



## **CENTRIFUGAL BLOWERS**



RB4002



RBX-250



RB1200HC

**REPUBLIC CENTRIFUGAL BLOWERS** are designed for both pressure and vacuum applications. As a preferred alternative to compressed air, centrifugal blowers provide clean, dry, oil-free air at lower operating costs. The market-proven RB-Series performs reliably across a wide spectrum of applications and industries. The best-in-class RBX-Series attains 80% peak efficiencies, further reducing operating costs. The RBX-Series offers up to 8 times longer bearing life than standard blowers.

Both belt-driven series were built for longevity in high-duty applications and require minimal maintenance. Each blower is manufactured with lifetime greased ceramic hybrid bearings and plated steel or aluminum alloy wetted components. Each model can be oriented in multiple directions, assembled within sound or weather enclosures, or converted to water-cooled or chemically resistant packages.

#### Advantages

- Endurance: Up to 8 times longer bearing life than standard centrifugal blowers (RBX-Series)
- Precision: Two-plane high-speed balancing of each bearing assembly
- Integrity: Each blower is functionally tested for performance
- Quality: Manufactured and assembled at Republic Manufacturing headquarters

#### Standard Features

- Zinc-plated steel bearing housing
- Ceramic hybrid bearings
- PTFE or two-piece Labyrinth seals
- Rotatable housing
- 6061/7075 Aluminum impeller
- A356 Aluminum volute (RBXSeries)
- Belt-driven for operation at various speeds

#### Available Options

- 3-75HP (shaft speeds to 25,000rpm)
- NEMA, IEC, explosion-proof, and washdown motors
- Sound/Environmental enclosures
- ANSI inlet and outlet flanges
- Water-cooled packages (RBSeries)
- Chemically resistant packages
- Hard anodized wetted components
- Stainless Steel wetted components
- Specialty coated or painted packages

#### Accessories

- Exhaust silencer
- Starter panel/soft start
- Variable frequency drive
- Ball valves/butterfly valves
- Gauges

## APPLICATIONS

### Beverage

- Product Drying
- Crate Cleaning and Drying

### Bakery

- Excess Product Removal
- Belt Cleaning
- Dust Removal
- Pan, Tray and Board Cleaning and Drying

### Food

- Drying Products
- Excess Product Removal
- Belt Cleaning
- Dust Removal
- Pan and Tray Cleaning and Drying
- Prevent Product Slippage

### Chemical Processing

- Belt Cleaning
- Product Drying

### Medical

- Product Drying
- Excess Product Removal
- Belt Cleaning
- Dust Removal
- Prevent Product Slippage

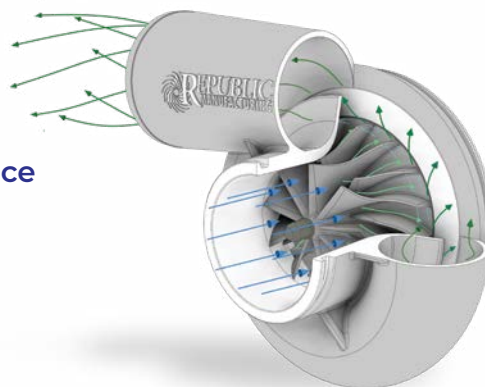
### Pharmaceutical

- Drying product packaging prior to ink jet coding or labeling
- Drying of vials, syringes, sterile packs, pouches, tubes, trays, crates, and pallets
- Drying of mixing and storage tanks
- Drying under the cap or lid
- Debris removal
- Moisture removal
- Dust removal
- Conveyor belt blow-off
- Leveling coating on caplets



### Functional Performance

- Air Flow: From 500 cfm up to 3100 cfm
- Pressure Capacity: up to 170" H<sub>2</sub>O
- Vacuum Capacity: up to 130" H<sub>2</sub>O

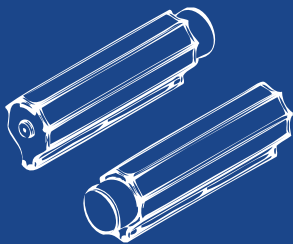


### Working Principle

Air enters the center of a spinning impeller and is divided between the impeller's vanes. As the impeller turns, it accelerates the air outwards using centrifugal force. This high-velocity air is then diffused and slowed down in the surrounding blower housing to create pressure.



AIR KNIFE SYSTEMS



CENTRIFUGAL BLOWERS



REGENERATIVE BLOWERS



VACUUM PUMPS



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