

Applications of Fox Venturi Eductors

Case Study No. 39

Product: Table sugar, (Coarse, 40 pcf) from a bulk bag. Transport 18000#/Hr over 45 ft total with (5) 90° long radius elbows into a storage bin.

Problem: Customer was changing the way they were handling sugar, from 50# bags to 2000# bulk bags. They initially looked at using screw conveyors, but the screws' inflexible, sloping geometry and inability to make turns could not fit into the existing plant. Moreover, the customer demanded reliable maintenance-free performance and ease of operation.

Solution: Two Fox 5" eductors each convey 9000 lbs/hr of sugar, from one of two bulk bag unload stations through 5" convey lines. Two blowers, each operating at 550 SCFM at 8 psig, supply motive air to each eductor. The customer required conveying air temperature of 92° F, requiring air-cooled heat exchangers, which Fox provided as an integral part of the system. The customer is extremely satisfied with the reliable performance of the Fox system, and p-d blower output pressure has since been reduced slightly, while system still meets rate.

