Cold Weather = Static Electricity Problems

Most of the country has been hit by record cold temperatures this winter. The consecutive cold, dry days can take its toll on your production. Manufacturing processes that have run smoothly can stop abruptly due to jamming, tearing, dust attraction and static cling.

EXAIR manufactures a complete line of static eliminators that are suitable for a wide variety of industrial processes. The Super Ion Air Knife™ is the most popular since it provides a sheet of ionized air that can quickly eliminate a charge over long distances (like sheet fed materials and high speed webs). The Ion Air Cannon™, Ion Air Gun™, Ion Air Jet™, Stay Set Ion Air Jet™, Static Eliminating Blowoff Station™ provide a focused airstream for hard to reach spaces. All are adjustable from a “blast” to a “breeze”.

Would you like to know more about the causes of static electricity and how to prevent it? EXAIR has a brief video that demonstrates static charge build up, how to measure it, and the products used to eliminate it.

If you have an application you would like to discuss, please contact an Application Engineer at 1 (800) 903-9247 or by e-mail at techelp@exair.com. They’ll be glad to help!

FREE AC Sensor With Static Eliminator Purchase!


Super Blast Safety Air Guns with Extensions Offer High Power for Hard to Reach Blowoff Problems

EXAIR’s Super Blast Safety Air Guns™ have always provided high quality performance for your blowoff, drying or cleaning needs. Now, they are available with 3 foot and 6 foot extension pipes. CE compliant Super Blast Safety Air Guns with Extension Pipes provide strong blowing force to clean large areas quickly and the extensions allow you to reach areas not easily accessible.

Extension Pipes give you a safer way to blow off those hard to reach areas, while allowing you to stay compliant with OSHA noise (29 CFR 1910.95(a)) and dead-end (29 CFR 1910.242(b)) regulations. Supplying compressed air closer to the affected area can decrease air consumption and increase results; adding an extension can also reduce excessive bending and reaching.

EXAIR’s Super Blast Safety Air Guns use engineered air nozzles for high performance – designed to maximize entrainment of room air while minimizing compressed air consumption. Super Blast Safety Air Guns range in force from 4.5 to 23 pounds (force measured 12” from target at 80 PSIG (5.5 BAR)). Combining that force with the added benefit of being able to reach tight machinery spaces makes the Super Blast Safety Air Gun a great tool for wide area blowoff, cooling and drying. To learn more about these Super Blast Safety Air Guns, check them out online at www.exair.com/05/sbsagext.htm.

EXAIR’s Static Eliminating Blowoff Station delivers a concentrated flow of ionized air to neutralize static electricity and clean the part prior to packaging.

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Application Spotlight:
Super Ion Air Knives

Application Goal:
To eliminate static causing an unacceptable scrap rate from a metalized plastic reflector used in automotive lighting.

Before EXAIR:

Injection molded parts were being direct metalized for use in automotive headlights. Parts were exiting the mold with a static charge and attracting dust prior to metalizing. The static charge and dust on the molded parts resulted in defects within the metalized coating in the form of spider webs and streaks in the coating. Any of these defects caused a rejection of parts and the manufacturer was experiencing close to 100% scrap rates.

After EXAIR:

This customer installed two Model 111012 12” (305mm) Super Ion Air Knives and a power supply to eliminate the static charge and dust on the parts immediately after removal from the injection mold. The knives also helped cool the parts which could then be moved to metalizing quicker. Another two 12” Super Ion Air Knives and a power supply were installed to treat the parts immediately before the metalizing process. The result was a perfect reflective finish on the plastic parts and a reduction of the scrap rate to less than 1%.

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

For decades, EXAIR’s products have solved many common industrial problems. Call our Application Engineering Department at (800) 903-9247 or email them at techelp@exair.com for help with yours.

A manufacturer machines insulated door panels in order to install windows. They cannot use liquid coolant because it is incompatible with the insulation, and this was greatly slowing their cutting speeds. With the addition of the Model 5215 Cold Gun Aircoolant System, they were able to increase their cutting speed, decreasing their process time, and increasing their tool life.

A furniture manufacturer operates a conveyor to process sawdust and wood chips. Dust would fall off the sides of the conveyor and build up, causing belt tracking issues. They installed a 3” diameter drilled pipe, fed by a blower, running alongside the conveyor, and this was marginally effective, but was very loud and had high maintenance costs. When the blower motor seized, they contacted EXAIR, hoping to replace this entire system with a compressed air product. A Model 110054 54” (1372mm) Super Air Knife™ was installed alongside the conveyor. This proved to be an effective, efficient, and quieter alternative to the blower-fed drilled pipe, requiring less space and maintenance.

A large manufacturer of electrical switchgears was loading screws into a hopper by hand. They replaced this manual lifting and filling operation with a Model 6083 1-1/2” (38mm) Line Vac which improved the efficiency of the assembly process by eliminating a labor-and-time-intensive step for the operators.

EXAIR’s Super Ion Air Knife removes static electricity from plastics, webs, sheet stock and other product surfaces where tearing, jamming or hazardous shocks are a problem. The laminar sheet of air sweeps surfaces clean of static, particulate, dust and dirt. Production speeds, product quality, and surface cleanliness can improve dramatically.

To learn more go to: www.exair.com/05/476.htm