

DeDuster®

by pelletron



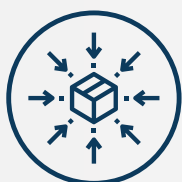
DUST, STREAMERS OR ANGEL HAIR REMOVAL

From 20 kg/h to 150t/h

Some dust and contaminants occur naturally while others are caused by the way the products are handled. The grinding process of post-consumer plastic naturally produces dust and impurities in plastic pellets, both fines (dust) and angel hair (streamers), are generated by the friction in conveying lines. Dilute phase systems create large amounts of dust and streamers; the higher the velocity, the larger the amount of impurities. Pipe elbows also cause friction and result in the creation of more dust and streamers. The high pressure in dense phase, or slow motion systems, creates very fine dust due to wall friction and friction between pellets. Temperature, pellet shape and product characteristics can also contribute to the creation of dust.

The plastics industry cleans pellets to improve the quality of both the pellets and the finished plastic product.

To address this list of requirements, Pelletron, part of Piovan Group, developed a cleaning machine that combines a variety of air wash principles, plus the revolutionary electro-static flux field feature, and built it with the lowest possible construction height. When electrostatically charged particles enter into the Magnetic Flux Field, the resulting “Lorentz Force” weakens the electro-static bond between fine dust and plastic pellets. This weakening, in combination with the air flow, allows the micro fine particles attracted to the pellet surfaces to be removed.



Compact size



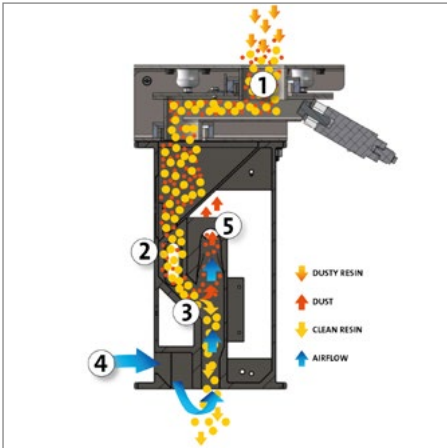
Quick return on investment



Visible results

Configurations

- Open Loop for processes with frequent product changes or for lines with frequent color changes in order to avoid cross contamination.
- Closed Loop for standard operations with the same or similar product grades or for inert gas applications.



Operating principle of C-20.
1. Controlled Feed Zone. 2. Ionizing Zone. 3. Venturi Zone. 4. Air Inlet. 5. Dust Collector



DeDuster® models XP180 to XP1500 can be equipped with an automated inlet deflector to distribute the material evenly over both wash decks. This option eliminates the need for the installation of a separate feeding device



For special applications with light weight bulk densities such as recycling, food, non-food we recommend using a single deck DeDuster® of the P-Series