Manufacturing Intelligent Compressed Air Products for Industry Since 1983

Number 134

THE LATEST NEWS YOU CAN USE FROM EXAIR

Winter 2022-2023

New Intellistat[®] Ion Air Nozzle

The winter brings colder temperatures that will often create drier surrounding air. These conditions in turn create troublesome static that can negatively affect production whether it's product quality, particulate clinging to objects, jamming, tearing or even worse, harmful shock to employees. EXAIR has been an industry leader in static eliminating solutions, and proudly offers a wide variety of products to help customers tackle any unique static dilemmas they may be facing.

When it comes to sensitive processes like scientific testing or electronic manufacturing, it's important to have a tool that will not only provide the necessary static decay rates, but also achieve this goal without harming what could be a delicate product/process. EXAIR's line of Intellistat products was engineered with this exact goal in mind carrying a **Class 5 rating for cleanrooms per ISO 14644-1**. In 2020 EXAIR introduced the **Intellistat* Ion Air Gun** as our handheld solution to eliminate electrostatic discharge in sensitive processes. Last year, we were happy to unveil our newest product: The **Intellistat Ion Air Nozzle** for remote mounting or benchtop assembly.

The Intellistat Ion Air Nozzle utilizes the same technology as the Intellistat Ion Air Gun, but comes equipped with a stainless steel bracket for easy mounting which allows for hands-free operation in processes where both hands are needed like precision parts assembly, testing or packaging. The nozzle distributes ionized compressed air to neutralize static and remove troublesome particulates during clean processes, test procedures and sensitive assembly work. With a +/-30 volt offset, the Intellistat was designed to consume minimal compressed air while simultan-eously delivering precise blow-off and exceptional static decay rates capable of reducing 1000 volts to less than 100 in under one second at up to 24" away. The design offers an efficient and low voltage transformer converting 120V to 24V to ensure user safety as well as being compatible with EXAIR engineered air nozzles certifying it meets all OSHA requirements for sound level and dead-end pressure. The Intellistat Nozzle also carries an LED indicator to assure proper functionality and is constructed from durable static-dissipative polycarbonate to assure its usefulness in applications requiring non-conductivity such as electronics manufacturing.

With the help of clean, ionized compressed air, the Intellistat Ion Air Nozzle is a hands-free solution for removing dust, static, particulate or contaminants in processes like circuit board manufacturing, removing debris from medical products, maintaining charge neutrality in laboratory processes and more. To learn more about the Intellistat Ion Air Nozzle and Ion Air Gun visit <u>https://exair.co/05-iian</u>.

In addition, EXAIR offers a full line of Gen4 Static Eliminators sure to keep processes running smoothly and increase employee safety by delivering positive and negative ions fast, over large areas, on to critical surfaces, or into hard-to-reach spaces. To learn more about EXAIR's extensive line of static eliminating products, visit our site at <u>https://exair.co/05-se</u>.

EXAIR's Static Eliminator Promotion

EXAIR's static eliminator promotion is also currently underway! Order any EXAIR Static Eliminator by March 31, 2023 and receive a free Model 7929 AC Sensor! Details: <u>https://exair.co/05sepromo</u>.



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



Have a Success Story?

If an EXAIR product solved your production line problem, we'd love to hear about it. Send us an email at <u>techelp@exair.com</u> and tell us your story. If we can turn it into a case study, we've got a little something for you!



ICCE

Super Air Nozzles Reduce Air Consumption and Noise for Steel Tubing Manufacturer



APPLICATION GOAL: Reduce compressed air consumption and noise levels associated with the inappropriate use of modular hose which is designed for use with liquids.

BEFORE EXAIR: A steel tubing fabricator blows air onto newly

welded tubing as it passes via rollers through a test sensor. The cooling flow of the air ensures that the test sensor does not overheat. The modular hose *(blue with orange tips, see photo at right)* provided adequate cooling flow, but was very loud, and was identified as an inefficient use of compressed air. Supply pressure to these hoses was 90 PSIG, and total compressed air consumption rate was 197.5 SCFM, and sound level was 96 dBA. These run 72 hours a week during normal operation.

AFTER EXAIR: Four Model 1103-9256 Mini Super Air Nozzles with 6" Stay Set

Hoses were purchased and installed (see photo at right) The air flow still provides reliable heat protection for the sensors, while compressed air consumption and noise levels dropped dramatically to 44.2 SCFM @90 PSIG, and 72 dBA, respectively.



SUMMARY: After proving the value associated with the use of the Mini Super Air Nozzles on this line, the decision was made to upgrade the other five roller lines in the plant. The monetary savings associated with the dramatic reduction in compressed air consumption are as follows:

	Air consumption, all five lines	Consumption savings, annual	Cost savings, annual
Coolant Hoses	987.5 SCFM	172,186,560 SCF	\$43,046.00
Super Air Nozzles	221 SCFM		



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.



11510 Goldcoast Drive • Cincinnati, OH 45249-1621 Phone (513) 671-3322 FAX (513) 671-3363 E-mail: techelp@exair.com • www.exair.com Copyright©2022 by **EXAUR** All Rights Reserved.

WNew 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.

Static and Dirt Removal

Company packages ceiling tiles. They are having a problem with particles adhering to the surface due to static charges. When they are stacked, the foreign objects get embedded, causing surface defects. Installing the **Model 112024 24" (610mm) Super Ion Air Knife** across the conveyor belt removed contaminants and neutralized the surface so as not to attract the contaminants back onto the surface. This eliminated all surface defects and customer returns.

GOTO exair.co/05-siak

🗡 Motor Cooling - rock wool

Company manufactures rock wool. They have a motor in a confined space. Ambient air temperatures around the motor can reach as high as 120°F. The fan on the motor then draws in this hot air and provides little or no cooling. Eliminating the fan, they introduced cold air from the **Model 3240 Vortex Tube** into the motor housing, eliminating overheating of the motor.

GOTO <u>exair.co/05-vt</u>

Super Air Amplifier Cools Parts Prior to Gauging Process

Customer is assembling piston rods to piston heads with pins. They heat the piston to allow for enough expansion to assemble the pieces. Once done, they need to cool the pistons down so they can be gauged correctly. A **Model 120022 2" (51mm) Super Air Amplifier** was aimed at the pistons as they moved by on an assembly line. Customer was able to cool the pistons down enough to be able to properly gauge and not have any further heat related faults.





When the temperature outside drops and humidity plummets, static electricity problems are sure to make bad things happen, leaving you to deal with the associated production headaches.

Order by March 31, 2023 and receive a Free AC Sensor!

