



Gen4 Static Eliminators for Web

As more polymers, plastics and thermoplastics are found within your machines and as production continues to increase speeds on processes, static will continue to be on the rise. And since static electricity will cause a variety of problems including contamination in packages, poor product finishes, and personnel shocks, static elimination will continue to be high on your priority list. If you want to keep up in your highly competitive market, the quality of your product may depend upon removing static from your process.

EXAIR offers many solutions for static elimination. Gen4 Static Eliminators have undergone independent laboratory tests to certify they meet the rigorous safety, health and environmental standards of the USA, European Union and Canada that are required to attain the CE and UL marks. They are also RoHS compliant. Their new design features include a metal armored cable to protect against abrasion and cuts, integrated ground connection and electromagnetic shielding.

Choosing the best product for the application generally depends on two characteristics of the application.

1. Do you need compressed air assistance due to high speeds or distance from the target?
2. What size area do you need to cover with the static eliminating ions?

Non-air assisted products like **Gen4 Ionizing Bars** (mounted within 4" of the surface) and the **Gen4 Ionizing Point** (mounted within 2" of the surface) are engineered to perform up to 25% better than previous models. They are typically best for slower process speeds and Ionizing Bars are offered from 3"- 108" lengths. These products have a small footprint and can be mounted in the tight quarters of many machine mounted applications. For high speeds or when product cannot be mounted within 4" of your target, some air assistance is necessary.

The Gen4 Super Ion Air Knife, Gen4 Ion Air Cannon

and **Gen4 Ion Air Jet** are air assisted and supply air flow to break the boundary layer of air created by high speed processes found in printing or other fast moving processes. They are also capable of covering larger areas than a Gen4 Ionizing Point or Gen4 Ionizing Bar.

Choosing the product to cover the right sized area is the next simple step. A Gen4 Super Ion Air Knife can cover the width of your application or a Gen4 Ion Air Cannon can be mounted remotely to flood an area where operators are getting shocked. The most popular items for static elimination are Gen4 Ionizing Bars and Gen4 Super Ion Air Knives.

Another major factor for a successful application is **proper positioning**. Static Elimination is a surface treatment and the ions generated by these products must come into contact with the surface holding a static charge. So, getting the product oriented to deliver ions to the targeted area is important. Static will also regenerate with more vibration and friction of insulating materials. It is important to mount a static eliminator at the last moment possible prior to the problem in the process. If it is positioned too far from the problem area, static may regenerate and continue to be a problem. If the process is long, more than one static eliminator may be necessary to remove the static charge from specific problem areas.

These products can provide a solution to the typical problems caused by static. EXAIR Gen4 Static Eliminators can keep your processes, products and packaging clean; they can remove and control contamination; and provide a safer environment for operators. A new selectable voltage power supply has been designed to operate our Gen4 products. Learn more about our Gen4 Static Eliminators online at https://exair.co/05_g4siak, order a catalog or talk to one of our Application Engineers.

Application Spotlight:

Reliable Gen4 Super Ion Air Knives Eliminate Static without Failures

Application Goal:

Replace fan operated ionizers, which are prone to shock hazards and frequent failure in industrial applications.

The Problem:

Commercial grade fan operated ionizers were installed to remove the static from plastic jugs prior to labeling on (4) conveyor lines. The ionizing elements and fan units failed frequently, needing replacement approximately every 12 months.



These units also allowed nuisance shocks to operators, which was a hindrance to line operation and maintenance, as was the space that the unwieldy enclosures, cables, controls and fan units took up on the lines.

The Solution:

The fan operated ionizer unit on one line was replaced with (2) Model 112012 12" (305mm) Gen4 Super Ion Air Knives and (1) Model 7960 2-Outlet Power Supply. Once satisfactory results were realized, the other three lines were outfitted with the same systems.

Static charge is quickly dissipated as the jugs pass through the ionized airflow of the Gen4 Super Ion Air Knives and the compact Gen4 Super Ion Air Knives create a better environment for the operators than the bulky enclosure required previously.



Although they had several different sizes of fan-type ionizers, they were all able to be replaced with 12" Gen4 Super Ion Air Knives, mounted vertically for compactness and efficiency. The replacement costs associated with the fan-type ionizers units was about \$1,300.00 per failure (not including labor to remove the failed components and install the new ones).

For comparison's sake, the (2) 12" Gen4 Super Ion Air Knives and Power Supply cost \$1,614.00... for a complete, new, reliable Static Eliminator system.

If the Ionizing Bars need replacement, they cost only \$212.00. The Air Knife portion, with no moving parts, will operate maintenance free, indefinitely, as long as it receives a supply of clean, dry compressed air.



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 techhelp@exair.com for assistance with yours.



A manufacturer is cold forming metal parts. After induction hardening a bolt, the product is conveyed through an oil bath. Excess oil was being carried into tubs as parts were discharged from the conveyor. A **Standard Air Knife** was installed to blow excess oil from the parts and back into the oil bath. This has cut oil consumption by 40%.



A popular breakfast foods manufacturer does a periodic water wash down of their equipment. The water tends to form puddles in several locations, which creates a safety hazard. Cleaning up with mops and floor squeegees was time and labor intensive, and they needed a quicker, easier way. The **Deluxe Reversible Drum Vac with Spill Recovery Kit** enables them to simply vacuum the water off the floor into a 55 gallon drum, then pump the waste water into a designated area.



A coal burning power plant needed a cooling solution for new electrical enclosures being placed in their boiler room, containing sensitive equipment to measure oxygen levels in their flue gas. Due to the aggressive environment (dust and temperatures in excess of 130°F), this was an ideal fit for High Temperature Cabinet Cooler Systems. After working with EXAIR Application Engineers to determine anticipated internal heat loads, a **Model HT4250 High Temperature NEMA 12 Cabinet Cooler System**, 3,400 Btu/hr - Continuous Operation was chosen to cool and continuously purge the enclosures, protecting the sensitive electronics inside.

Static Eliminator PROMOTION!

**FREE
AC
SENSOR**
With
purchase
\$54 Value



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 any Static Eliminator by March 31, 2018, and we'll include a **FREE Model 7929 AC Sensor**.



To learn more go to:

www.exair.com/05/sepromo.htm