Solutions for the Foundry Industry

Delta-Phase® Shakeouts

We Make Your Work Flow

Carrier Vibrating Equipment, Inc.
Bring Your Shakeouts Into the Modern Age!

Carrier’s heavy-duty shakeout, combined with our Patented Delta-Phase Drive®, can increase your foundry’s output and casting quality by maximizing sand removal and minimizing casting damage! At the same time, the shakeout will decrease your maintenance costs and downtime.

How It Works

Step 1
The mold is loaded onto the shakeout while it has a forward angle of attack.

Step 2
The angle of attack is changed automatically to stop the mold and increase the shakeout time as required.

Step 3
Once the sand is removed, the angle is then lowered automatically to quickly discharge the casting.

This is just one example of how Carrier’s Delta-Phase shakeouts may be operated. Operation can be tailored to your specific castings. Contact Carrier for more information.

The isolated design reduces dynamic reactions and eliminates the need for expensive foundations!
The heavy-duty Delta-Phase® Shakeouts are a proven success, with customers acknowledging over five years of rugged service with no parts’ maintenance.

Shakeout fed directly from mold punch-out station with numerous recipes for multiple jobs. Processes sand-to-metal ratios from 6:1 to 60:1. Works excellent for unpoured molds.

Shakeout system for aluminum engine blocks in No-Bake molds. Provides 8-10 minutes of retention time to effectively remove casting and de-core. Special “V” shaped decks available for minimal surface contact.
Shakeout designed to interface with manipulator with a thumper arm. The operator can stop castings in order to desprue then return to normal flow. This method reduces damage to shakeout, manipulator, and surrounding equipment.

Shakeout designed for large molds with variable sand-to-metal ratios. Adequate for castings up to 3,500 pounds. This unit is approximately 9 feet wide by 20 feet long.
Dual shakeout systems designed to knock out the flask and thoroughly clean the castings. Both units have individual cleaning recipes tailored to each casting. Castings range from 100 to 1,800 pounds.

Lumpbreaker system featuring variable retention time for increased capacity. Flat deck design eliminates hang-ups and jamming over old style lumpbreakers.

**Advantages**
- Direct drive—will not overstroke!
- Low maintenance shakeout
- Small quantity of parts to replace or stock
- No special gear boxes or timing belts
- Simple, electronic drive consisting of standard PLC and VFD components
- More precise and reliable than airbags
- Eliminates casting damage
- Increases sand removal
- Decreases shakeout size

**Patented Drive**
The low maintenance, heavy-duty drive includes:
- High life, low cost spherical roller bearings
- Minimal quantity of spare parts
- “Off-the-shelf” motors
- No gear boxes or timing belts required
Since its origin in 1950, Carrier has been recognized as the industry leader in designing and building foundry equipment. Our unique capabilities have served metalcasters around the world longer than any other full-line vibrating equipment manufacturer.

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
- Cool
- Convey
- De-Oil
- Dewater
- Distribute
- Divide
- Dry
- Dry/Cool
- Elevate
- Feed
- Flatten
- Heat
- Meter
- Moisten
- Orient
- Proportion
- Quench
- Recycle
- Sculp
- 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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Furnace Charge Feeder
No-Bake Shakeout
Barrel Horse™ Shakeout
Receiving Conveyor for Desprue, Sorting and Grinding (oval conveyor)