

Cost savings with improved drag slat conveyor floors



Examining how Kenco Engineering's slat conveyor drag floor can produce cost savings.

Slat conveyors are an integral and necessary part of any modern asphalt production plant. While performing similar functions in all asphalt plants, the slat conveyor design will be affected by and will also influence factors such as the arrangement of plant components due to facility layout, production rates, or the ability to store asphalt overnight.

Each manufacturer has a slat conveyor design unique to themselves with unique design elements, capabilities and use unique wear components. In addition to the major OEM designs, many aftermarket options exist thus allowing plant managers to customize their plant as they see fit. This discussion will include concepts applicable to all OEM make and model slat conveyors.



In most cases, slat conveyors today will leave the factory with slat conveyor floors protected by either bolt-in, cast wear plates or weld-in, chrome carbide overlay sheets. In general, the cast, bolt-in liners will be mounted onto a drilled sub-floor that is an integral and structural part of the slat conveyor. When compared to the chrome carbide overlay sheet design, the bolt-in cast liner provides much quicker replacement than welded-in sheets. This discussion will be based on the usage of cast, bolt-in liner plates.

Prior to 2015, Barriere Construction in Franklinton, LA was getting a maximum of 1,000,000 tons of asphalt across their slat floor using High Chrome OEM liner plates with an average floor life of 750,000 tons. This life cycle meant that Barriere needed to replace this OEM floor every 2-3 years.

Replacing a slat floor of this nature is a complex and expensive operation. Replacing this floor included a crane rental that averaged \$30,000. It also involved many man-hours of labor which exposed workers to potential accidents and injuries. Adding on the downtime incurred by the plant, the liability incurred by this process as well as the actual cost of replacement wear parts, the total cost of a rebuild exceeded \$100,000.



Let's try something else...

In 2015, Barriere decided to try something new. They invested twice the price of an OEM floor in a replacement floor from Kenco Engineering, Inc. The Kenco floor was made from a different alloy as the OEM and came in a 700BHN hardness. What was the result? This initial floor from Kenco Engineering lasted until the 2025 rebuild season! This extended wear life saved the cost of laying down the drag slat and rebuilding it 3 or 4 times. An investment of an extra \$26,000 in the Kenco Engineering floor in 2015 resulted in a savings equivalent to several hundred thousand dollars over the life of the floor.



More importantly, the elimination of 3-4 replacement cycles also eliminated the potential danger to workers during those operations. Suspended loads are always a cause for concern. And when those loads weigh tens of thousands of pounds, safety concerns are paramount. The elimination of risk in plant operations now regularly drives purchasing decisions.

This is just one of the many examples of how investing in Kenco Engineering quality wear parts will pay dividends. To put it bluntly, Kenco Engineering wear parts are the cheapest long-term part that can be bolted or welded onto your equipment!



Want more information?

Contact our team of problem solvers at Kenco Engineering, Inc:

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