

# ADAMARK AIR KNIFE SYSTEMS



Post Shrink Tunnel Drying
Air Knife Belt Cleaning Systems
Conveyorized Drying Systems
Bolt-On Air Knife Systems
Air Knife Belt Defrosters
Crate and Tote Drying
Booster Blowers
Vacuum Pumps for Carton Erecting
Vacuum Pumps for Vacuum Packaging

# **Food Package Drying**

You have just waxed your car and it rains. You decide to dry the car by driving fast, really fast. At first nothing happens, the drops remain stuck to the car. You drive faster and faster. Finally the air velocity pushes the drops together until they create a drop so heavy it flies off the car.

That's it, that's what we do: air knife drying.

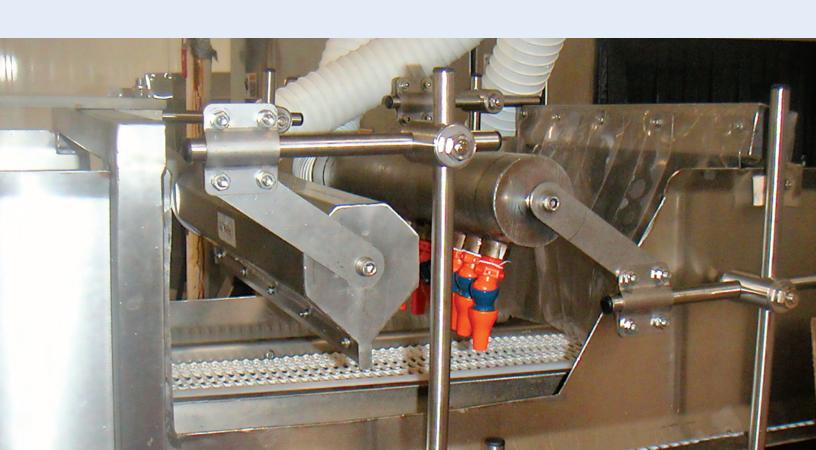
Ray Ralph, President R.E. Morrison Equipment Inc.



### Why Adamark?

The Adamark system does not use compressed air. The Republic compact high speed centrifugal blower is used to produce warm, dry air at pressures up to 2 psi. The efficient compact air knives create a high velocity air stream that strips the water from the package. The normal practice is to use compressed air with high pressure air knives, jets and nozzles. Compressed air is cool, wet and often contains residual amounts of oil vapor. Rarely does the end user have enough compressed air to dry the product or belting. A compressed air driven air knife uses 4.5 cfm of compressed air per inch at 75 psig. A flat jet 2" nozzle consumes 20 cfm. An up to date report on the cost of compressed air suggests when all fixed and variable costs are considered 1 cfm of compressed air costs \$150.00 per year to operate, (based on single shift 8 hours per day 5 days per week). A 24" wide belt using one compressed air air knife and two flat jet nozzles could cost as much as \$22,200.00 per year.

The ADAMARK blower driven system would require two air knives requiring 10 electrical horsepower. 10Hp = 7.46Kw, if you use \$.07 / Kw hour that's \$0.52 / hr, if you use one 8 hour shift per year that's 2080 hrs x 0.52 / hr or \$1081.60 per year. \$22,200.00 compared to \$1081.60. The ROI will be less than one year.





## The Adamark Drying System

The Adamark Air Knife Drying Systems have been uniquely engineered to dry the water and condensation from vacuum packaged food products after they exit from a hot water or steam shrink tunnel.

Through the use of liquid heat or steam, the film is shrunk to fit the product perfectly. Though the package is sealed, product and conveyor remain wet, creating a significant problem when the product is weighed, labeled, ink jet coded and finally placed in a carton.

Fortunately, every Adamark Drying System is custom designed to eliminate these problems, guaranteed.

### **Adamark Dries:**

### **Prior to Weighing**

High velocity air knives positioned following the exit of a shrink tunnel dry the conveyor belt immediately, providing an accurate weight every time. This prevents the need to stop production regularly to manually dry the belt and reset the scale.

### **Prior to Labeling**

There are two significant advantages to labeling a dry product: The label will stick and stay where it is positioned without wrinkling from the absorption of moisture. And, a less expensive, thinner label can be used when the package is dry prior to labeling, reducing material costs.

### **Prior to Coding**

When ink-jet coding, less expensive inks can be used on a dry product; no smears or runs. Even at high line speeds, the primary advantage is a clear, inexpensive code.

### **Prior to Boxing**

With a dry product, there is never a concern that the wet bottom of a stacked product will stick to or soil the top label of the previous product. Less expensive cartons (thinner, non-waxed) can be used when the risk of case rot from accumulated water is eliminated by the Adamark Drying System.



### **Adamark: Engineered to Work**

Adamark systems are available in kits to bolt onto existing conveyors or as a stand alone conveyorized drying unit. The unique Adamark air knife drying conveyor is complete in every way. The unit is normally 5 to 6 feet long with a frequency drive controlling the belt, adjustable to match existing line speed. The air knives are installed top and bottom with the blower tucked underneath the drip pan. The system is even available with integrated controls to link it with the line's existing control box.

When added to the packaging line, the Adamark air knife drying system, removes the residual water to allow the other equipment to perform as it should, accurately and trouble free.

Adamark blower driven air knife drying systems are designed to fit, engineered to work.



### **Beyond Air Knives**

### **Becker Vacuum Pumps and Blowers**

The R.E. Morrison network of solutions extends beyond air knife drying to include accessories used throughout the packaging process. Our vacuum pumps and blowers can be used in many other areas of the packaging process. Becker vacuum pumps use advanced rotary vane technology and are sold in both oil-free and oil-lubricated forms. Our pumps and compressors are ideal for use in the following areas:

- > Vacuum Packaging
- > Booster Blowers
- > Vacuum lifting
- > Vacuum Pick and Place
- > Label application
- > Vacuum filling
- > Carton erecting
- > Case packing





### The REM Network

www.remequip.com/network

R.E. Morrison Equipment is an industry leading manufacturer and distributor of a wide variety of proprietary and non-proprietary vacuum and drying technologies. The REM Network is the gateway between all our content, from technical specifications to the details on distribution partners and suppliers.



#### **R.E. Morrison Equipment**

www.remequip.com

As the Canadian Master Distributor for Becker Vacuum Pumps, Republic Blower Systems and Mann Industrial Filters, R.E. Morrison has been providing solutions to Canadian customers for over 20 years. Our new 10,000 sq. foot Mississauga headquarters serves as the base for the REM Network, including all Adamark and BaseVac Dental related activities. By combining European precision with North American practices, REM has a custom designed, economical and high quality solution for every application.



www.adamarkairknife.com



The Adamark and Adamark II Air Knife Systems are the first choice of many of Canada's largest manufacturers for one simple reason: they are guaranteed to work. Our expert systems engineers have created bolt-on and drop-in solutions for many different product and conveyor drying and belt cleaning applications. Every system is custom designed from the ground up based on your application to ensure it meets your requirements

### **BaseVac Dental Systems**

www.basevacdental.com



In 2004, the BaseVac Dental line of dental vacuum products was born. Based on a complete understanding of dry vacuum pumps used in industrial applications, the BaseVac Dental line was immediately recognized as the correct dental vacuum solution. The BaseVac Dental Dry Vac system is 100% dry, easy to maintain, and fits in a closet. In spite of its compact package, the Base Vac Dental Dry Vac is capable of supporting up to 12 operatories in standard configurations and a virtually unlimited number in a custom designed system.

### **Ribbit Enterprises**

www.ribbitenterprises.com



Ribbit Enterprises is R.E. Morrison's American distributor for Adamark Air Knife Systems and BaseVac Dental vacuum systems. Ribbit operates out of REM's Mississauga head office and offers the same level of customer service and product support REM customers have come to expect. Dealer inquiries welcome.

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