ASGCO® Helps Midwestern US Coal Handling Operation Reduce Combustible Dust and Spillage in High Volume Transfer Terminal

This underground rail car transfer point for Sub-Bituminous Coal was failing due to poor design and inferior components, leading to major dust and spillage.

**Problem:**
The existing 54” wide conveyor transfer point located under a rail car unloader was causing excessive dust, spillage and conveyor belt cover wear due to the poor design, chute liner wear and corrosion. The extremely volatile nature of sub-bituminous coal/PRB presents a fire and explosion hazard when there is airborne dust and spilled coal in the area. The existing transfer point being located underground in a tunnel made the cleanup of spilled coal difficult as well as creating an explosion hazard due to the dusting.

**Solutions:**
ASGCO technicians thoroughly inspected the failing system and proposed a redesign of the existing transfer chute using advanced Flo-Control® technology. This design is computer modeled to yield the most efficient method to minimize the impact of 3000 tons of coal per hour onto the receiving belt. In addition, the material flow will be precisely coordinated to match the speed and direction of the receiving belt. ASGCO® Modular Impact Cradle Beds®, Slide-N-Roll™ and Slide-Lers®, in conjunction with Double Handled Stainless Steel Clamp-Mount® Skirtboard Sealing System and Dust Control Curtains were also installed to control spillage and airborne dust.

**Results:**
As illustrated in the photos below it’s clear that the installation of the redesigned ASGCO® Flo-Control™ transfer chute in combination with the modular belt support impact system and the Clamp-Mount® skirt sealing system has completely stopped all material leakage and reduced airborne dusting to below OSHA standards. The replaceable, standard sized wear liner system can now be easily maintained and the skirting seals can be adjusted without tools when necessary. The clean-up and explosion hazard has been eliminated.

**ASGCO®s 3-DEM™ Complete Transfer Point Design and Fabrication** is a revolutionary way to handle granular and particulate material handling problems through computer simulation and 3-D CAD. Combined with our conveyor and material handling knowledge, engineering capabilities we are able to make transfer point problems a thing of the past.

**Benefits:**
- Increase Production Capabilities
- Optimize Life on Conveyor Belt and Components
- Minimize Material Spillage
- Reduce the Need for Dust Control and Suppression

For more information and benefits of ASGCO® 3-DEM® Designed Flo-Control® Chutes contact us at www.asgco.com