

POSI-FLOWTM ***Vibrating Conveyors***

The efficient way to convey bulk materials.



We Make Your Work Flow

Carrier[®]

Vibrating Equipment, Inc.



WE MAKE YOUR WORK FLOW

Since our origin in 1950, Carrier has been recognized as the industry leader in designing and building bulk material handling equipment. From fine powders to heavy metals, our multi-functional conveyors have served all major industries around the world—providing the most efficient systems to simultaneously convey and process varieties of products.

One-Step Processing

Carrier's unique vibration technology gives you the power to perform processing functions while conveying in a single self-contained unit.

Dry	Sort	Accumulate
Cool	Meter	Dewater
Heat	Quench	Divide
Calcine	Agitate	De-oil
Blend	Grade	Tumble
Wash	Separate	Proportion
Solidify	Blanch	Distribute
Classify	Scalp	Recycle
Screen	Moisten	Orient

Improve Your Product Quality While Lowering Capital Costs and Energy Consumption

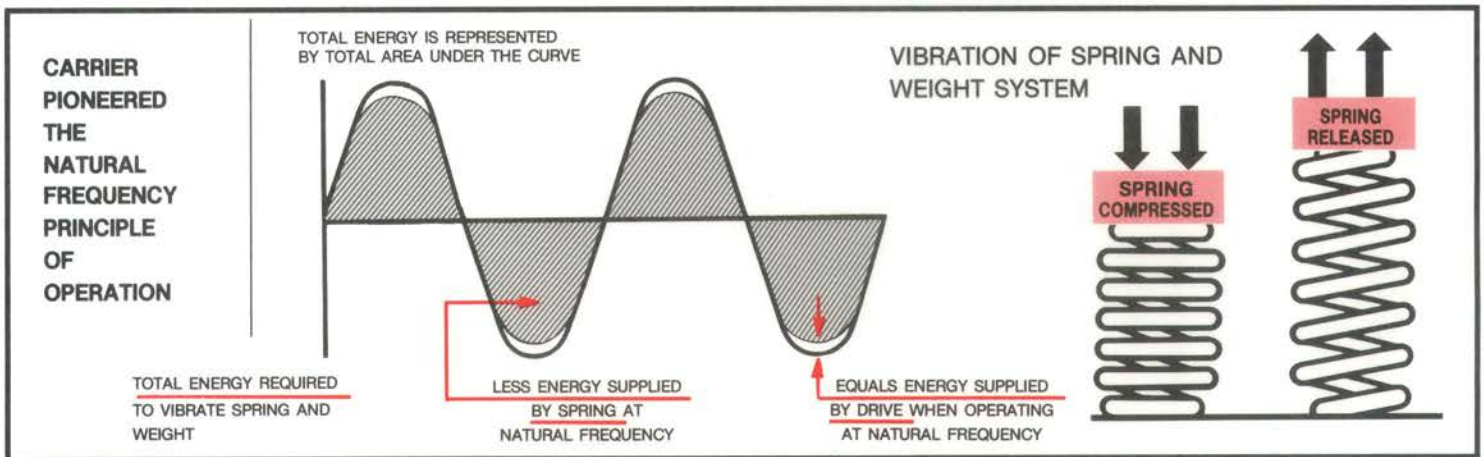
Repeat users attest to our uncommon expertise for design of quality equipment. Our experience in improved and cost-effective conveying methods includes applications for products industrywide:

Synthetics	Sugar	Glass
Ores	Vegetables	Food Powders
Wood	Seeds	Crumb Rubber
Minerals	Confections	Explosives
Fertilizers	Fiberglass	Rubber Pellets
Pet Foods	Sand	Bauxite
Resins	Cereals	Coke
Plastics	Limestone	Metals
Salt	Coal	Clay
Grains	Scrap	Meat
Tobacco	Chemical	Pharmaceuticals
Pet Food	Compounds	Carbon Black

Solutions Designed to Order

Installing new equipment is an important investment. This is why we invest the time to study each individual application. We build each unit to order to assure equipment that fits precisely into your manufacturing operation. Working with your engineering team, we tailor it to match your most demanding sanitary specifications, industrial and environmental codes. Our R&D specialists conduct tests for design parameters in new or unusual applications.

NATURAL-FREQUENCY®



Carrier's Natural Frequency Conveyors

utilize a drive tuned in resonance with the spring-supported weight system. Most of the drive force alternately stores and releases by the springs. Once this harmonic motion is initiated, the springs are the driving medium to maintain constant motion under trough loads. Conveyor lengths up to three hundred feet operate efficiently in a single drive. POWER

AND MAINTENANCE REQUIREMENTS ARE MINIMAL. Each spring, uniformly spaced, is an individual driving medium, distributing drive forces equally over conveyor length to prevent destructive force concentrations. As a result of this controlled linear motion and perfect timing, Carrier's POSI-FLOW™ conveyors produce gentle vibratory action to move materials, including fragile particles, safely.

POSI-FLOW™ Vibrating Conveyors

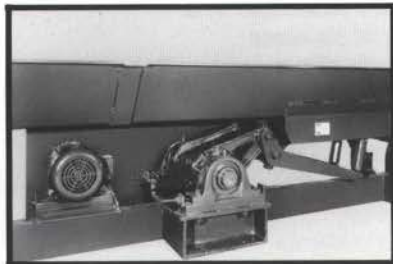
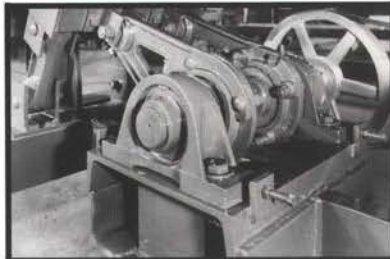
We are the only full line vibrating equipment designer whose varied patents and experience permit complete utilization of NATURAL FREQUENCY conveying advantages:

- *Versatility in Construction and Application*
- *Reliable Operation Over Long Equipment Life*
- *Energy Efficiency*
- *Multifunctional — Space Saving*
- *Minimal Maintenance*
- *Safe, Clean Operating Environment*

Carrier Engineers select spring and drive type to suit each application. Drives can be located at any convenient point; along the length, at the end, or overhead.

Shockless Drive

Designed for most normal conditions, this economic, positive eccentric drive is cushioned from effects of starts/stops and load reactions by the torsion bushings



Shock Absorber Drive

Designed for low maintenance under steady force and rapidly reversing forces, the shock absorber compensates for changes in the neutral level of the pan, distributing the load to the spring system



Poz-A-Flex® Drive

Designed for medium-duty applications, rubber marshmallow springs in compression offer the advantage of the rubber compression drive at lower cost. Operates in overstroke and understroke conditions



Rubber Compression Drive

Designed for heavy duty service, hopping, frequent starts/stops, or variable speed, the rubber in the drive is selected to cushion these effects. Overstroke is accepted without structural member overstress or affecting integrity of the drive



All-Steel Drive

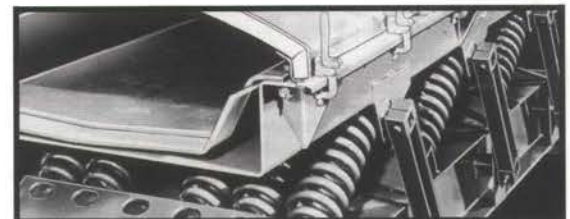
Designed for super duty service with repeated starting under full product load. Rugged steel coil drive springs isolate adverse operating forces to provide long system life with minimum maintenance in severe operations

Spring assemblies provide continuous support and maintain the conveyor's structural rigidity for service ranging from light to maximum loads.



Leaf Springs

Simple, low-cost design for long stroke and medium to light duty applications; virtually unaffected by continuous moisture exposure



Coil Springs/Leaf Spring Stabilizers

Rugged, heavy duty construction for high capacity application; excellent for high-temperature use



Rubber Shear Springs/Rocker Arm Stabilizers

Designed for high impact loading medium to heavy duty applications; impervious to water and abrasive atmosphere



Coil Springs/Rocker Arm Stabilizers

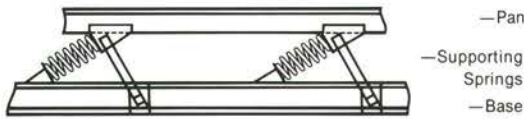
For heavy impact and transverse loads, this combined assembly provides durability for maximum longevity in operation with low maintenance.

POSI-FLOW™ Conveyors

DYNAMIC BALANCING AND VIBRATION ISOLATION

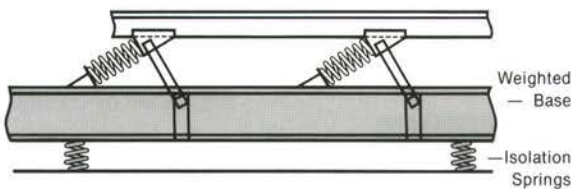
BASE MOUNTED

Conveyor base mounts to support designed to absorb vibrations. Recommended for installation at or below grade.



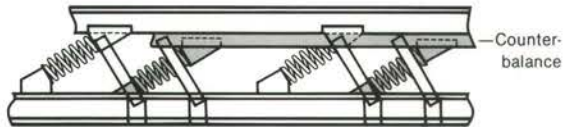
ISOLATED WEIGHTED BASE BALANCING

Conveyor base with several times the mass weight of pan is mounted on isolation springs. Depending on spring type, isolation percentage is 80 to 90%.



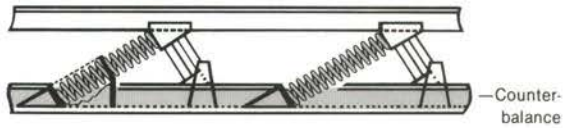
BALANCED

Counterbalance member operates 180° out-of-phase with conveyor pan. Identical spring systems create equal and opposite forces to reduce reactions by 90%.



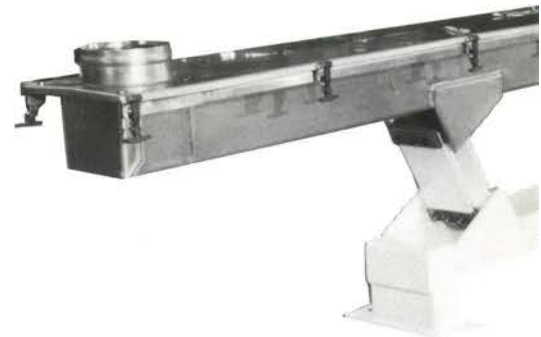
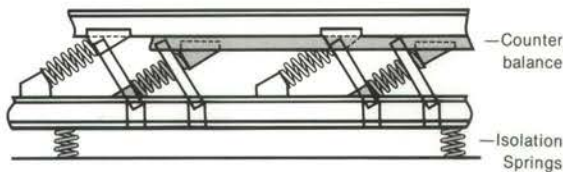
BASE EXCITED BALANCING AND ISOLATION

Counterbalance member under conveyor pan with spring connection to pan. Reduces reactions by 95%.



ISOLATED-BALANCED

Balanced type conveyor with base mounted on isolation springs. Combination reduces reactions by 98%.



Pans are fabricated in a variety of stainless and other alloys or fiberglass. Sizes and types are based on capacities, material characteristics, plant space, and fit-up to existing equipment.



Deep, smooth, one-piece trough construction in POSI-FLOW™ conveyors prevents spillage and hang-ups.

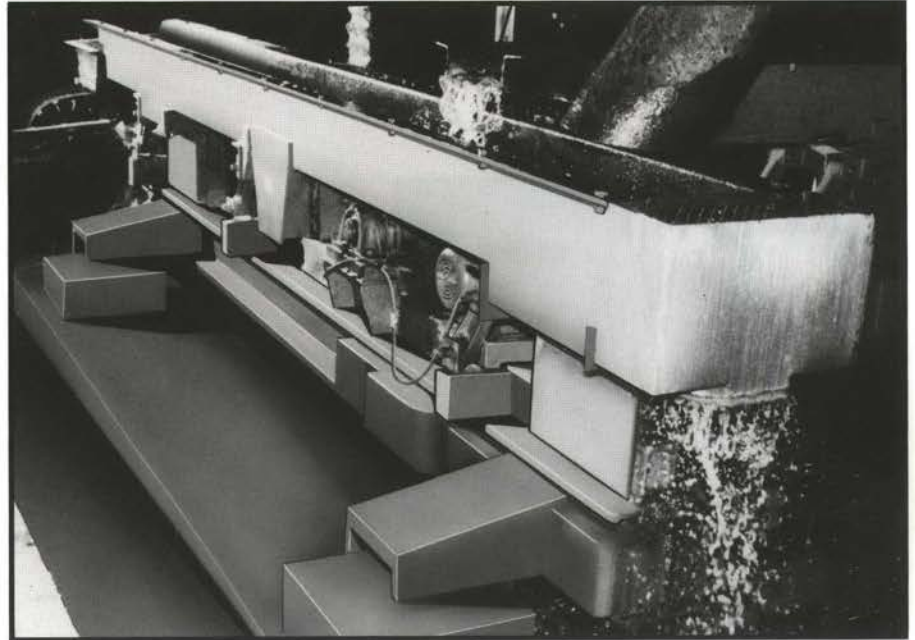
Conveying around a building support column



POSI-FLOW™ Design Flexibility



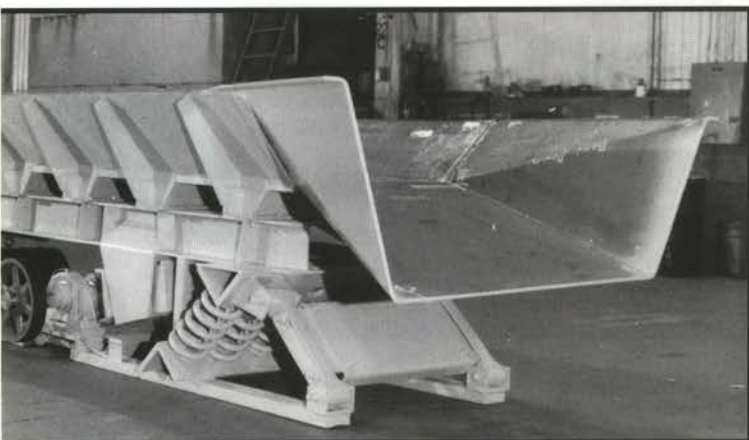
Stainless steel conveyor designed especially for food, dairy, and pharmaceuticals



Water pools quench and solidify glass cullet and other molten materials for ease of handling and reuse



Leaf spring conveyor distributes various types of clay and refractory materials through 36 gates

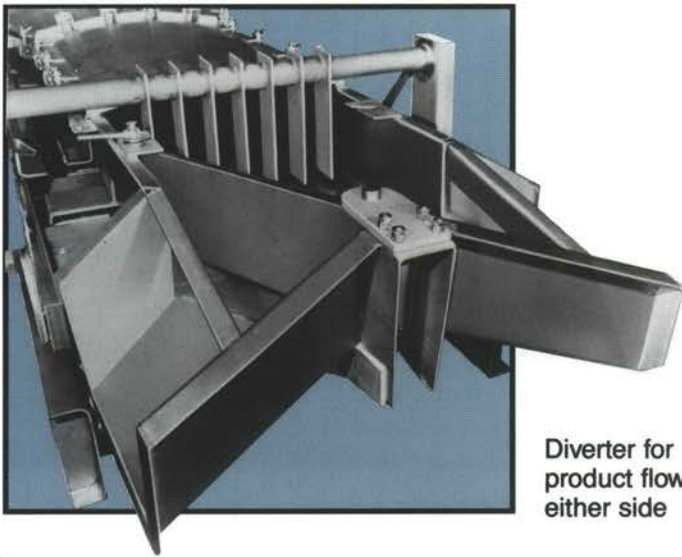


Coil spring conveyor for wood waste, logs, and foundry use

SOLUTIONS

Carrier Has The Features You Need

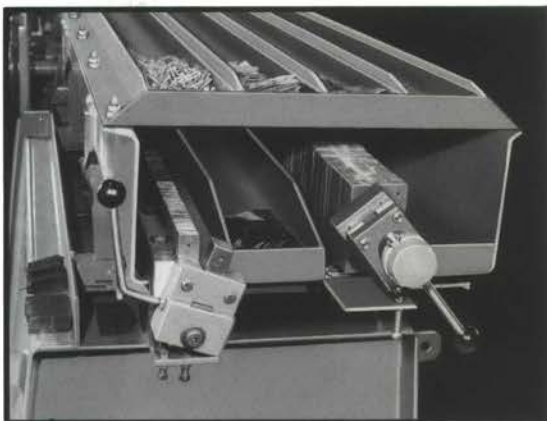
If you need special features to combine various functions with conveying—use Carrier's design expertise. These are a few ideas to facilitate cost-effective conveying.



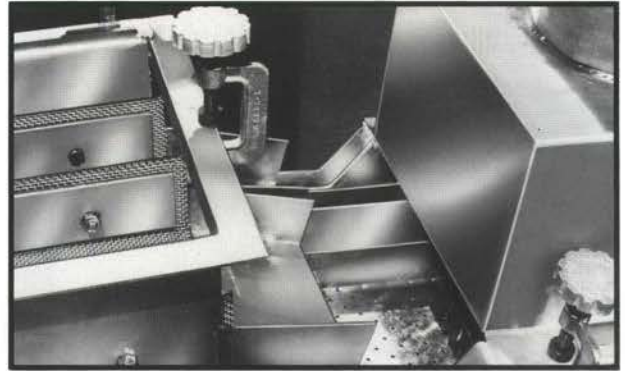
Diverter for product flow to either side



Scalping deck, diverters with dual discharge



Metal parts orient while conveying on 4 lane double decks



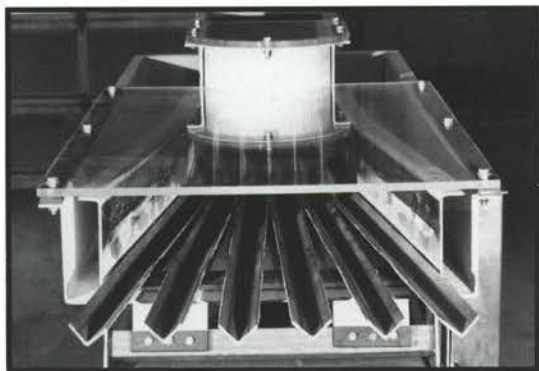
Channels separate rubber parts, convey to built-in water spray and air dry sections

Scalping section in woodwaste conveyor

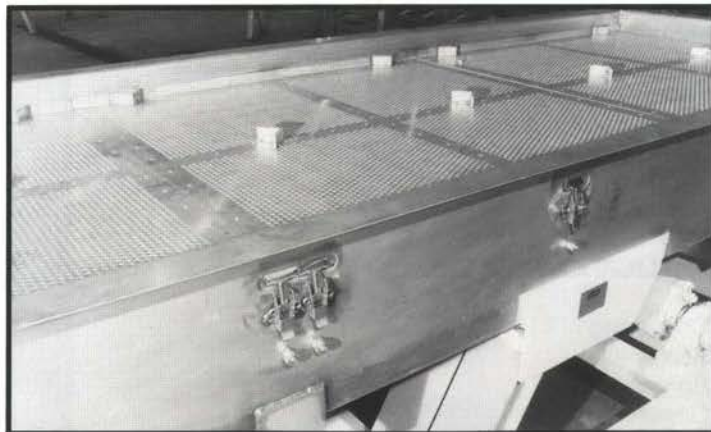


High temperature construction and diverters to side discharge points

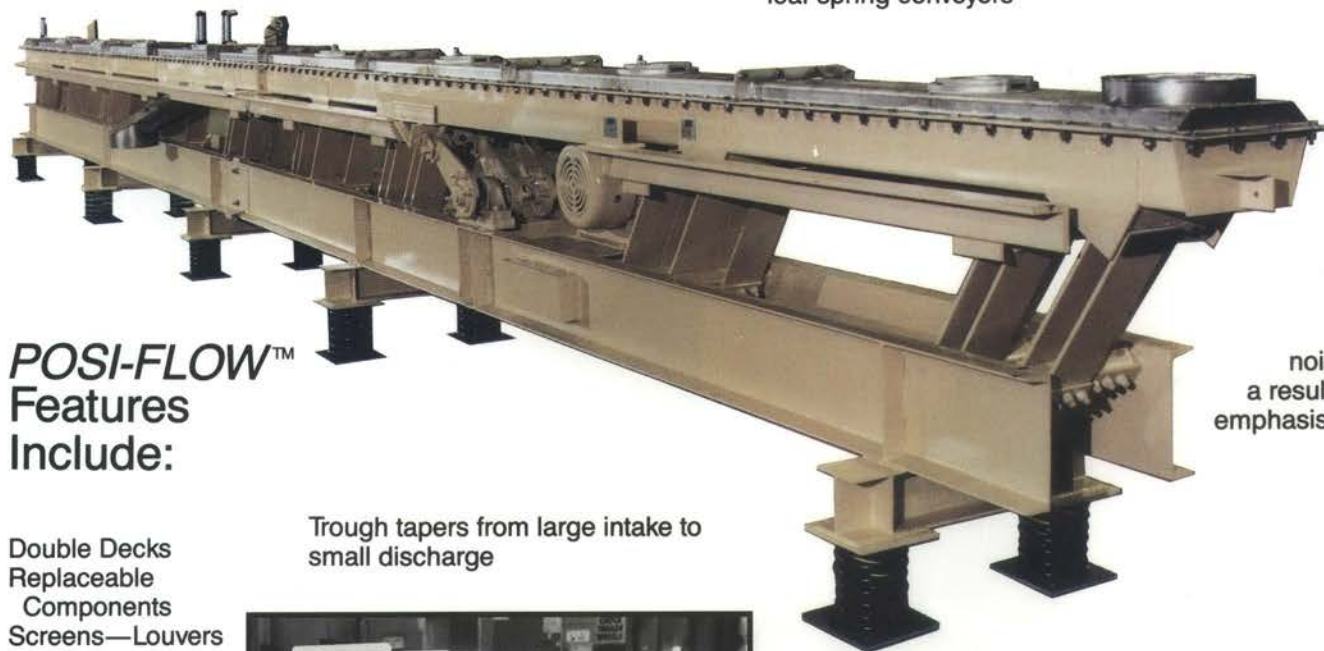
And To Make Your Work Flow Better



Channels to orient and distribute



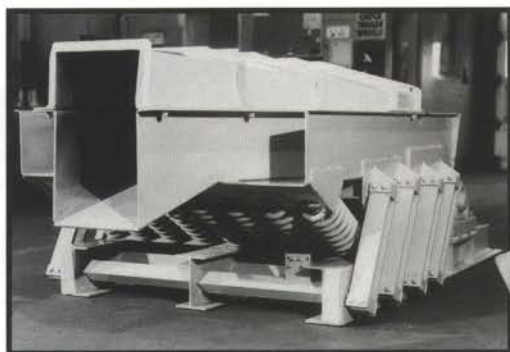
Stainless steel replaceable screen decks on leaf spring conveyors



POSI-FLOW™ Features Include:

- Double Decks
- Replaceable Components
- Screens—Louvers
- Dividers
- Diverters
- Liners
- Custom Shaped Troughs, Inlets, Outlets
- Self-Locking Gates
- Dust-Tight Covers
- Heat Blankets
- Hot Air Plenums
- High Temperature Pans
- Dynamic Balancing
- Support Stands

Trough tapers from large intake to small discharge



Air cylinder-operated gates divert prills

Various techniques to minimize noise levels are a result of Carrier's emphasis on R&D



SOLUTIONS

Carrier's *POSI-FLOW*™ Conveyors Are Positive Perform

Some of the benefits users tell us about...

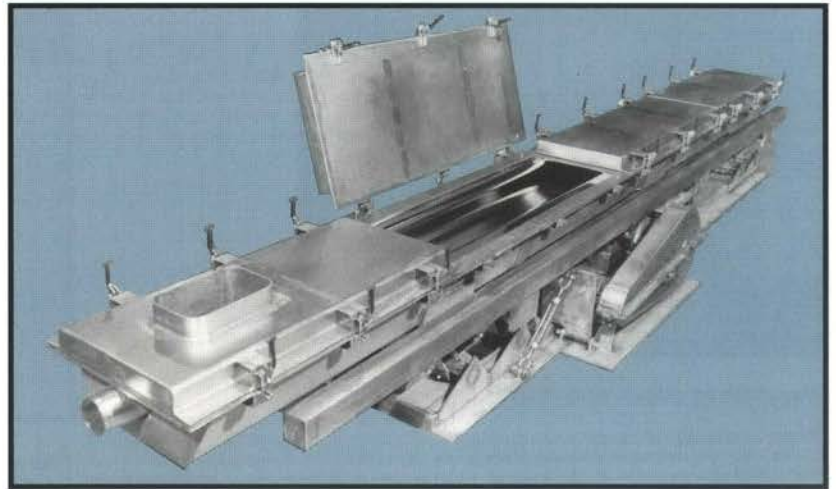
Energy efficient
Minimal product degradation
Low maintenance
Easily cleaned

APPLICATIONS INCLUDE:

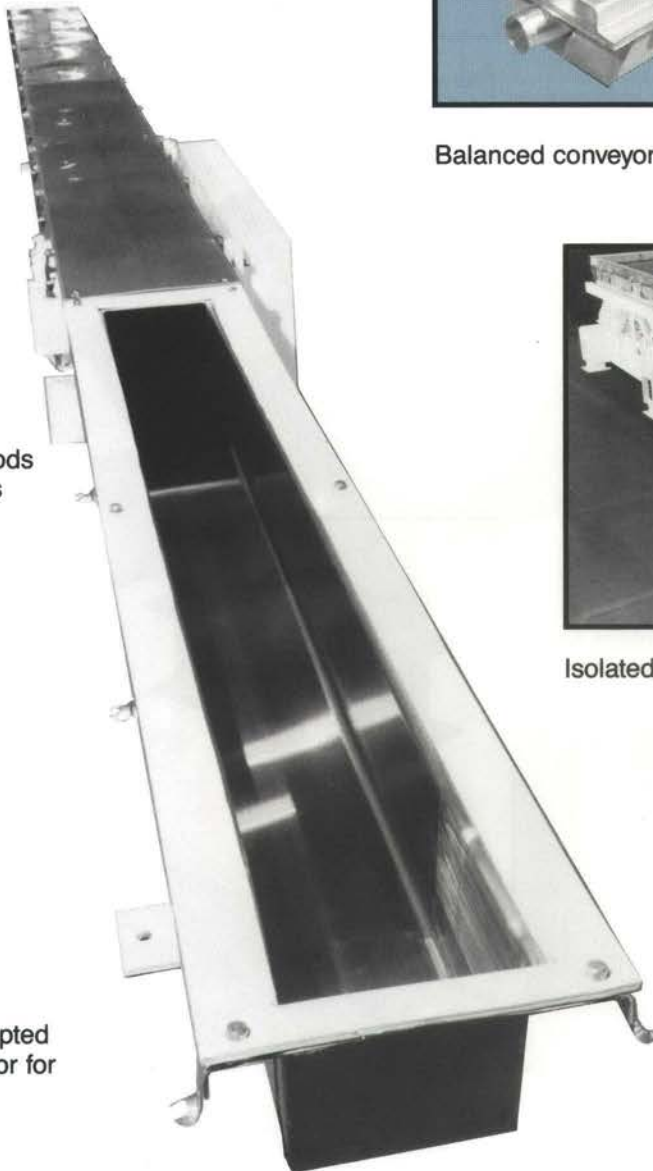
Conveying
Screening
Sorting
Dewatering
Feeding

OF:

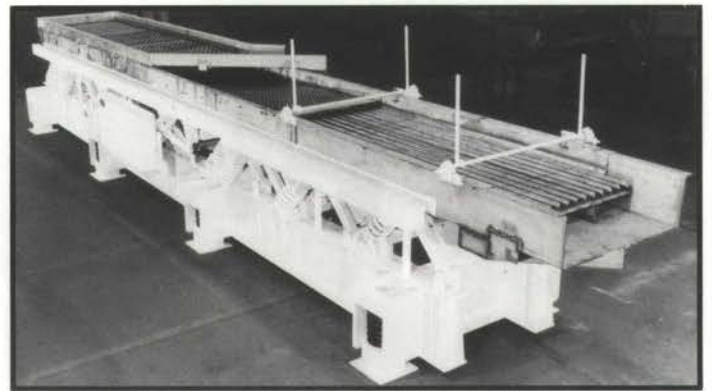
Cheese Powders
Cheese Curd
Whey
Lactose
Sugar
Salt
Lecithin
Vegetables
Meats
Cereals
Various Other Foods
And Confections



Balanced conveyor scalps overs from cereal while conveying



USDA Dairy Accepted screening conveyor for dairy products



Isolated and balanced seafood screening conveyor

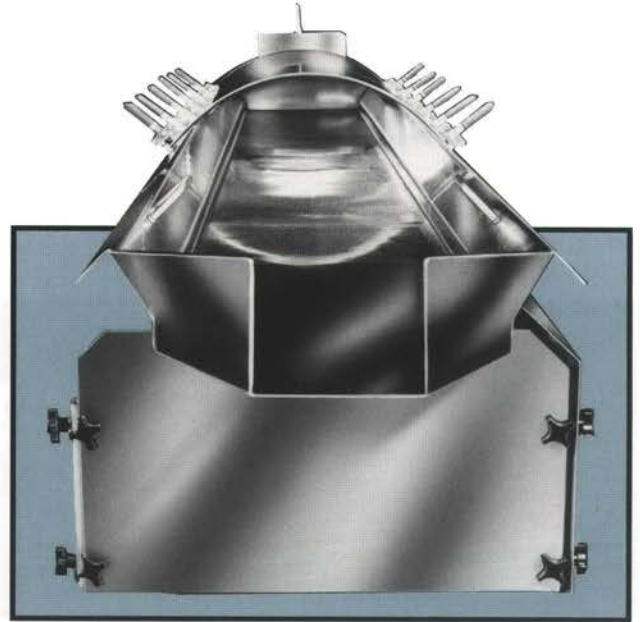


Isolated S/S conveyor scalps, screens and elevates food powders

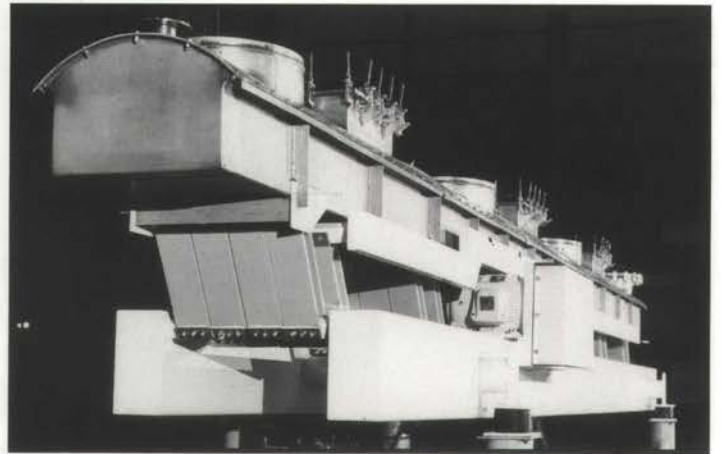
Conveyors In Dairy, Food and Pharmaceutical Industries



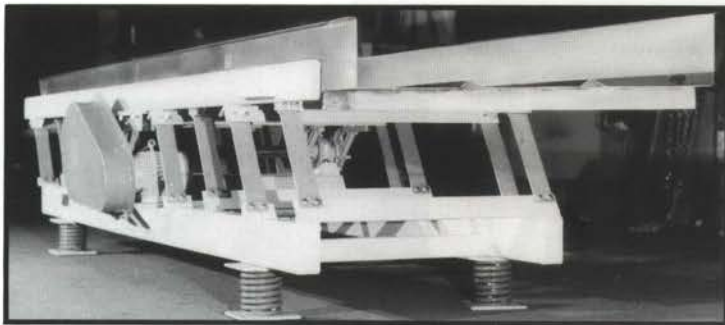
Meat pieces are sorted, classified, oriented and conveyed to packaging



Cheese curd dewaterers, scalps, and conveyors on stainless steel unit, designed for complete washdown

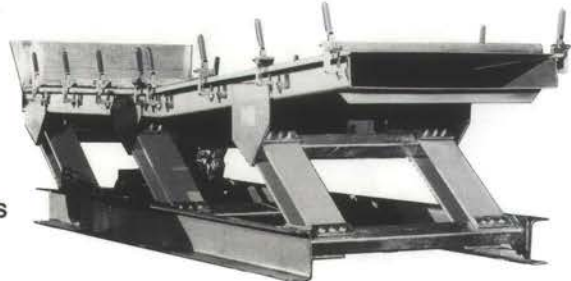


Wet sweetener cake drops from 4 centrifuges. Surges are leveled to deliver continuous flow. Enclosed conveyor accepts nitrogen purge



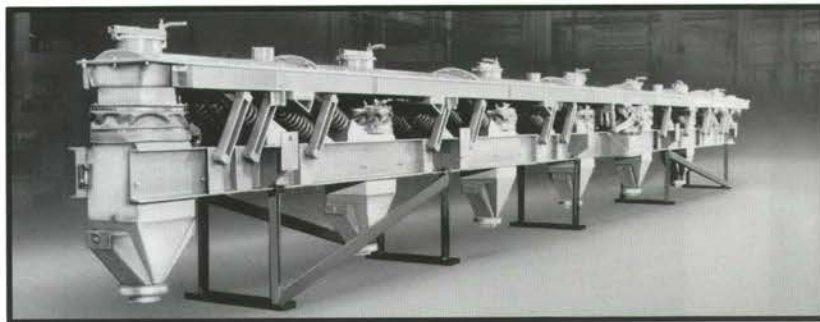
Leaf spring conveyor for foods and confections

Onion rings separate from slices on this special design food grade conveyor



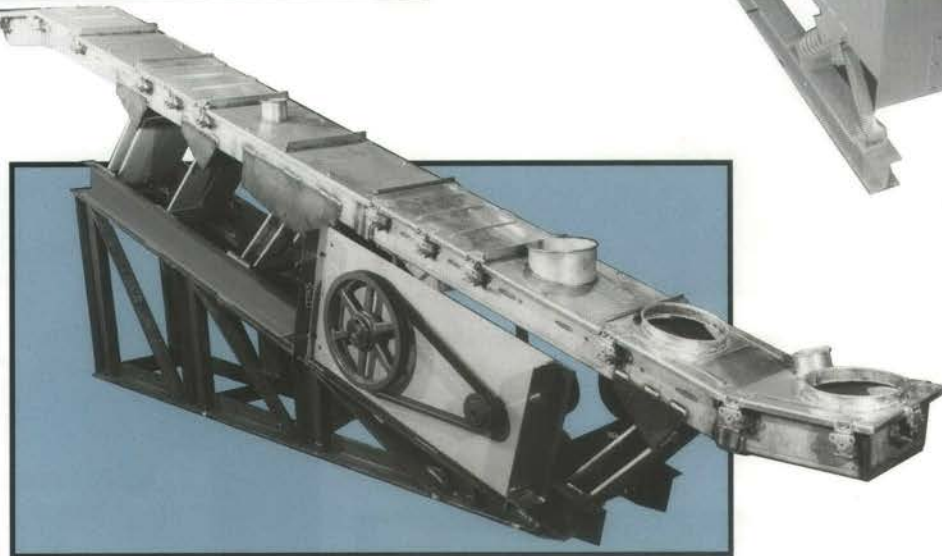
POSI-FLOW™ Designs

Through Carrier's unique blend of design skills and application technology, conveying efficiencies are improving for thousands of high quality products around the world.



Agricultural chemical distributor

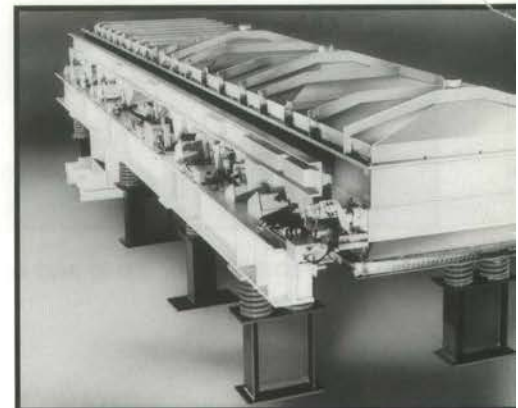
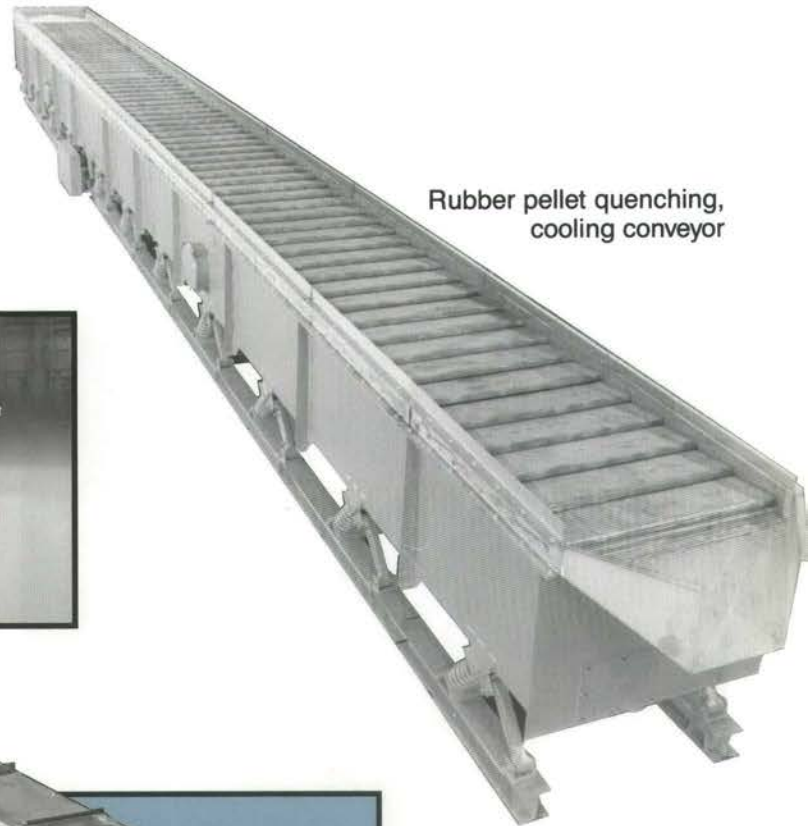
Stainless steel covered unit conveys uphill from 2 charge points



Covered units with gates screen and distribute tobacco stems and pieces

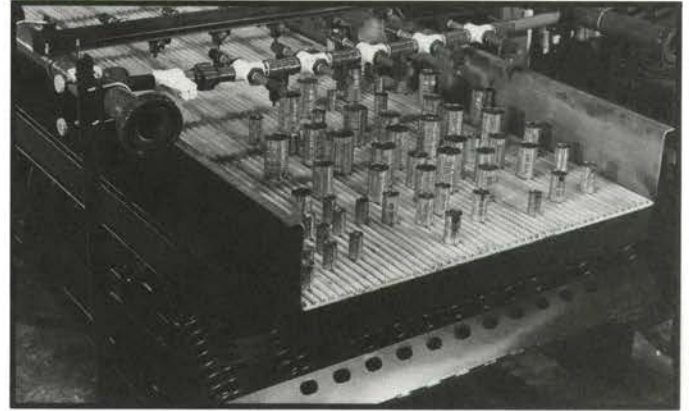


Rubber pellet quenching, cooling conveyor



To Suit Industry Needs

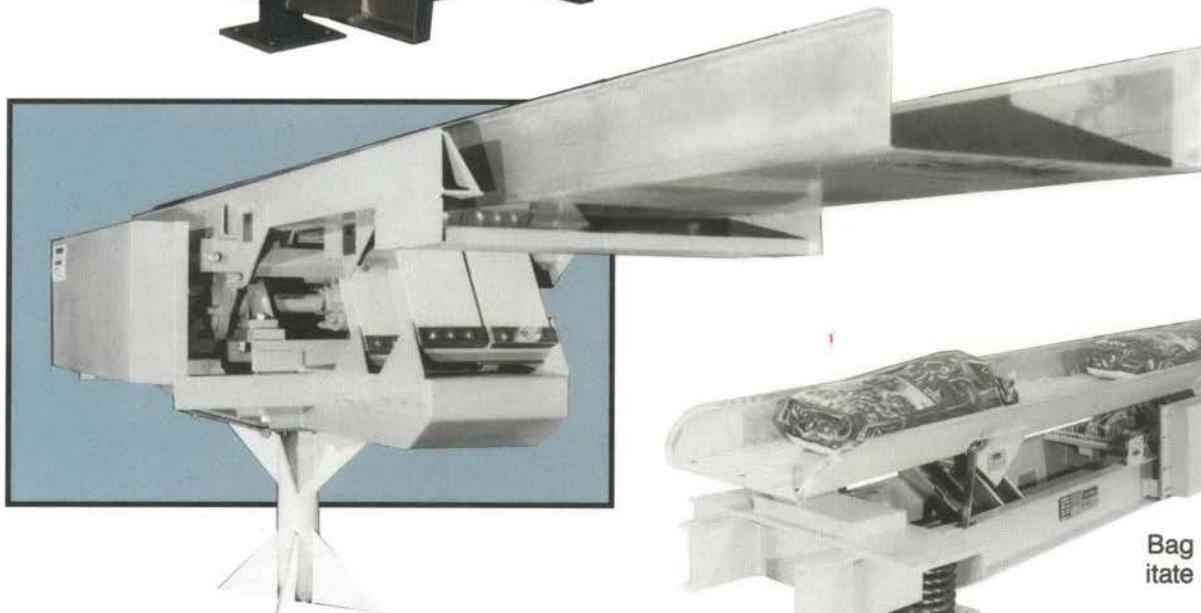
All **POSI-FLOW™** Conveyors illustrated in this brochure were designed for the specific needs of the users.



Juice in cans cools while conveying under water-spray



Ampli-Flex™ Variable Amplitude Conveyor for precision metering of a wide range of products.



Conveyor revolves 360° to feed



Bag flatteners facilitate quick and safe palletizing

Tell us what you're moving. Tell us what you want to do to it along the way. And we'll show you how Carrier Vibrating Equipment can make it better and move it faster. Whether you need new equipment designs, processes and methods...improved efficiencies of existing lines...or analysis of material behavior in a given application...our engineering creativity combines with technology to **MAKE YOUR WORK FLOW.**



Vibrating Equipment, Inc.

THE STANDARD OF EXCELLENCE IN BULK MATERIAL HANDLING AND PROCESSING EQUIPMENT

Fluid Bed Dryer/Cooler Systems, Conveyors, Spiral Elevators, Feeders, Shakeouts
Screens, Bin Activators, Pile Dischargers

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