

## Harsh Environments Spell Failure



**The new NHP Cabinet Cooler System keeps dirt, heat and moisture out of the enclosure.**

The control panel in the above photo looks like it was thrown from the sky in a meteor shower! Of course, it wasn't but just goes to show how bad some industrial environments can be. Most people tend to ignore the heat, dirt or moisture until it shuts down their machines as a result of damaged electronic components.

EXAIR's low cost Cabinet Coolers can prevent these environmental problems. The various types include:

- NEMA 4 (dust, rain and hose down)
- NEMA 4X (same as NEMA 4 but in corrosive areas)
- NEMA 12 (dust, dirt, dripping of non-corrosive liquid)

The Cabinet Coolers don't use harmful refrigerants. Instead, they use an internal vortex tube to convert an ordinary supply of compressed air into cold 20°F (-7°C) air. Relative humidity inside the enclosure stabilizes at 45% so no moisture condenses. There are no moving parts to wear out and all Cabinet Coolers are UL Listed.

What about dirty areas like a foundry or steel plant where contaminants pass through small holes or conduits? Our new Non-Hazardous Purge Cabinet Cooler Systems are ideal for these applications. NHP Cabinet Cooler Systems provide a slight positive pressure in the enclosure by passing 1 SCFM (28 SLPM) of air through the Cabinet Cooler under normal conditions. When the thermostat detects high temperature, it energizes the solenoid valve to pass full line pressure to the Cabinet Cooler, giving it full cooling capability.

Need help selecting the right Cabinet Cooler for your enclosure? Just call Brian, Neal, Joe or Kirk in our Application Engineering Department at 1-800-903-9247.

## A Better Way to Dry Parts

The need to blow water, oil, dirt, dust and chips off parts, webs, sheets and conveyors is a very common industrial problem. Unfortunately, too many people use a piece of drilled pipe connected to their compressed air supply. They don't consider the consequences. Besides being dangerous, drilled pipe is noisy and wastes air!

Consider this. One single 1/8" diameter hole consumes 22 SCFM at 100 PSIG, covers only an inch, and screams at over 90 dBA! By comparison, a 6" Super Air Knife consumes the same 22 SCFM at 100 PSIG but provides a full 6" (15cm) coverage with a noise level of only 70 dBA!



**A Model 110006 6" Super Air Knife blows solvent off circuit boards prior to packaging.**

EXAIR's Super Air Knife is the best choice for blowoff, cooling and drying applications. It creates a uniform sheet of airflow across the entire length with hard-hitting force and minimal wind shear. **Surrounding room air is entrained into the primary airstream at a ratio of 40:1. Plus, you can reduce air consumption by 90% and noise levels to a whisper.**

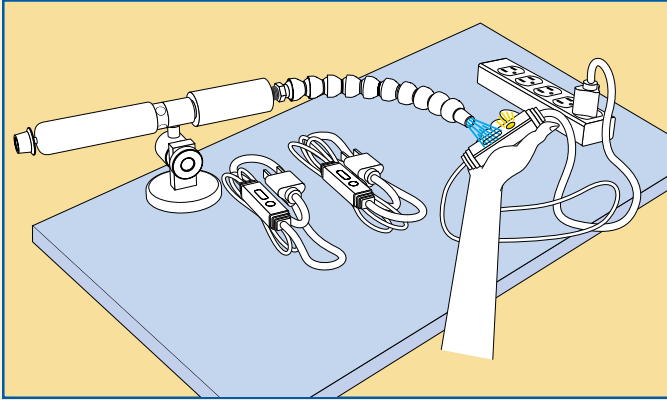
Sound too good to be true? It's not! If you'd like to know more about the Super Air Knife, return the enclosed postage-paid card and we will send your free copy of our Catalog 16. And, if you order the Super Air Knife, rest assured that it will perform as stated. We guarantee it!

### 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 Spotlight: Testing Heat Tape Thermostats



### The Problem:

A manufacturer of electrical heat tapes had a problem testing thermostats for accuracy. The heat tape is supposed to switch on when the outdoor temperature dips below 40°F to prevent pipes from freezing or ice from building up on a roofs edge. The liquid-tight thermostat of every tape had to be dipped into a bowl of ice water (thermometer checked at 36°F) to make sure the pilot light came on and the tape got warm. Summertime heat caused the water to heat up so quickly that more time was spent regulating the water temperature than testing thermostats.

### The Solution:

The water bath was replaced with a **Model 3825 Adjustable Spot Cooler**. Once set to their desired temperature of 36°F, it provided a stable temperature all day long without adjustment. Drying each heat tape was no longer required and testing was over in seconds.

### Editor's Comment:

The Adjustable Spot Cooler paid for itself in no time as a result of the increased productivity. In this case, **the company used the included 15 SCFM generator which minimized the compressed air use, costing only 23 cents per hour of continuous use!** When testing thermostats, cooling machined plastics, setting hot melts or controlling tolerances, the Adjustable Spot Cooler is the best choice.







## Stay in the Loop

Be the first to know as new things happen at EXAIR (new products, catalogs, performance enhancements, etc.). Just fill out your e-mail address on the enclosed postage-paid card and mail it today, or subscribe on our website at [www.exair.com](http://www.exair.com). We'll be happy to e-mail you when new information becomes available, along with a hotlink so you can go directly to our website for complete details. Of course, you will always have the option to "click" your name off of the list at any time, and EXAIR will never disclose your e-mail address to any third party.



## Application Checklist

In each newsletter, we summarize some common problems solved by EXAIR products. Please call our Application Engineering Department for help with yours.

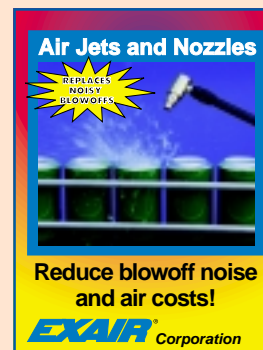
-  A manufacturer of confectionary products uses the **Model 6063 1-1/2" Stainless Steel Line Vac** to convey crushed peanuts to a hopper on a machine that makes caramel apples.
-  In seconds, the **Model 110024SS 24" Stainless Steel Super Air Knife** cools ravioli and other pasta from 170°F down to 130°F before going into a freezer.
-  An aircraft engine manufacturer uses the **Model 120022 2" Super Air Amplifier** to blow weld spatter away from a laser welding lens.
-  A fabricator of dairy machinery uses the **Model 110012SS 12" Stainless Steel Super Air Knife** to blow brine water off of cheese before coloration.
-  Production time is dramatically reduced when a manufacturer of wire and cable cools the PVC jacket of machine tool wire with a **Model 3225 Vortex Tube**.
-  A manufacturer of laminate flooring eliminates the static charge and blows away chips on the laminate with a **Model 111212 12" Super Ion Air Knife Kit**.

## Reduce Blowoff Noise!

Cut air consumption up to 80%  
and noise levels up to 10 dBA!



Blowoff • Clean • Cool • Dry



Energy saving Air Jets and Nozzles use a small amount of compressed air to induce a high mass flow of free air - up to 25 times the air consumed! The high outlet flows are ideal for blowoff, cleaning, cooling and drying operations. Air Jets and Nozzles meet OSHA dead-ended pressure requirements. Many styles and materials available.

For more details, return the postage-paid card for a catalog or contact an Application Engineer.