

Vibrating **Conveyors**

Vibrating conveyors offer an efficient and economical way of gently moving bulk material, and can be custom engineered to handle everything from light and fragile to heavy and abrasive. Carrier's Natural Frequency design uses a specialized drive tuned in resonance with the spring-supported weight system, allowing most of the drive energy to be stored and released by the springs.

Once in motion, the natural frequency keeps the conveyor in constant motion and the uniform spacing of the springs keep the drive forces evenly distributed when loaded. This highly efficient and reliable design allows conveyors in excess of 300 feet to operate on a single drive.



Convey More Materials

- Materials with a wide particle size mix
- Sluggish, sticky, or clumping materials
- High-temperature materials
- Fragile materials or those at risk of degradation



Features & Benefits

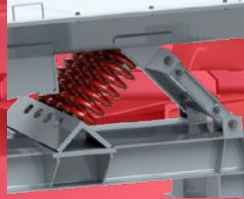
- Multifunctional design able to convey, feed, heat, cool, scalp, screen, quench, dewater, orient, accumulate, separate, and distribute all in a single piece of equipment
- Energy efficient, low maintenance and long-lasting reliability
- Few moving parts, easily-cleaned surfaces, and low maintenance compared to other conveyors
- Leak-proof, monolithic troughs eliminate spilling, waste, and contamination
- Simple to replace liners and trough surfaces
- High temperature designs handle products up to 2,000 deg. F. and designs that withstand thermal expansion



Spring Examples



Leaf Springs



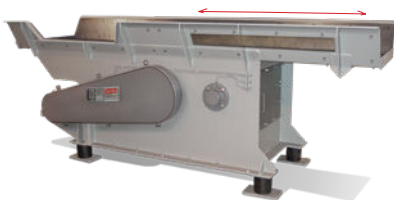
Metal Coil Springs



Additional Options

Two-Way Conveying

Convey in two directions if the process has more than one path.



USDA/3A Sanitary Designs
USDA/3A certified conveyors for sanitary processing.



Perforated Plates Or Screens

Perforated plates or screens can be included to scalp overs, remove fines or dewater products.



Heating & Cooling Jackets
Jacketed designs provide indirect heating and cooling while conveying products.

Dust Tight Designs

Custom dust-tight construction for safety and security available.

Materials of Construction

Polished trough and special coatings assist in conveying sticky products.

Industries & Applications

From light and fragile products to heavy or abrasive products, Carrier vibrating conveyors provide the power to perform processing functions while conveying in a single self-contained unit.

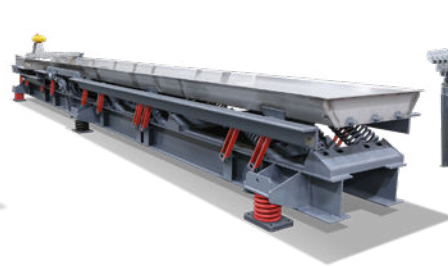
- Plastics, Resins & Synthetics
 - Chemical Compounds
 - Shredded UBC
 - Fertilizers
 - Food, Dairy & Pet Food
 - Glass
- Pharmaceuticals
 - Bauxite & Clay
 - Crushed Coal & Minerals
 - Limestone
 - Pelletized Products
 - Rubber & Crumb Rubber
- Salt
 - Sand & Silica Sand
 - Foundry, Metals & Sand
 - Wet Cake
 - Wood
 - And much more



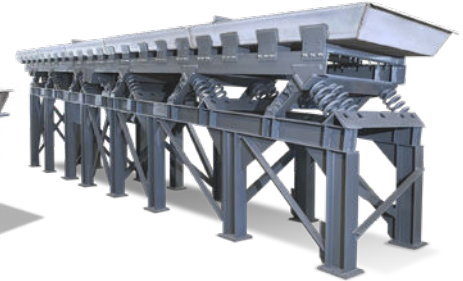
Plastics & Resins



Heating & Cooling



Rubber & Crumb Rubber

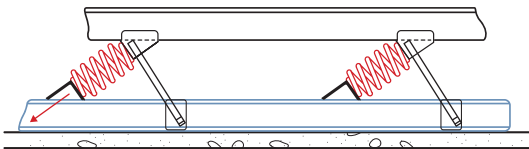


Foundry

Balancing Types

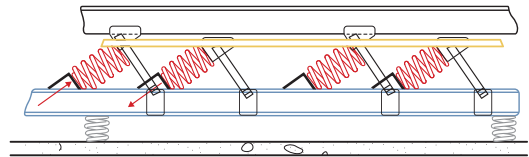
Non-Balanced, Base Mounted

Conveyor base is mounted to a support that is engineered to absorb vibrations.



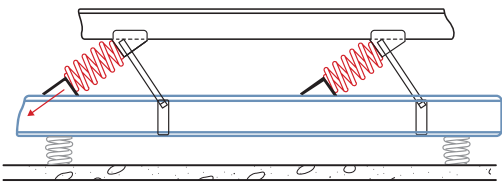
Balanced, Isolated

Combination of using counterbalance member & isolated weight base mounted on springs to reduce reactions.



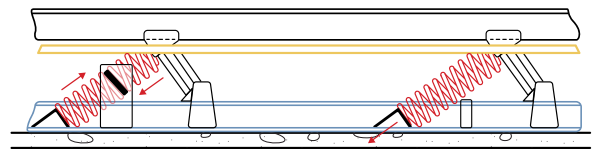
Balanced, Isolated Weighted Base

Conveyor base weighted to be several times the mass weight of the pan is mounted on isolation springs to reduce reactions.



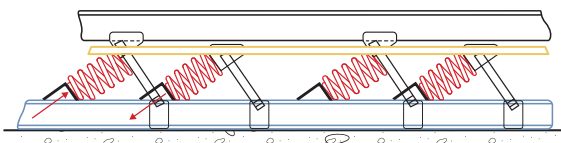
Balanced, Base Excited

Counterbalance member under the conveyor pan with a spring connection to the conveyor pan to reduce reactions.



Balanced, Base Mounted

Counterbalance member operated 180° out-of-phase with the conveyor pan. Identical spring systems create equal & opposite forces to reduce reactions.



Integrated Systems

Carrier designs and manufactures additional processing equipment that can be integrated upstream or downstream for complete multistep process lines.



Engineering & Manufacturing

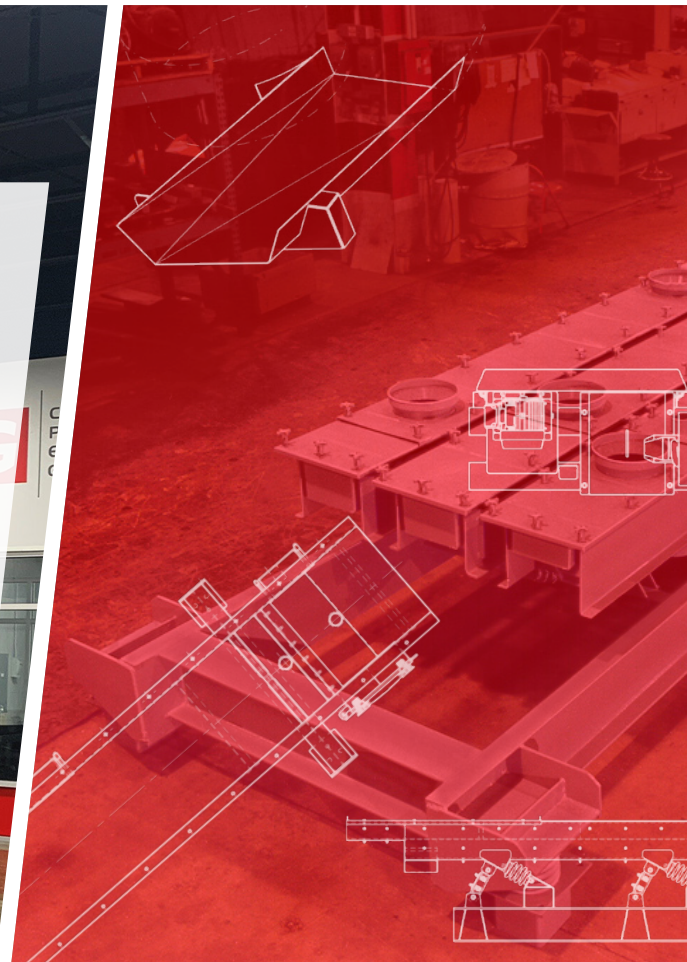
- Technology profile of over 150 patents
- Equipment designs are verified using Finite Element Analysis (FEA) to ensure trouble-free service and long life
- 3D equipment modeling
- State-of-the-art manufacturing facilities on 3 continents with robotic cutting and welding
- Manufacturing expertise working with mild steel, various grades of stainless steel, duplex steels and other exotic alloys for specialty applications
- Welders certified to ASME & AWS standards
- ISO 9001:2015 certified



Lab Testing

Be confident that your powder and bulk solids processing is efficient with CPEG's 15,000 ft² state-of-the-art test lab. With our lab, you have access to the most extensive testing capabilities in the industry. Multiple pieces of equipment can be combined for multistep and multistage testing to simulate field operation, validate new equipment designs and provide complete process solutions. Combined with our full analysis of material characteristics and measurements of material behavior in specific processing applications, you are assured an efficient, reliable and safe solution, all backed by our process warranty.

Field testing with rental equipment is available when lab testing would not effectively simulate process operating environments.



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