

Processing Solutions for Food, Dairy, Pet Food, & Pharmaceutical

Carrier Vibrating Equipment designs and manufactures innovative process equipment for industries that must meet sanitary guidelines including the food and dairy industries, pet food and pharmaceutical industries. Our equipment can be built to meet USDA/3A standards and include features such as Clean-In-Place (C.I.P.) spray nozzles that enhance the cleanability of the equipment.

Carrier's processing equipment delivers reliability, low maintenance, and easy cleaning of dry, wet, sticky, oily, or dusty products. Whether you need to dry, cool, heat, toast, convey, elevate, screen, dewater, sort, feed, scalp, or distribute, we have a solution for your most demanding sanitary specifications and process requirements.



Trusted in these Industries over 70 Years

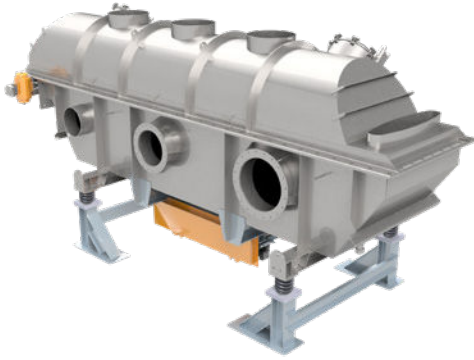
Equipment for Processing Food, Dairy, Pet Food & Pharmaceuticals:

- Vibrating Fluid Bed Dryers & Coolers
- Static Fluid Bed Dryers & Coolers
- Vibrating Conveyors
- Vibrating Feeders & Screeners
- Vibrating Spiral Elevators

Carrier®

Vibrating Fluid Bed Dryers & Coolers

Vibratory fluid beds evenly dry and cool a variety of products such as dairy and cheese powders, vegetable protein products, poultry meat, vegetables, nuts, beans, cereals, coffee, spices, sugars, salts, pet kibble and litter, gel capsules and more with little product degradation or damage. They are also highly effective in the drying, cooling, and classification of pharmaceutical powders.

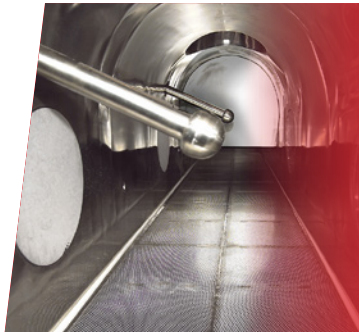


Features & Benefits

- Fluidizing design accommodates a wide range of particle sizes
- Plug flow delivers consistent first-in, first-out processing
- Highly efficient heat transfer when processing at low temperatures to prevent product damage
- Zoning allows multiple functions such as drying, classification, and cooling to be performed

Options

- Clean-In-Place (C.I.P.)
- Patented Delta-Phase® drive for on-line residence time control
- Variety of fluidizing deck designs
- Quick access manways & doors



Clean-In-Place (C.I.P.)

Fixed spray nozzles for applications requiring frequent cleaning.

Static Fluid Bed Dryers & Coolers

Static, or non-vibratory, fluid beds gently dry, cool, heat, toast, sterilize, classify, or agglomerate food, dairy, pet food and pharmaceutical products in batch or continuous operation. A single fluid bed processor can efficiently perform two or more of these functions. They are ideal for large production capacities and most cooling applications. Clean out is simple and there are no moving parts.

Features & Benefits

- Efficient fluidizing design provides optimal heat transfer without product degradation
- Zoning allows multiple functions such as simultaneous drying, classification, and cooling to be performed
- Material is continuously mixed while in the bed, creating uniformity in drying and blending

Options

- Uni-body designs
- Clean-In-Place (C.I.P.)
- Immersed heat exchangers
- Batch or continuous processing
- Control systems



Uni-Body Designs

Uni-body designs feature a seamless surface and easy-clean design, eliminating areas where food and dairy products may build up or become stuck.

Vibrating Conveyors

Sanitary conveyors provide smooth conveying of fragile foods or pharmaceuticals and is ideal for moving snack foods, cereals, and coated products. Its multi-functional design allows operators to cool, scalp, screen, distribute, and more. Units can be engineered/manufactured to meet USDA/3A requirements.

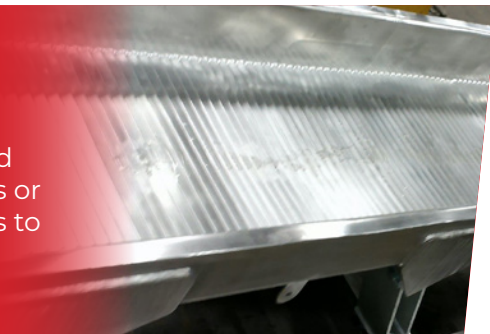
Features & Benefits

- Vibration gently conveys light or fragile products
- Leak-proof, monolithic troughs eliminate spilling, waste, and contamination
- Few moving parts and smooth bed design for simple, easily cleaned surfaces
- Counterbalancing and/or isolation arrangements available to minimize dynamic reactions



Polished Troughs

Units can be designed with polished troughs or other special coatings to eliminate sticking.

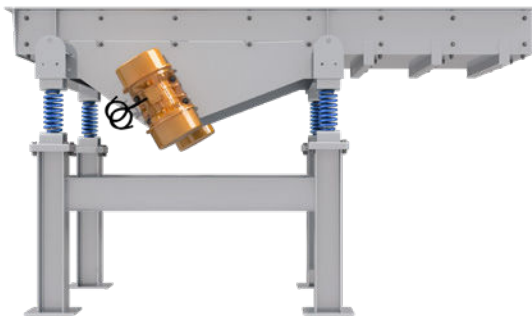


Options

- Polished troughs
- Covered or tubular troughs
- Heating & cooling jackets
- Two-way conveying
- Dust-tight designs
- Bias cut discharge
- Distribution gates

Vibrating Feeders

Vibratory feeders deliver an efficient and economical means to meter bulk materials at a controlled rate. They are designed to feed but can also screen, scalp, or dewater materials, making them ideal for a variety of industries.



Features & Benefits

- Natural frequency drive units maintain stroke under extreme headloads for reliable operation
- Fixed or variable feed rates provide versatility for different process requirements
- Side, end, intermediate, straight, or bias discharges for various arrangements

Options

- Removable dust-tight covers
- Two-way feeding designs
- Screening or scalping decks
- Isolation arrangements

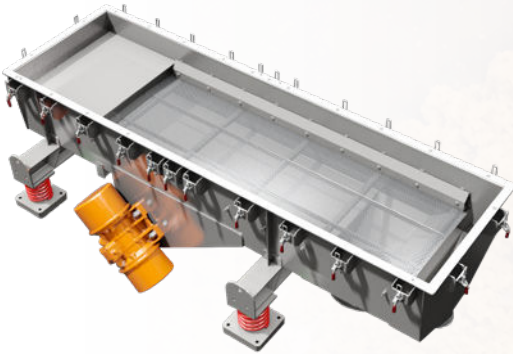


Dust-Tight Covers

Feeders can be designed with removable dust-tight covers to protect materials and process operators.

Vibrating Screeners

Vibratory screeners are designed to feed, screen, scalp, dewater, or separate materials. Carrier screeners can be customized with a variety of media to sort materials based on size. They are deal for screening a wide variety of food, pet food, pet litter, and pharmaceutical products.



Features & Benefits

- Robust designs provide reliable operation and maximum screening efficiency
- Custom screening deck designs for a variety of applications
- Elliptical or circular motion for increased efficiency
- Side, end, intermediate, straight, or bias discharges accommodate various process specifications

Custom, Sanitary Screens

Sanitary screening decks are customized to efficiently screen a variety of food, pet food and pharmaceuticals.



Options

- Custom, sanitary screen designs
- Clean-In-Place (C.I.P.)
- Multiple screening decks
- Optional ball decks

Vibrating Spiral Elevator

Vibratory spiral elevators can heat or cool products while elevating without damage or degradation and are built for sanitary applications that require easy cleanup. They efficiently handle fatty or oily products such as meats and cheese, dry or wet food and pet food, and pharmaceutical products.

Features & Benefits

- Versatile design capable of heating or cooling material while transferring vertically to another process
- Adjustable stroke, speed, and retention time for optimal conveying of materials
- Direct drive motor design eliminates over-stroke



Options

- Jacketed flights
- Air distribution for heating & cooling
- Enclosures
- Isolation arrangements



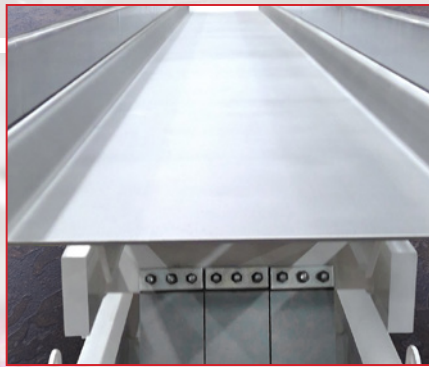
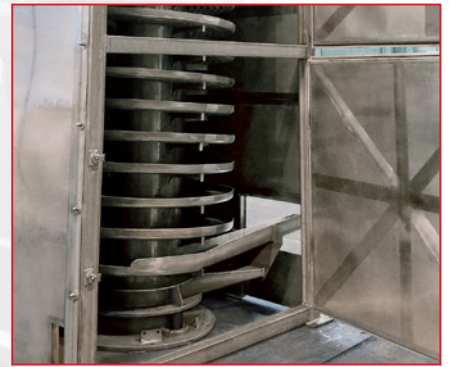
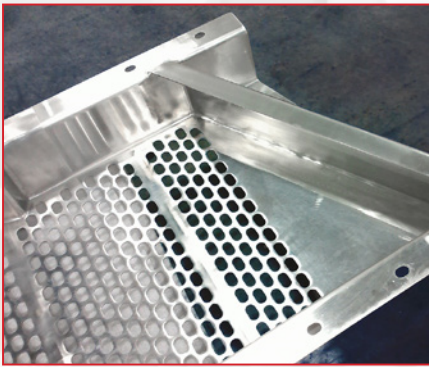
Jacketed Flights

Spirals can be designed with jacketed flights and spray nozzles.

Sanitary Equipment Solutions

Whether the application requires food-grade design to meet USDA/3A standards, pharmaceutical-grade finishes or gentle processing of fragile pellets such as pet foods, our design engineers partner with your team to develop suitable design, materials, fabrication methods and process requirements to ensure a successful processing system.

- Clean-In-Place spray devices
- Uni-body construction
- Polished troughs & specialized coatings
- Free of cracks, ledges & voids
- Sloped design for drainage
- Rubber isolators or shrouded coil springs
- Dust-tight covers & enclosures
- Continuous welds
- Caulked exterior skip welds



Complete System Integration for Food, Dairy, Pet Food & Pharmaceutical Processing

Carrier Vibrating Equipment can help with the design and selection of complete processing solutions.



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 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.

Aftermarket Parts & Services

Carrier offers a full line of aftermarket parts for its equipment. Our Aftermarket Sales Team will assess your parts needs and recommend the best solution. Our engineers are available to assist in any redesign or retrofit your existing equipment for new applications.

AMERICAS

Carrier Vibrating Equipment, Inc.
3400 Fern Valley Rd
Louisville, KY 40213, United States
Tel: +1-502-969-3171 | Fax: +1-502-969-3172
carriervibrating.com | cve@carriervibrating.com

EUROPE

Carrier Europe SA
Rue Joseph Luns 52
B-1401 Nivelles, Belgium
Tel: +32 67 40 01 40
carriereurope.be | ceur@carriereurope.be

CHINA

Carrier Vibrating Equipment (Shanghai) Co., Ltd.
#1 Bldg., #88 Shenzhou Road, Fengcheng Town
Fengxian District | Shanghai, 201411 China
Tel: +86 21-33925800
cves@carriervibrating.com.cn

