



R. A. ROSS & ASSOCIATES, INC.
2231-A Ampere Drive, Louisville, KY 40299

Our solution will save a customer over \$80,000 a year for just ONE drying operation

Solutions like this are what we do every day at R. A. Ross.



REPUBLIC
Blower Systems®



Republic HC 1200 Centrifugal Blower

Big savings by less compressed air usage for drying parts

SITUATION:

Compressed air is often referred to as the “third utility” in industrial plants as the cost to produce it can be extremely high. Many companies use compressed air to blow off or dry parts during certain stages of the manufacturing process. Large air compressors are expensive to purchase and maintain not to mention the cost of compressed air delivery equipment (ie, high pressure hoses, air knives, blades and nozzles, etc.) used to get the air to the process. R.A. Ross and Associates was able to bring an air savings solution to a major brake pad manufacturer in Kentucky by recommending the use of regenerative air blowers instead of compressed air to dry parts. Regenerative air blowers produce a higher volume of air at a lower pressure at the same time using less energy. The cost savings to the customer by switching to the regenerative blower and air knife system for one drying operation came to approximately \$80,000 per year*. Equipment payback was about 9 weeks. That’s a serious solution! And at R.A. Ross & Associates, that’s what we do everyday!

Continued over

HOW IT WORKS

Since each product and application is unique, Republic Blowers will ask that you fill out an Evaluation Guide (*example right*) detailing size of product, description of product, (holes, shape, etc.), speed of conveyor belt and so on. Once your specific need is determined, a custom designed air knife system will be recommended. Once approved, we will then test and be able to determine the amount of savings over traditional compressed air operations.



REPUBLIC
Blower Systems®

REPUBLIC MANUFACTURING AIR KNIFE SYSTEMS

- Custom designed and manufactured
- Perfect for:
 - Drying parts, bottles, cans, food products, packaging, fruits, vegetables, meat, fish, poultry, textiles, carpet, film, wire, cable, metal, tile, wood, flooring
- Belt cleaning:
 - Debris removal, sawdust removal, confectioner and food topping removal, liquid blow-off
- Static control
- Air curtain:
 - Prevent hot air loss from oven, prevent cold air loss from freezer

* Contact us for details of how we arrived at the over \$80,000 savings figure used in this case study.

CONTACT US

Call us for information on how we can help solve your problems in any of the following areas:

- ▶ Pumps
- ▶ Blowers
- ▶ Filters
- ▶ Mixers
- ▶ Tanks
- ▶ Vacuum Pumps
- ▶ Mechanical Seals
- ▶ Heat Exchangers
- ▶ Repairs



Evaluation Guide

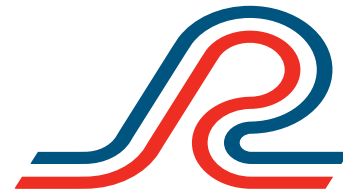
Name: _____ Title: _____ Date: _____
Company: _____
Street: _____
City: _____ State: _____ Zip: _____ Country: _____
Telephone: _____ Ext: _____ Fax: _____

1. Describe the product to be dried: _____
2. Product Dimensions: L: _____ W: _____ Ht: _____ Diameter: _____ Thickness: _____
3. Product Finish: Smooth Surface Textured Holes Pockets Other: _____
4. How is your product transported? _____
5. Conveyor Type: Roller Belt Chain Overhead Hoist
6. If conveyed by belt, is belt: Open Solid
7. Conveyor Speed _____ ft/min m/min Line Speed in parts per _____ min hr
8. Conveyor Width _____ Conveyor Height from Floor _____
9. Production line speed in parts per: Min Hour Day
10. Material to be removed from product? _____
11. Product Temperature _____ Celsius Fahrenheit
12. Volume of Liquid Particulates to be Removed: High Medium Low
13. What happens to the product after it passes through the air knife system? _____
14. What quality problems now result from inadequate drying? _____
15. Please describe present drying system: _____
16. Please define drying requirements: 75% 80% 85% 90% 95% 100% Other
17. Plant Conditions: Temp _____ Altitude _____
18. Will blower be exposed to water spray: Yes No Dirt/Debris: Yes No Other _____
19. Preferred Air Knife Material: Anodized Aluminum 316 Stainless Steel
20. Is a part available for testing? Yes No
21. Can the blower be mounted within 10 ft of the air knives? Yes No If no, how far away? _____
22. At what voltage/frequency does the plant/application run? Voltage _____ Frequency 50Hz 60 Hz

Please attach any photos or drawings of the application.

FAX OR RETURN THIS QUESTIONNAIRE TO: (214) 631-3673

ATTENTION: APPLICATION ENGINEERING



R. A. ROSS & ASSOCIATES, INC.

Keeping process flowing since 1985

R. A. Ross & Associates, Inc. 502 267-8677
Headquarters Fax 502 266-7928
2231-A Ampere Drive 1 800-489-8677
Louisville, KY 40299 solutions@raross.com
www.raross.com



Serving Kentucky, Indiana, Michigan, Ohio and W. Virginia