

Applications of Fox Venturi Eductors

Case Study No. 63

Product : **Snack foods, corn-based, from extruder.**

Irregularly shaped snack products, 3 - 20 #/ft³, various shapes and sizes up to 1-1/2" long

Problem : This Saudi snack food producer needs to transport various shapes of corn-based snack products from their extruder to their dryer. The unusual shapes of these products, familiar to us all, make them challenging to transport without damage. Their bulky size requires a relatively large line, although the transport rate is low. The system had to be fully sanitary/USDA-approved. The producer asked their extruder supplier to include the transport system with the extruder.

Solution : Fortunately, the extruder supplier has years of experience with Fox eductors. Helped by the product's moisture and fat content (they get crispy only after emerging from the dryer), Fox eductors, with carefully controlled transport velocities, very successfully conveys the product with minimal degradation. The key is Fox's bleed valve kit, installed between the blower and eductor, which allows the customer to control transport velocity by bleeding off air from the blower. In this way the customer himself can vary air flow to the transport system, feeding the eductor with only enough air to fluidize the material, while keeping velocity - and hence degradation - to a minimum. The Saudis report this simple and safe system is consistently and reliably delivering on-spec product.

Conveying Unusually Shaped Snack Foods from Extruder to Dryer without Degradation

