

Minimising fugitive material

A global commitment to a faster, cleaner, greener bulk handling sector continues to gather momentum

US-based Martin Engineering continues to champion Martin Manufactured Canoe Liners (MMCL), which it says: "minimises fugitive material, including dust", with high quality skirting and wear liner products.

Martin Engineering calls it a new standard in wear liner technology that's revolutionising bulk handling. Installing MMCL inside the equipment's conveyor transfer point: "Absorbs impact and abrasion and creates a dam to shield the sealing system from the weight of the material load, prolonging the life of the seal."

MMCL also feature a steel plate to prevent bond issues. For greater handling flexibility, they are also stackable to line higher drop chutes when necessary. MMCLs are made from highly durable urethane, moulded around a long-lasting steel plate and gives handling equipment a longer lifespan of service, while reducing dust and product spillage. Martin Engineering believes its technology goes a long way to attaining a lower operation price point long term.

Protecting the chute wall from heavy, fast-moving cargo, is working and Martin Engineering is proud of the industry modernisation its technology is providing and the positive impact it is having on the environment. A spokesman for the company said the MMCL has morphed into a component that aids better, safer and more reliable bulk handling.

Greater design sophistication is driving higher levels of safety and cost effectiveness through the business. Less dust overspill lessens the possibility of ignition of often explosive material. Previous designs could leave a gap between the liner and the skirting, resulting in small particles becoming trapped, with the potential to cause damage to the belt. The outcome: extra labour needed for the operation, handling downtime, a need to replace equipment and higher costs.

"This is a shift in the engineering and role of wear liners," Dave Mueller, Manager of Conveyor Products for Martin Engineering, said. "Like most conveyor components, the design has evolved into a component that is more effective, safer to maintain and more reliable."

Martin Engineering is passionate about helping customers overcome dust control issues, with four pillars at the forefront: safety, efficiency, productivity and profit. Established in the bulk handling sector for 75 years: "No matter what the particular challenge is, we've probably seen it many, many times and already know how to fix it. Whether it's material clogging the discharge port of a container or railcar, or a fugitive dust issue, that you can't seem to get under control. If you're shutting down way too often because material is sticking to the belt past the head pulley, we know exactly what to do," said the spokesman.



SERVING THE BULK MARKET FOR 75 YEARS

Cimbria, too, has been serving the bulk market for 75 years and has delivered 17, 500 Moduflex systems to global customers investing in loading equipment. The Moduflex S-Series remains a popular chute for loading grain, sugar, flour and similar products with moderate dust and wear characteristics. Capacity ranges from 250-700m/hr, exceeding that of the Moduflex C-Series.

For handling cement, fly, ash and similar wearing and dusty products, Moduflex's H Series comes into its own and has a capacity to load 250 M hourly. Cimbria equipment's dust-free credentials are clear, with an emphasis on: heavy-duty performance, long-term durability and high capacity. All chutes can be fitted to tanker trucks, flatbed trucks, open and closed rail wagons, and containers for the handling of any kind of dry bulk, including agricultural, industrial commodities and raw materials.

Cimbria is committed to assisting its customers with dust-less operations, providing customers with the right system tailored to their business. "Loading bulk product is associated with the risk of creating waste and dust, as well as the danger of explosion. These risks can have a negative impact not only on work safety, but also on the surrounding environment and on companies' finances," said a spokesman for Moduflex.

Solutions to lessen dust that Cimbria offer include both closed systems, with an outlet nozzle that rests on tankers' loading hatches, and an open system, with the loading chute resting on the product pile. Cimbria believes that flexibility is key to reducing operation costs. Modifications of the loading chute are easily achievable across the equipment range, limiting disruption to the loading process and lost production time.

Last year, Cimbria fulfilled an order for a silo complex at Port Said, which included eight silo bins with a capacity of 12, 500 tonnes for wheat storage. This built on a 30-year relationship with Egypt, which has seen 95% of all silos delivered by Cimbria, with a total storage capacity of 2.5m tonnes.

