

Eriez® 76C Vibratory Feeder Helps Prevent Chipping and Breaking of Drying Tablets for Van Air Systems

With more than 65 years of experience developing desiccant formulas at its production facilities in Lake City, PA, Van Air Systems is the original and leading manufacturer of several deliquescent desiccants for removing moisture from compressed air and gases. The products are used to dry biogas, landfill gas, natural gas and compressed air.

What is deliquescent desiccant? Deliquescence means to dissolve and a desiccant is a drying agent. Therefore, deliquescent desiccant is a drying agent (in the form of a tablet) that dissolves to keep air and gas lines dry and moisture free.

Van Air Systems markets the non-toxic and environmentally-safe air drying tablets under the brand name DRY-O-LITE®. The ¾" diameter tablets are available in 50 lb. bags or pails, 506 lb. steel drums and 2,000 lb. bulk bags.

Dry air is critical in pneumatic conveying, wood products production, mining, abrasive blasting, painting and many other manufacturing applications.

In November 2014, Van Air Systems installed an Eriez Model 76C Feeder to help efficiently convey DRY-O-LITE tablets onto a bucket elevator which feeds into an automatic bagging machine.

"We run 2,000 pounds per hour of product, eight hours a day, six days a week," says Dale Oesterling, Project Manager for Van Air Systems. "That product is our lifeblood; it keeps us going, so we cannot afford a lot of downtime or breakage of the product when it moves from one part of our processing plant to another."

76 Feeder Moves Product Gently

Van Air Systems ordered the 76C Feeder from Eriez when an older conveyor unit stopped functioning and was beyond repair. The 76 Series Feeders are the largest units in Eriez' line of compact vibratory feeders, and offer all of the same features and benefits of existing models in a supersize design to meet larger application requirements. The 76 Series Vibratory Feeder supports trays up to approximately 175 lbs and is available in all standard voltages.

"Some trays are too heavy for existing models and it is not always practical to use multiple drives," says Rob Yandrick, Product Manager—Vibratory/Screening at Eriez. "The 76 Series offers a solution and fills a void in the market. It satisfies larger application requirements and enables increased overhang for better installation options."

One reason Van Air System chose the 76C Feeder was the ability to adjust the amplitude and gentleness of the vibratory motion so the tablets are conveyed without excess up and down movement, according to Oesterling. "If you start bouncing the tables, they begin to chip which creates a lot of dust. Eventually you have a bad product," he says.

"The vibratory motion of the feeder can be adjusted so the bounce is not perceptible," Oesterling observes. "You want to be able to dial the motion down and use as little energy as possible. But if

you turn it down too much, the product just sits there. The Eriez feeder gives us the ability to adjust the motion in just the right manner so the tablets move along efficiently without damage.”

The DRY-O-LITE tablet absorbs water vapor from streams of compressed air. The surface of the desiccant tablet dissolves slowly, forming a brine solution which drops from the surface. The tablet continuously dissolves until the desiccant is fully consumed.

Naturally, Van Air Systems wants to ensure that the DRY-O-LITE tablets are conveyed onto a bucket elevator with little or no product breakage before they go into final packaging, according to Oesterling. The company stakes its brand name on the integrity of the consumable product and relies on the Eriez 76C Feeder for processing assurance.

“We were pressed for time after our older piece of equipment went down. Eriez recommended their new 76 Feeder,” Oesterling says. “This new feeder is a longer version of one of their previous designs, so it conveys the product very smoothly onto the bucket elevator. We just stuck it there and turned it on. It’s worked well. If something can survive in our environment and work six days a week, then it’s a good product.”

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Eriez is recognized as world authority in separation technologies. The company’s magnetic lift and separation, metal detection, fluid filtration, flotation, materials feeding, screening, conveying and controlling equipment have application in the process, metalworking, packaging, plastics, rubber, recycling, food, mining, aggregate and textile industries. Eriez manufactures and markets these

products through 12 international facilities located on six continents. For more information, call toll-free (888) 300-ERIEZ (3743) within the U.S. and Canada. For online users, visit www.eriez.com or send email to eriez@eriez.com. Eriez World Headquarters is located at 2200 Asbury Road, Erie, PA 16506