



Solving Money Wasting Abrasion

Worn out elevator heads, chutes, pipes and bins are a costly and constant problem for facilities that handle almost of any kind of bulk commodity. These components are continuously assaulted by a variety of particles from sand, glass and cement to soybeans, feed minerals and pellets. Over time, these expensive components erode away and leave leaky holes that create extra housekeeping, and potentially dangerous operating conditions.

To protect equipment and extend life, Maxi-Lift offers two excellent solutions:

Ceramic Tile

Urethane Sheeting

Ceramic Tile

Ceramic Tile is one of the most popular materials for lining bulk conveying equipment. This material is made from Alumina and is highly durable, with excellent abrasion and corrosion resistance. It is also fire retardant and can be used in environments up to 1500 degrees.

The tile are available in several standard sizes that can be custom cut to fit into a variety of shapes to fit nearly any conveyor chute, inlet, discharge or cyclone. Tile can be cut and shaped to accommodate tight spaces.

The white color allows operators to see impact zones to help evaluate equipment function and performance. It also helps brighten these impact zones for easier inspection.

Ceramic tile adheres to steel surfaces through the use of adhesives specifically designed for this application. Options include a two part epoxy that allows for applications on vertical and overhead surfaces. This material is moisture resistant, and will even cure underwater. The second option is the use of an industrial grade silicone sealant and adhesive. This single compound product requires no mixing and has an operating temperature between -62 to 350 F.

For applications where the adhesives might not provide the required hold, a weld in product is also available which allows for the tile to be applied with either the epoxy or the silicone, then tack welded to the steel sub-surface.

Urethane Sheeting

Some applications call for the use of a softer surface to minimize particle damage, or for a lining material that allows more shaping than can be achieved with ceramic tile. Maxi-Lift recommends the use of urethane sheeting in those applications.

Urethane is a lightweight, flexible alternative to ceramic tile. It has excellent impact resistant characteristics, while adding noise reduction and corrosion resistance to its benefits. The ability to shape urethane sheeting to fit inside troughs or spouting is a further benefit. This material can curve to fit the shape of pipe allowing users to custom fit spouting.

The material comes in various thicknesses depending on the wear need. Backing materials also vary depending on installation needs. The most common backing material is expanded metal back, which allows the material to still be shaped while providing some rigidity for attachment. Attachment is made using specially capped bolts that are countersunk into the material and extend through the steel sub-surface. This allows the material to be easily replaced over time.

Project Bundles

Maxi-Lift stocks both ceramic tile and urethane sheeting to line those wear surfaces in your facility that see the most abrasion. When scheduling your next project, call Maxi-Lift for a quote on elevator buckets, belting, hardware, and of course wear lining materials.