

Product Sticking to Conveying Augers Over Time

Question

I have a product that likes to stick to my conveying auger over time. Do you have a solution for this problem?

Answer

Many bulk solids contain moisture and are very sticky. They become difficult to convey because the bulk solid sticks to the flight surface of the screw and builds up. Since you are processing polymers, the materials of construction of the conveying equipment are typically stainless steel. The flight surfaces and complete screw can be polished to a very fine finish and even electro-polished to achieve a mirror finish. The bulk solid has less tendency to stick and will release from a smooth, polished finish. The internal surfaces of the trough can also be polished or electo-polished.

Another option is to coat the conveying surfaces with non-stick coating such as Teflon. The coatings can be engineered for your specific application. The flight design of the screw conveyor can be modified to be a ribbon or even a shaftless type. Ribbon and shaftless screw conveyors are designed specifically for conveying sticky bulk solids. Sticky products adhere to the screw at the location where the flight meets the center pipe. The ribbon flight is only attached to the center pipe with thin posts located on 90° intervals. The shaftless flight has no center pipe and only uses the flighting or spiral to convey the product. You may want to consider these options.



KWS Manufacturing 3041 Conveyor Drive Burleson, Texas 76028

Toll Free: (800) 543-6558 Phone: (817) 295-2247 Fax: (817) 447-8528

www.kwsmfg.com