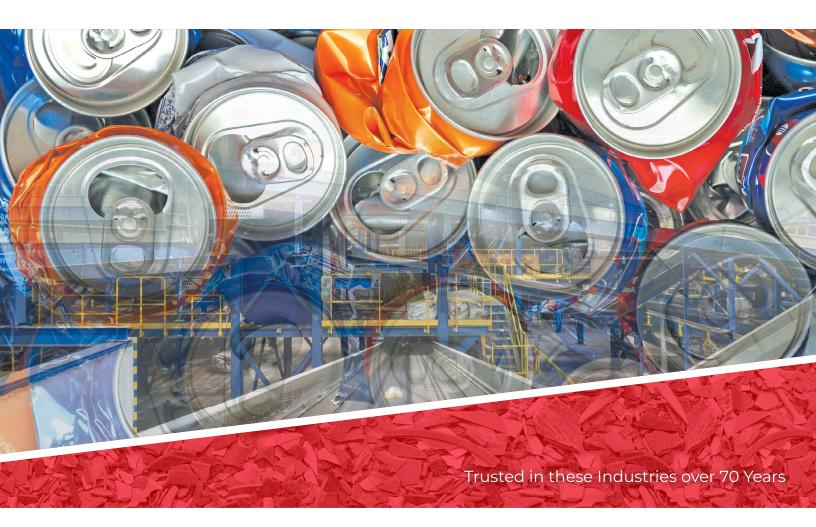
# **Processing Solutions for Recycling & Waste**

Carrier Vibrating Equipment designs and manufactures a line of equipment specifically for the unique processing needs of the recycling and waste industries. From vibratory conveyors, feeders and screeners to air knife separators and vibrating fluid bed dryers, our recycling and waste equipment provides high efficiency and long life to keep costs down and revenues up.

Carrier's heavy-duty equipment supports recycling operators all over the world with reliable processing technology. Our equipment has been used for scrap and waste materials including UBC, metals, electronics, glass, plastics, and construction debris.



# Equipment for Processing Waste & Recycled Materials:

- Vibrating Conveyors
- Vibrating Feeders & Screeners
- Air Knife Separators
- Vibrating Fluid Bed Dryers

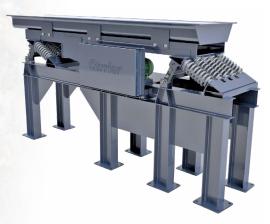


## **Vibrating Conveyors**

Leaf and coil spring vibrating conveyors easily move scrap, UBC, construction debris, glass, and plastics reliably and efficiently. Our conveyors are multi-functional, combining a number of processes in a single unit, and can also be designed for specific applications.

#### **Features & Benefits**

- Multi-functional design in a single unit to convey, feed, heat, cool, scalp, screen, quench, dewater, accumulate, separate and distribute
- Natural frequency design with minimal horsepower requirements
- Leak-proof monolithic troughs eliminate spilling, waste and contamination
- Simple replacement of liners or troughs



## **Options**

- Quenching conveyors
- Two-way conveying
- Leaf springs or metal coil springs
- · Polished troughs & special coatings
- Perforated plates or screens
- Dust-tight designs
- · Heating & cooling jackets



#### Quenching Conveyors

Quenching conveyors with integrated water pools provide continuous processing of glass <u>cullet from melt fur</u>naces.

## Vibrating Feeders & Screeners

Feeders deliver efficient, economical metering of bulk solids at a fixed or adjustable feed rate. Screeners are built for a variety of waste materials and can be designed with multiple decks in a single unit to meet exact process requirements.





Screeners for Recycling

### **Vibrating Feeders**

- Natural frequency drive units maintain stroke under extreme headloads for reliable operation
- Fixed or variable feed rates provide versatility for different process requirements

#### **Vibrating Screeners**

- Multi-functional design for screening, scalping, dewatering or separation
- Vibratory screeners with elliptical or circular motion for increased efficiency



#### **Options**

- Polished trough & coatings
- Isolation arrangements
- Fixed or adjustable rate control
- Removable dust-tight covers



### **Options**

- Multiple screening decks
- Ball decks
- Wire mesh, perforated plate, or wedge wire decks

## **Air Knife Separators**

Air knife separators are an efficient and easy way of separating metal, plastics, paper, and debris from the waste stream. It works by using a vibrating conveyor to move material over a high velocity stream of air, causing heavy materials to drop out while lighter materials are blown into a hopper or exhaust filter.

#### Features & Benefits

- High-velocity air knife separates plastics, paper
   loose dirt from UBC scrap or construction debris
- No moving parts in contact with material to minimize product degradation
- Adjustable nozzle assembly allows fine-tuning

#### **Options**

- Single or dual air knife arrangement
- Supply air blower for separation
- Dust collection equipment
- Support structures





**Vibrating Fluid Bed Dryers & Coolers** 

Fluid bed dryers are an ideal and customizable solution for efficiently removing moisture from recycled materials. They can dry a wide variety of recycled materials including UBC aluminum scrap prior to it moving to the furnace and plastics that have been cleaned and washed. Fluid bed dryers and coolers can be designed for any material and any moisture requirement.



### **Options**

- · Custom fluidizing decks
- High-temperature designs
- Access manways & doors
- Custom controls
- Iso-Max<sup>™</sup> dynamic reaction reducer

#### Features & Benefits

- Optimized fluidizing velocity and vibration provides maximum energy efficiency
- Plug flow delivers consistent first-in, first-out output of materials
- High temperature designs provide minimal footprint and maximum efficiency
- Zoning allows multiple functions such as simultaneous drying, classification, and cooling to be performed

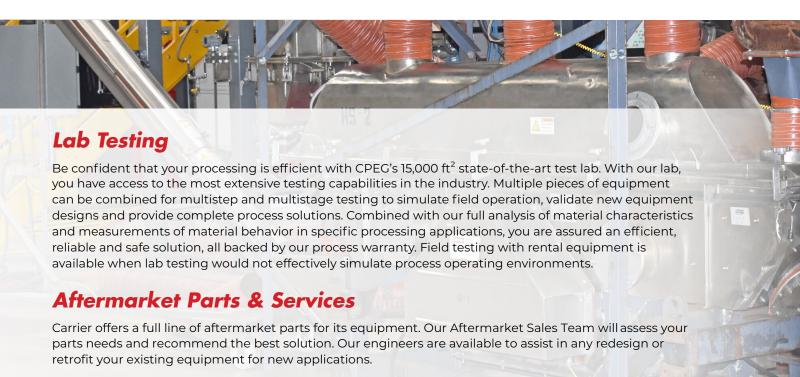


Custom Fluidizing Decks



## **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



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