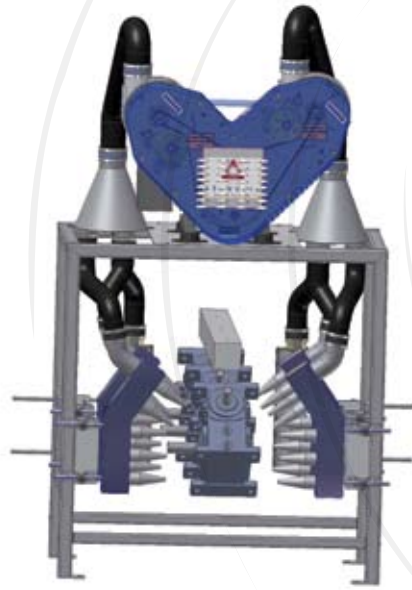


Parts Drying



REPUBLIC
Blower Systems®

Republic Air Knife System Components

The Republic Air Knife System produces a high velocity, high impact air stream which removes dust, industrial debris and liquids typically found following a wash, rinse or product filling operation.

These air knife systems are engineered, manufactured and tested to provide 99.9% of product removal from parts prior to labeling, ink jet laser coding, packaging or other secondary operations.

Air knife assemblies are available in extruded aluminum, stainless steel, or nickel with lengths from 2" up to 196" and with an adjustable gap for proper airstream control.

Additionally, the air velocity can be adjusted in the field with an optional butterfly or dampener valve to provide the appropriate pressure and airstream as required by the process.

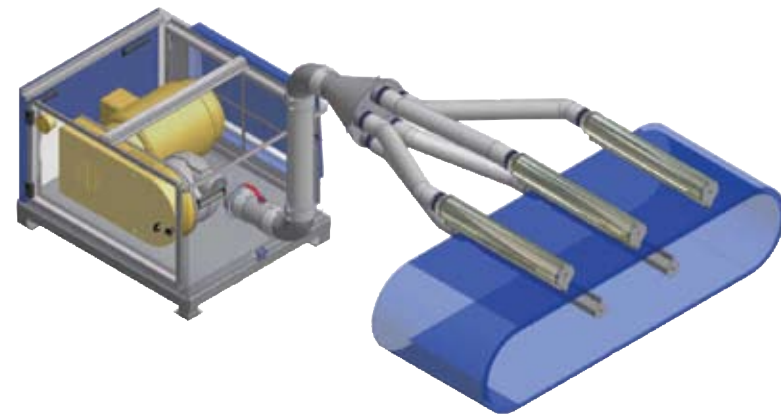
Multiple air knife and nozzle combinations can be connected to a manifold assembly, which in turn is powered by a single motor/blower system.

Competing blower and air knife designs remove only part of the moisture and then rely on additional moisture evaporation as the part travels through the manufacturing process. Republic Blower Systems manufactures a unique air knife system that allows for the most efficient method of debris removal or drying.

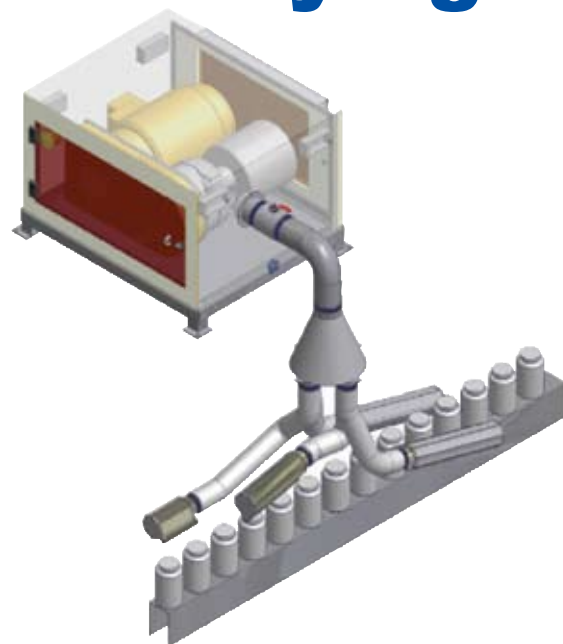
Republic Air Knife Systems can also provide additional heat sources for those special high temperature applications where the product requires a controlled temperature heat cure or set. For cooling applications, Republic can design and provide cold air systems for cooling parts as they exit a plating or coating operation.



Steel Strip Drying & Conveyor Cleaning



Bottle & Can Drying



REPUBLIC
Blower Systems®
www.republicsales.com
800.847.0380

280-0044
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Applications:

- ▲ Drying of:
 - Bottles and cans
 - Coiled steel
 - Wire and cable
 - Hanging parts
 - Extrusions, hose, plastics and film
 - Batteries
 - Confectionery and food toppings
 - Medicine vials
 - Stampings, forgings, machined parts
 - Textiles and carpeting
 - Packaged meat, fish and poultry products
 - Produce—fruits and vegetables
- ▲ Conveyor belt cleaning or drying
- ▲ Static control
- ▲ Air curtain to prevent hot air loss in an oven
- ▲ Air curtain to prevent cold air loss in a freezer
- ▲ Debris, dust, or liquid blow off
- ▲ Coating control of primers, glue, adhesives and inks
- ▲ Plastics sheets, film/wire

Republic Air Knife System Components

Air Knife

- ▲ Clear anodized aluminum, nickel plated aluminum, 316 stainless steel
- ▲ Inlet sizes: 2", 3" & 4"
- ▲ Gaps: incrementally adjustable from zero to .250
- ▲ Styles available: single inlet, dual inlet, middle inlet, or staggered multiple inlets
- ▲ Teardrop shape provides uninterrupted air stream for maximum velocity and efficiency.
- ▲ Externally clamped design for applications that require precise air streams
- ▲ Special designs: square, rectangular and multiple strand wire drying



Airwipe

- ▲ All stainless steel body construction
- ▲ Adjustable inserts for air stream adjustment. Inserts available in stainless steel, UHMW polypropylene, abrasive resistance coated steel
- ▲ Flanged for ease of mounting to existing equipment
- ▲ 4" inlet to allow for maximum air stream velocity
- ▲ For extrusion profiles providing complete circumference drying



Airwipe Enclosure

- ▲ Polypropylene, stainless steel construction
- ▲ Acoustical design for noise reduction
- ▲ Top opening door with lift-off hinges for ease of entry
- ▲ Water drain system allows easy removal of collected water



Blowers

- ▲ Robust design is efficient, easy to maintain and durable
- ▲ Low energy consumption
- ▲ Allows for increased production speeds or levels, thus a quick payback
- ▲ Reduced sound levels when compared with compressed air
- ▲ Provides dry, oil-free, high volume/pressure air for industrial applications
- ▲ Field serviceable



Blower/Motor Enclosure

- ▲ Available in painted steel or stainless steel construction
- ▲ Acoustical foam lined for noise reduction
- ▲ Dual doors with lift-off hinges for ease of maintenance
- ▲ Low profile to fit under existing conveyors or equipment
- ▲ High profile for minimum footprint applications
- ▲ Filter change gauge on front door for ease of filter maintenance
- ▲ Leveling pads



Motor/Blower Stands

- ▲ Available in stainless steel or painted steel construction
- ▲ Standard heights: 12" 18", 24" & 42"
- ▲ Available in custom heights
- ▲ Leveling pads



Reducers/Enlargers

- ▲ Stainless steel construction
- ▲ For 2", 3", 4" & 6" piping applications



Y Branch

- ▲ Stainless steel construction
- ▲ 2", 3", 4" & 6"
- ▲ 4" inlet with (2) 3" outlets



Nozzle

- ▲ Stainless steel construction
- ▲ Multiple outlet diameters
- ▲ Internal design maintains high velocity air stream
- ▲ Hose connections: 2" & 3"



Air Knife & Nozzle Support Brackets

- ▲ Provides vertical, horizontal, and angular adjustments
- ▲ Stainless steel construction



Butterfly Valve

- ▲ Anodized aluminum construction
- ▲ Adjustable locking hand lever
- ▲ Sizes: 2", 3" & 4"
- ▲ 3" available in stainless steel



Hose and Clamps (EPDM Sleeves)

- ▲ High strength EPDM rubber with two stainless steel hose clamps



Manifolds:

- ▲ 304 stainless steel with 4" inlets and 3, 4, 5 or 6 – 2" or 3" outlets
- ▲ Special configurations available in 316 stainless steel or painted steel



Inlet Filter

- ▲ 10 Micron standard. Special filters available in 3 and 5 micron
- ▲ Housing construction: Stainless steel or painted steel
- ▲ Filter change gauges standard on stainless steel models
- ▲ Filter media: paper or polyester (washable/reusable)



HEPA Filters

- ▲ Stainless steel welded canister
- ▲ Horizontal or vertical mounting
- ▲ Designed for minimum air flow loss through filter media



Discharge Silencers

- ▲ 2", 4" & 6" inlets
- ▲ All-aluminum construction with polyurethane epoxy paint finish

