

# EXAIR®-MAIL



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NEWS YOU CAN USE FROM EXAIR CORPORATION

## Super Air Knife Is The Smart Choice

When you need to blowoff, dry or cool a surface, you are faced with the hardship of how to get the job done quickly and efficiently. Here are some facts to consider:

**Blowers** - You might think blowers are a good choice, until you own one. They're expensive and take up a lot of space. Most exceed OSHA 90 dBA noise requirements and don't get the job done on the first pass. Maintenance is frequent and expensive. The motors turn up to 20,000 RPM causing the blower bearings to last about a year. **Bearing replacement costs about \$1000 and there is downtime for the unit to be sent back to the manufacturer since most can not be repaired on site.**

**Drilled Pipe** - The initial cost is low. The "weakest link" is the high compressed air consumption. A 1/8" diameter hole at 80 PSIG air consumes 17.5 SCFM (standard cubic feet per minute) of air! For one eight hour shift, **that cost translates into \$546 per year, per hole! It violates OSHA dead-end pressure requirements and noise levels (over 90 dBA).**

**Super Air Knife** - EXAIR's Super Air Knife produces a uniform sheet of laminar airflow across the entire length. It can be adjusted from a "blast" to a "breeze" and cycled on and off with instantaneous response. With the 40:1 air amplification (40 parts room air to one part compressed), **one 6" Super Air Knife at 80 PSIG uses less air than one 1/8" drilled hole!** It is safe since it can't be dead-ended and now the **sound level is only 69 dBA!** It is maintenance free since **there are no moving parts to wear out.**



**The Model 110024SS 24" Stainless Steel Super Air Knife dries bolt covers after electro-polishing.**

When it comes to drying parts after washing, cleaning conveyors or components, and cooling hot products, the compact Super Air Knife is the answer. If you'd like to know more, or have an application in mind, call 1-800-903-9247 to speak with Kirk, Brian, Joe or Neal in our Application Engineering Department. They can help.

## 1/4 Ton Of Refrigeration In Your Hand!



**Stainless Steel Vortex Tubes are available in three sizes with capacities up to 10,200 Btu/hr.**

It seems impossible that a tube so small can deliver such tremendous cooling power! The Vortex Tube has been a scientific wonder for over 70 years. Why? It has no moving parts and uses no electricity or refrigerants, yet it can produce temperatures as cold as -50°F from ordinary compressed air! EXAIR's catalog details several of the theories as to "why they work". In reality, ours is not to question "why". We know Vortex Tubes work and are extremely reliable. We have many satisfied customers who regularly buy them to use in their cooling applications.

Over the years, we have run into some common cooling applications that have warranted us to manufacture "applied products". These include:

- **Cabinet Coolers** for cooling control panels
- **Cold Gun** that replaces mist coolants for machining
- **Mini Cooler** for cooling small parts and tools
- **Component Cooler** for cold testing electronic components
- **Adjustable Spot Cooler** for cold air to -30°F for spot cooling

Do you need a low cost cooling solution? Please call our Application Engineering Department at 1-800-903-9247.

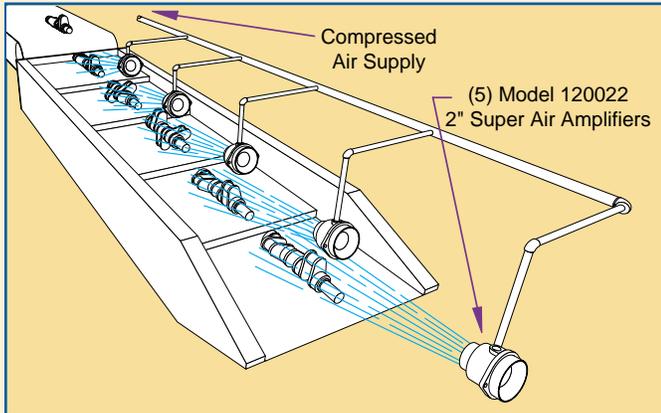
## Need It Now? It's Yours!

Do you need the dimensional drawing of a product? Want a catalog? Or, do you need to replace a lost "Installation and Maintenance Sheet"? You can download any of these right now by visiting our secure web site. In addition to the many downloads, you'll find complete technical information, many application photos and drawings, an extensive list of FAQs, and have the capability of placing an order.

Visit [www.exair.com](http://www.exair.com) now!

## Application Spotlight:

### Super Air Amplifier Cools Iron Castings



#### The Problem:

A foundry that produces iron castings for the automotive industry had a problem with certain hot parts that slowed their production. After pouring, the castings gradually cool by traveling along a 200 foot long conveyor. At the end, a shake-out conveyor breaks the sand mold so the casting can be removed. Normally, the operator could pick up the part with special gloves and grind the rough edges. However, some castings such as crankshafts, differential housings, and shift parts retained too much heat, making them too hot to handle. The operator had to wait up to ten minutes for them to cool.

#### The Solution:

They installed (5) **Model 120022 2" Super Air Amplifiers** over the shake-out conveyor. The high output airflow from each Super Air Amplifier rapidly cooled the parts without shocking them (no cracks or imperfections from cooling too rapidly). **When the part reached the end of the conveyor, the operator could proceed immediately.** The backlog was completely eliminated.

#### Editor's Comment:

This manufacturer had almost given up on finding a cooling solution since the fans and blowers that were tried in the past showed little improvement. Our Super Air Amplifier dramatically reduced the cooling time. As a result, they installed them on their second line. The low cost Super Air Amplifiers are compact, portable and have no moving parts to wear out (which is ideal in a dusty foundry). **And, the patented design assures the highest output air volumes possible with the lowest air consumption.**

### The **EXAIR** Guarantee

EXAIR unconditionally guarantees its cataloged products for 30 days.

If you are not satisfied for any reason within that time, you may return the product for full credit with no restocking charge.

## Application Checklist

EXAIR's compressed air products solve many common industrial problems. Below are some of the applications we've been able to help with recently. Please call our Application Engineering Department for help with yours.

-  A manufacturer of extruded plastic films cools the film surface, eliminates static cling, and blows the dust away with a **Model 111236 36" Super Ion Air Knife Kit**.
-  Prior to applying an aluminum coating, an automotive headlamp manufacturer cleans charged dust particles from the surface with a **Model 7292 Ion Air Cannon System**.
-  To keep paint from getting hot and "gummy", a gear train manufacturer created a cooling jacket for their paint hose that surrounded it with cold air from a **Model 3230 Vortex Tube**.
-  To increase production, a bakery uses the **Model 3925 Adjustable Spot Cooler** to set lines of hot decorative carmel on cheese cakes.
-  Following a machining operation, a manufacturer of automotive oil pumps rinses coolant off the pump bodies, then dries them with a **Model 110012 12" Super Air Knife**.

## Eliminate Static and Dust!

Prevent jamming, tearing and static electricity shocks!



EXAIR provides the cost effective solution for removing static electricity from plastics, webs, sheet stock and other product surfaces. Production speeds, product quality and surface cleanliness can improve dramatically.



**Super Ion Air Knife™** delivers a uniform sheet of static eliminating ions!



**Ion Air Cannon™** provides a concentrated flow for static removal.



**Ion Air Gun™** is a rugged, ergonomic, effective spot cleaner.



**Ion Air Jet™** is a compact static eliminator that delivers a blast of air!



**Ionizing Bars** compact, rugged bars eliminate static cling.



**Digital Static Meter** locates the source of the static problem.