

# Static Electricity

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Is static electricity causing problems in your trim or dust collection system this winter? It's not too late to address the problem now so you can be better prepared for cold weather next year.



Static electricity is not easily predicted, but it can be addressed once you know you have it. Puhl's static electricity solutions are low maintenance with no moving parts or power requirements. These passive systems work in conditions where relative humidity is as low as 20%. The devices, called Static Docking Stations, bolt into the ductwork and replace an existing clean-out section of the duct. Static Docking Stations are easily installed by your local maintenance techs.

Compressed air can also make your static problem worse, especially in the baler room. Bursts of compressed air designed to clear photo eyes can add static electricity to the system and cause a number of problems, including false alarms and false cycling of the baler. False cycling a baler eventually leads to bad bales and can even result in friction fires if left unaddressed for a long enough period of time. For compressed air blasts on photo eye lenses, Puhl offers small static-reducing cartridges that plug into existing plastic airlines. Though these cartridge units are consumable (they dissolve over about a year of use), they are the best and most reliable technology available today that doesn't require power or maintenance (e.g. no moving parts).

Electro-static reducers are another option but the downsides often outweigh the advantages. Electro-static reducers leak dust, plus you have to be vigilant about keeping metal out of them. If you're in a business where the occasional metal fragment finds its way into trim waste (e.g. a stray stitcher wire from a stitched book), you may end up with more headaches. Even a small staple can short out the unit. And every time the unit shorts out, you have to send a technician to manually reset it.

As a last resort for those times when the relative humidity is extremely low (say around 10% or lower), there's an option that involves building a small liquid injection system using industrial grade fabric softener. The key to successful use is controlling the liquid injection to avoid liquid collecting in the duct or coating any downstream filters. There is some down-side risk with liquid-based systems, but the benefits often make the risk worthwhile. If you're interested in building your own system, Puhl can walk you through the basics so you can minimize the risks.

Static electricity can be a challenge but there are solutions that work. For more information, give us a call at 615.230.9500 or [email us](#).