### **How to Keep Your Electronics Cool and Running!**



Hot weather is here already! Be prepared for the problems it brings! Hot weather can cook the electronics in your control panels. And, it usually happens when you least expect it, and always when you can't afford to be shut down. Machines, conveyors and production lines can grind to a halt when circuits

and sensors malfunction. And putting a fan in front of the

panel door is **NOT** the solution!

EXAIR's Cabinet Cooler® Systems are the quick, easy fix! Our NEMA 12, 4 and 4X Cabinet Coolers are UL Listed to US and Canadian safety standards, CE compliant, and



designed to match the NEMA rating of your particular enclosure. Available in cooling capacities up to 5,600 Btu/hr for large and small control panels, these compact coolers are quickly installed through a standard electrical knockout hole and held in place with the supplied locknut.



EXAIR's ETC Electronic Temperature Control accurately maintains a constant temperature inside the enclosure.

In today's energy conscious environment, it makes good sense to save on compressed

air use. EXAIR's ETC™ Electronic Temperature Control can help you do just that! It can keep the temperature inside the enclosure slightly under the maximum rating of the electronics. This permits just enough cooling for the electronics without going so cold as to waste compressed air. The temperature inside the electrical enclosure is constantly monitored by a quick response thermocouple with an LED display on the ETC that displays °F or °C.

Do you have a panel that needs cooling but are unsure what cooling capacity is needed? We can help! If the hot summer weather is creating the problem, in most cases, 2,000 Btu/hr is enough refrigeration to offset the

summertime heat load, regardless of the panel size. If you'd like some help calculating the heat load and choosing the appropriate Cabinet Cooler model, contact an Application Engineer at 1-800-903-9247 or by e-mail at <a href="mailto:techelp@exair.com">techelp@exair.com</a>. They'll be glad to help. See more details on next page.

**Heavy Duty HEPA Vac Makes Its Debut!** 

EXAIR's new Heavy Duty HEPA Vac™ is now available! This heavy duty vac attaches to an ordinary 55 gallon open top drum to turn it into a powerful, HEPA quality, industrial vacuum cleaner. The Heavy Duty HEPA Vac is specially designed to move more material with less wear. Plus, this vacuum has been engineered to filter contaminants to HEPA requirements in dusty environments requiring frequent cleaning.



It is extremely quiet at 82 dBA (half the noise of electric vacs), making it suitable for a wide variety of environments. An economical, easily maintained pre-filter stops larger particles, while the HEPA filter handles the smaller matter. All filters are tested for minimum 99.97% filtration at the 0.3 micron level to meet HEPA standards in strict accordance with IEST-RP-CC-007.

The Heavy Duty HEPA Vac System comes complete with the Heavy Duty Dry Vac, lever lock drum lid, shutoff valve, pre-filter, HEPA filter, 10' (3m) static resistant hose, hose hanger, 1/2 NPT quick connects coupling, 20' (6m) compressed air hose, pressure gauge, and aluminum chip wand (drum not included). Complete systems including a drum and dolly are available. Find out more about the Heavy Duty HEPA Vac at www.exair.com/05/hepa.htm



EXAIR has a complete line-up of industrial vacuums in addition to the new ¹ Heavy Duty HEPA Vac, including the ² Reversible Drum Vac™, ³ Chip Vac™, ⁴ Heavy Duty Dry Vac™, ⁵ Vac-u-Gun, ⁶ Deep Hole Vac-u-Gun and our patented ⁊ Chip Trapper™. We have precisely the vacuum you need! Find out more at www.exair.com/05/vacuum.htm

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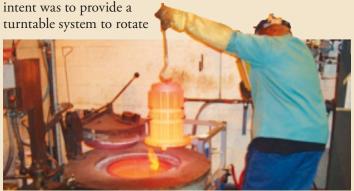


## **Application Spotlight:**

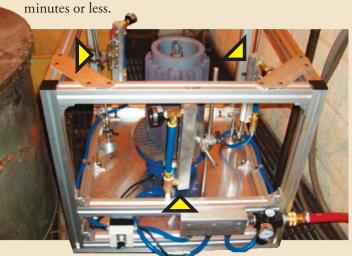
Decrease the cooling time of heat-treated tooling after it is removed from a furnace.

#### **Before EXAIR:**

Customer was using (3) 24" industrial shop fans to cool the tooling piece from 1,725°F to less than 600°F. The engineer's



the part, while blowing it with a greater volume of air, to effect faster cooling. The fans needed almost a half an hour to cool the part to 600°F, and their goal was to reduce this to 20



#### **After EXAIR:**

The customer designed and fabricated the cooling system using three Model 110012 12" (305mm) Aluminum Super Air Knives, equipped with Model 9060 Universal Air Knife Mounting Systems, and Model 9076 Air Knife Plumbing Kits, as shown above.

#### **Summary:**

The 3 air knife system had a total output air flow of 4,176 SCFM (40 times the air consumption!) and provided better-than-anticipated results, by cooling the tool to 200°F in about 20 minutes. Not only did this meet their operational goal, but it also provided for safer handling of the parts by their operators. To learn more about air knives, visit www.exair.com/05/ak.htm



# 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.



## **New Application Checklist**

EXAIR products solve a variety of problems. Please call our Application Engineers at 1 (800) 903-9247 or e-mail them at techelp@exair.com for assistance with yours.



A company manufactures woven wire products. They dip the wire screen into a paint solution and need to remove the excess. They were using beater brushes. The brushes did not do a good job and they wore out rapidly. A **Model 110048 48**" (1219mm) Super Air Knife provided an even and effective blow off as the product exited the dip tank.



A company extrudes a .038" fiber optic cable for a branch of the armed services. They have had difficulty holding tolerances due to variations in temperature. By installing a **Vortex Tube**, they can cool the cable very quickly and get a good solid set. This prevents the material from stretching due to any variation in line speed of the extrusion head.



A painting company has an on-going housekeeping issue where dust and powder collect on the ceiling beams and joists over time and need periodic cleaning to keep contamination between different paints from being a problem. The interesting issue with this application is that the customer needs a self-contained vacuum cleaner with filtration, but needs to be able to access the ceiling too. Most standard vacuums only have a hose about 5' long. They ordered a **Chip Vac System** with a special 20' hose and a **Line Vac** to place as a booster between the standard 10' hose and the special hose. This allowed them to have success over a 30' distance.



For a limited time, EXAIR is offering a free AC Sensor when you purchase one of our Cabinet Cooler® Systems. Cabinet Coolers are the low cost, reliable way to cool and purge electronic control panels. NEMA 12, 4 and 4X Cabinet Coolers that match the NEMA rating of the enclosure are available in many cooling capacities for large and small control panels.

Order a Cabinet Cooler System by July 31, 2013, and you will receive a free Model 7929 AC Sensor!



To learn more go to:
www.exair.com/05/ccpromo.htm