

Bin Dischargers and Storage Pile Dischargers

Vibrating Bin Dischargers are proven to enhance the flow of bulk materials from storage. Material moves in and out of bins by either mass flow or plug flow. True mass flow moves material on a first-in, first-out basis, eliminating dormancy of material in the storage bin. Mass flow is approximated by sizing a bin discharger to the exact diameter of the bin. Plug flow eliminates dormancy but material along the edges moves at a slower velocity. Standard vibrating bin dischargers range from 2 foot through 15 foot diameter and are provided with flexible seals designed to provide a dust-free environment.



Available in stainless steel construction.

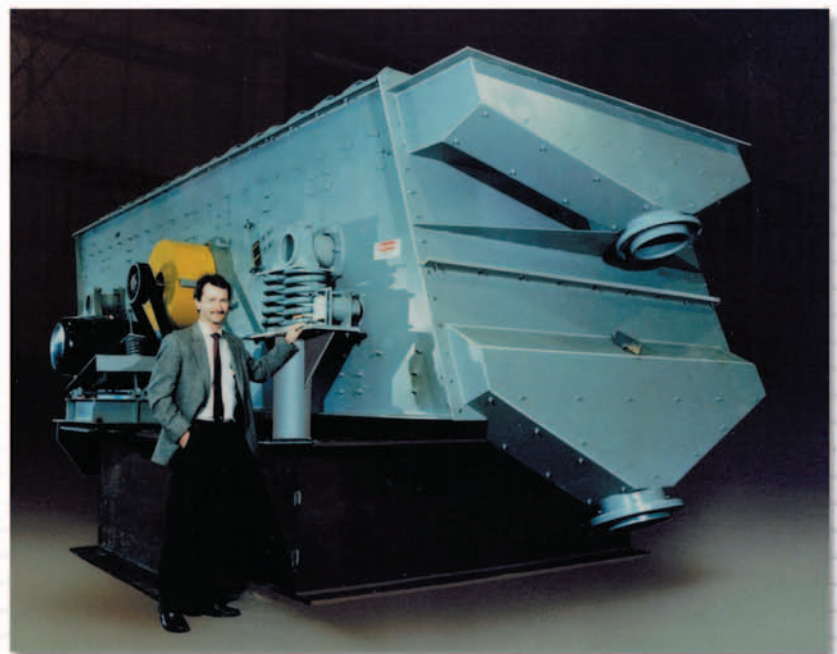


Shipped completely assembled.

Bin dischargers.

Vibrating Screens

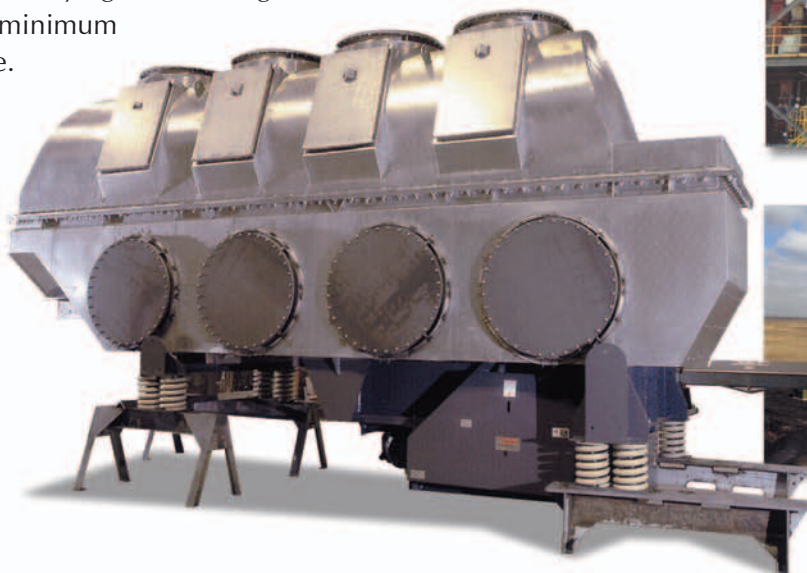
Carrier's drive mechanism, which is totally enclosed and non-ventilated, can be located above or below the screening surfaces. The rotating eccentric weights are adjustable as well as the drive speed, via a variable frequency drive, in order to vary the vibration intensity for optimum screening results. Steel coil isolators are provided to absorb dynamic reactions and prevent vibration transmission to the support steel.



FLUID BEDS

Vibrating Fluid Bed Dryer/Cooler

Carrier Fluid Bed Systems are specially designed to provide a continuous passage of air through the product bed, providing a more efficient drying and cooling process with minimum retention time.



Laboratory Testing

Carrier puts technology to the test every day in its Research & Development Center. The R&D lab includes a heat transfer batch pilot system providing air and steam capabilities to dewater, steam, cool, and achieve direct and indirect heat transfer. The test center also features a high temperature fluid bed system with full testing capabilities up to 1200°F.





Ladle Shakeout with Slag Takeaway Conveyor.



Ladle Shakeout.

Corporate Profile

Established in 1950, Carrier specializes in the manufacture of feeders, dischargers, screeners, and fluid bed processors for all types of mining applications.

Carrier continues to bring new technology to the market, as well as new value to existing technology through its Research and Development Lab. The lab serves as a technology base in which to confidentially test the feasibility of new products and processes, simulating actual operating conditions.

With a technology profile of over 150 patents, each application is custom tailored. Computer assisted design and manufacturing procedures provide the background for the innovative engineering required to achieve unmatched production efficiencies.

With an extensive line of processing machines and vibrating equipment, we are your **ONE-STEP SOLUTION** to:

- Accumulate
- Agitate
- Blanch
- Blend
- Calcine
- Classify
- Cool
- Conveyor
- De-Oil
- Dewater
- Distribute
- Divide
- Dry
- Dry/Cool
- Elevate
- Feed
- Flatten
- Heat
- Meter
- Moisten
- Orient
- Proportion
- Quench
- Recycle
- Scalp
- Screen
- Separate
- Shakeout
- Singulate
- Solidify
- Sort
- Tumble
- Wash
- Withdraw

Representatives

Carrier is represented by more than 75 manufacturer's representative organizations throughout the U.S., Canada, Mexico, Korea, Peoples Republic of China, Taiwan, Chile, Argentina, Columbia, Brazil, Peru, Eastern Europe, and Western Europe. Licensees: India, Japan, Sweden, and Australia. Contact our United States office for the nearest representative in your area.

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