

# AIR KNIFE SYSTEMS

FEATURING CENTRIFUGAL BLOWERS



Stainless Steel Air Knife



Aluminum Air Knife



Nozzle Air Knife



Food Grade Air Knife

**REPUBLIC AIR KNIFE SYSTEMS** are engineered, manufactured and tested to provide 99.9% of liquid, dust, and debris removal from products prior to labeling, ink jet laser coating, packaging, or other secondary operations using a high velocity, high impact air stream.

Our air knives are available in extruded aluminum, or stainless steel with lengths from 2" up to 196" with an adjustable gap for better air stream control. We offer nozzle knives for direct drying, air wipes to match your extrusion profile and wire, and food grade air knives which are USDA and NSF compliant. In-house engineering expertise allows us to provide a heat source for your high temperature applications or cold air systems to cool the parts. Custom air knife designs are available to meet your exact needs.

Our breath of manufacturing equipment allows us to engineer and manufacturer the additional components needed to complete your system; including the Republic Centrifugal Blower, butterfly valves to provide the appropriate pressure and air stream as needed, brackets, elbows, Y-branches, and manifolds.

## **Advantages**

- Low energy consumption
- Dry, clean, oil-free air stream
- Filtered inlet prevents contamination
- Increased production speeds
- Reduced sound levels

## **Available Options**

- Aluminum or stainless steel construction
- Special inlets available
- Custom designs available
- USDA and NSF compliant food grade designs available
- Air slot across the entire length/ adjustable gap sizes

## COMPONENTS



## **Centrifugal Blowers**

- Ball bearings require no maintenance.
- Run at low pressure, and allow for increased production speeds.
- Operating speeds from 9,000 to 20,000 rpm.
- Powered with a 3 hp to 75 hp motor.
- Up to 4000 cfm of air at pressures up to 170"H<sub>2</sub>O.
- 100% tested to meet the quoted performance statement.



#### **System Components**

- Air Knives
- Inlet Filters
- Manifolds
- **Butterfly Valves**
- Reducers/Enlargers
- Y-Branches
- Hose & Clamps
- **Elbows**
- Air Wipes
- **Discharge Silencers**



## **Additional Options**

- All-In-Ones
- **Overspray Enclosures**
- Static/Dust Elimination Bars
- Inline Air Heaters & Chillers
- **HEPA Filters**
- VFDs/ Motor Starters/ Soft Starters
- Motor/Blower Stands
- **Blower Enclosures**