

Manufacturing Intelligent Compressed Air Products for Industry Since 1983

Number 136

NEWS YOU CAN USE FROM EXAIR

Summer 2023

Prepare for the Summer Heat



The summer is finally here and that means overheating electrical panels are a real possibility! Protecting electronic panels from the upcoming heat can prevent problems like intermittent circuit failures, inaccurate sensor reading, and complete failure of critical circuit boards. EXAIR's low-cost and easy-to-install Cabinet Cooler® Systems are designed to cool dust-tight, oil tight, splash resistant, and indoor/outdoor enclosures. Utilizing clean, moisture-free compressed air, EXAIR Cabinet Coolers both cool and purge your electrical cabinets protecting them from excessive heat or foreign contaminants.

Not sure if Cabinet Coolers are the solution for you? Contact an EXAIR Application Engineer at techelp@exair.com. Our engineers have years of experience working directly with customers to find the solution that best fits their unique process and problems. EXAIR even offers a Cabinet Cooler Calculator to simplify the process of finding your specific model.

In this real-life story, Lasercraft found the Cabinet Cooler was easy to install, compact in size, readily available, maintenance-free, quiet, reliable and inexpensive. Read for yourself how these Cabinet Coolers ended costly shutdowns for Lasercraft and get an idea what Cabinet Coolers can offer your facility.

Visit our site to learn more or chat with one of our Application Engineers. And, for a limited time, we even have a special promotional offer accompanying Cabinet Coolers.

New CE Rating for NEMA 4 Cabinet Coolers

EXAIR products are engineered to improve efficiency while increasing facility safety in the process. This ongoing focus on standards and personnel safety has earned EXAIR NEMA 4 Cabinet Cooler[®] Systems an upgraded CE certification under their latest safety directives. Performed by an independent laboratory, this new certification not only provides added utility in processes that adhere to the highest industry specifications, but is also a testament to EXAIR's commitment to continuous improvement and quality standards compliance. With continued effort focused on creating efficient and safe products, EXAIR Cabinet Coolers continue to meet all industry standards for safety in your process.

New ATEX Cabinet Coolers

EXAIR's line of Cabinet Cooler Systems are an industry leading solution for protecting your sensitive electronic enclosures. With the demands of an evolving industry, we understand different processes require different solutions that also meet specific safety guidelines. That's why EXAIR is proud to present our latest iteration of the Cabinet Cooler system, the ATEX Cabinet Cooler.

ATEX Cabinet Cooler Systems are engineered and approved for use upon purged electrical enclosures within the ATEX areas rated Zones 2 and 22. These UL tested Cabinet Coolers meet all the stringent requirements for explosive environments and provide a low-cost and reliable solution, with no moving parts to wear out.

Like the rest of EXAIR's Cabinet Coolers, ATEX Cabinet Coolers can be installed in minutes through a standard electrical knockout, and come in various cooling capacities from 1,000 to 5,600 Btu/Hr for any enclosure small or large. Available in both aluminum and stainless steel, ATEX Cabinet Coolers are CE compliant and maintain NEMA 4/4X integrity in applications like relay panels, PLC's, motor control centers and more!

Try it out at this link: https://exair.co/05ccalc

Download our White Paper "Cabinet Coolers End Costly Shutdowns":

https://exair.co/ ccecs05

Visit to learn more: https://exair.co/ ccpromo05

Learn about the full breadth of EXAIR Cabinet Coolers and their different certifications: www.exair.com

Beat the heat this summer with ATEX Cabinet Coolers! Learn more and shop our new line by visiting the link. https://exair.co/05-ATEX





MANUFACTURING INTELLIGENT COMPRESSED AIR® PRODUCTS SINCE 1983

Please see other side

11510 Goldcoast Drive • Cincinnati, OH 45249-1621 Phone (513) 671-3322 FAX (513) 671-3363 E-mail: <u>techelp@exair.com</u> • <u>www.exair.com</u>

Safety Air Nozzles Reduce Sound Levels & Increase Safety

APPLICATION GOAL: To lower compressed air consumption and noise levels associated with crimped-end copper line blow offs installed on machine tools.

| 1/4" Copper Tube, Type L, crimped | | | | | |
|-----------------------------------|--|-----------------|--|------------------------------|--|
| 1 | | Opening Size | Compressed Air Consumption @100PSIG | Sound Level @3ft Distance | |
| | | 1/16" × 3/16" | 19.6 SCFM | 96 dBA | |

BEFORE EXAIR: A major producer of high-tech plastic products operates (10) machines that use compressed air blow offs to remove chips and shavings from manufactured parts. These blow offs consisted of 1/4" open ended copper tubing that had been crimped on the end. This was effective, but loud, inefficient, and not compliant with OSHA safety or sound level standards. They operate these blow offs continuously, with a supply pressure of 100 PSIG, ten hours a day, four days a week.

AFTER EXAIR: Using standard compression fitting adapters, they were able to quickly and easily install Model 1100 1/4 NPT Super Air Nozzles, after simply cutting the crimped ends off the tubing. These effectively blow off the parts at a fraction of the compressed air consumption and sound level of the copper tubing.



| | Compressed Air Consumption @100PSIG | SoundLevel @3ft Distance |
|------------------------|---|-----------------------------|
| Model 1100 | 16.9 SCFM | 76 dBA |
| Reduction (per Nozzle) | 2.7 SCFM | 20 dBA |

SUMMARY: The considerable reduction in sound level was noticed immediately upon installation of the Super Air Nozzles on just a few machines on the first day. Once they were all outfitted, the sound level change throughout the shop was remarkable.

Based on an average compressed air cost of \$0.25 per 1,000 SCF, and (10) machines running (40) hours a week, 52 weeks per year, this user is enjoying annual savings of **\$842.40**, as well as the greatly reduced noise levels and compliance with OSHA standards for compressed air use for cleaning [1910.242(b)] and occupational noise exposure [1910.95].



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.

EXA/R.com[®]

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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 <u>techelp@exair.com</u> for assistance with yours.

Super Air Amplifier Removes Heat from Hot Glue Process

This customer builds special purpose equipment, primarily for the electronics manufacturing industry. One of these products has magnets that are hot-glued in place. They were having problems with excessive heat building up in this part of the machinery, which was unable to be removed through the standard ventilation ducts and fans. They installed a **Model 120022 2" (51mm) Super Air Amplifier,** which quickly and quietly exhausts the hot air from the hot-glue chamber, keeping the temperature low enough for effective and safe operation.

GOTO https://exair.co/05-sal

🖌 Super Air Wipe Keeps Sensor Clean

A manufacturer of medical endoscopes places the small diameter, long endoscopes into a steaming process to sterilize the parts. The steam is detected by a sensor to confirm presence of steam. The sensor, which is mounted on the end of a robot arm which is holding the endoscope, becomes coated with steam. This prevents the sensor from working properly. This customer has installed an EXAIR **Model 2400 1/2" (13mm) Super Air Wipe** onto the steam enclosure frame which allows the robot to place the endoscope through the Super Air Wipe. They operate the Super Air Wipe at a low pressure so it does not disrupt the steaming process and the Super Air Wipe keeps the steam from reaching the sensor. This has stopped misreads and failures of the sensor.

GO TO https://exair.co/05-saw

Blowing Charged Particles from Glass Prior to Tempering

Vortex Tubes are used to cool down an automotive door seal extrusion before it is coated with a color to match the interior of the car. The coating process cannot be done until the original extrusion is cool. The **Model 3240 Vortex Tube** sped up the production, allowing it to move quickly and smoothly.

GO TO https://exair.co/05-vt

