

Ionizers Based on Safe Alpha Ionizing Technology

Are They Safe?

That's a question asked frequently about NRD alpha ionizers. And it's a question that's been answered positively for more than four decades. NRD technology has been in use - without incident since 1970 for static control, smoke detectors, physics research, space exploration and instrumentation. All over the world, workers in various industries use NRD products safely to obtain better quality and higher productivity.

Because our products use a very unique technology, questions about safety are often raised. Understanding the technology and how it's used can help to dispel any concerns.

The Ionizing Source

NRD ionizers use an internal energy source, a naturally occurring radioisotope called Polonium-210. Exceptionally effective as an ionization source to neutralize static charge, Polonium-210 poses no hazard to workers or materials. With more than four decades of field use, there's never been a single failure. Naturally, our products must meet strict standards. In addition to our own comprehensive production and quality tests, our alpha ionizers have successfully completed all testing and evaluation programs required by the U.S. government.

We use a proprietary metallurgical encapsulation process to lock the radioisotope inside a solid foil of pressure-welded gold and silver, assuring the most safely sealed ionization source available. Since the foil is made of precious metals, it's highly resistant to oxidation, extreme temperatures or exposure to solvents.

How It Works

Safely secured inside the ionizing device, Polonium-210 releases a form of energy known as alpha particles. These charged particles collide with the surrounding air molecules creating ionized air which eliminates the static charge.

Safe To Use Anywhere

You can use NRD ionizers just about anywhere static is a problem – even in places that are not safe for electrical ionizers, such as volatile, solvent-laden environments, tight spaces, or applications with sensitive electronics.

There's no risk of electrical shock because there are no high-voltage power supplies. There's no danger of puncture wounds or other physical injuries from sharp emitter points. And there's no electromagnetic interference (EMI) generated by NRD ionizers that might upset process equipment controllers.