

PLIBRICO MONOLITHIC LININGS FOR ASH HOPPERS

Stand-Out Refractory Selections

...proven performers in
countless installations

You're in complete control of your ash hopper refractory costs with the choices Plibrico offers, for you can select from them to precisely match your own operating conditions, whether moderate, severe, or extreme. All serve in either wet or dry hoppers, and all have demonstrated their cost-effectiveness in their service range.

For moderate conditions, select either Pligun Hydro-Mix for a gunned lining or coarse-grained Plicast 27-C for a formed and poured lining. To ward off severe abrasion, mechanical abuse and thermal shock, choose Plicast or Pligun Tuff-Mix for either cast or gunned linings respectively. And where conditions are extreme, you can combat them effectively with the superior properties of either Plicast 3000, Plicast Hyrezist 3000 or Pligun Super Tuff-Mix.



Gunned or cast . . . Tuff-Mix lives up to its name

Here you see two views of a typical ash hopper lining being pneumatically placed with Pligun Tuff-Mix at a large coal burning power station in Ohio. Tuff-Mix is widely favored for severe ash hopper service because of its proven staying power, its ability to take the punishment severe operating conditions inflict.

Whether you choose Pligun Tuff-Mix for its installation speed or Plicast Tuff-Mix for its consistency control while forming, you get a first quality refractory, one that imparts beneficial properties to the installed lining. Formulated to cover the service range from 200°F to 2500°F, Tuff-Mix achieves volume stability and tames thermal shock. With its high strength, it is armored against mechanical abuse and stubbornly resists abrasion. Tuff-Mix is indeed one "tuff" refractory!



Practical engineering Ideas contribute to longer refractory life

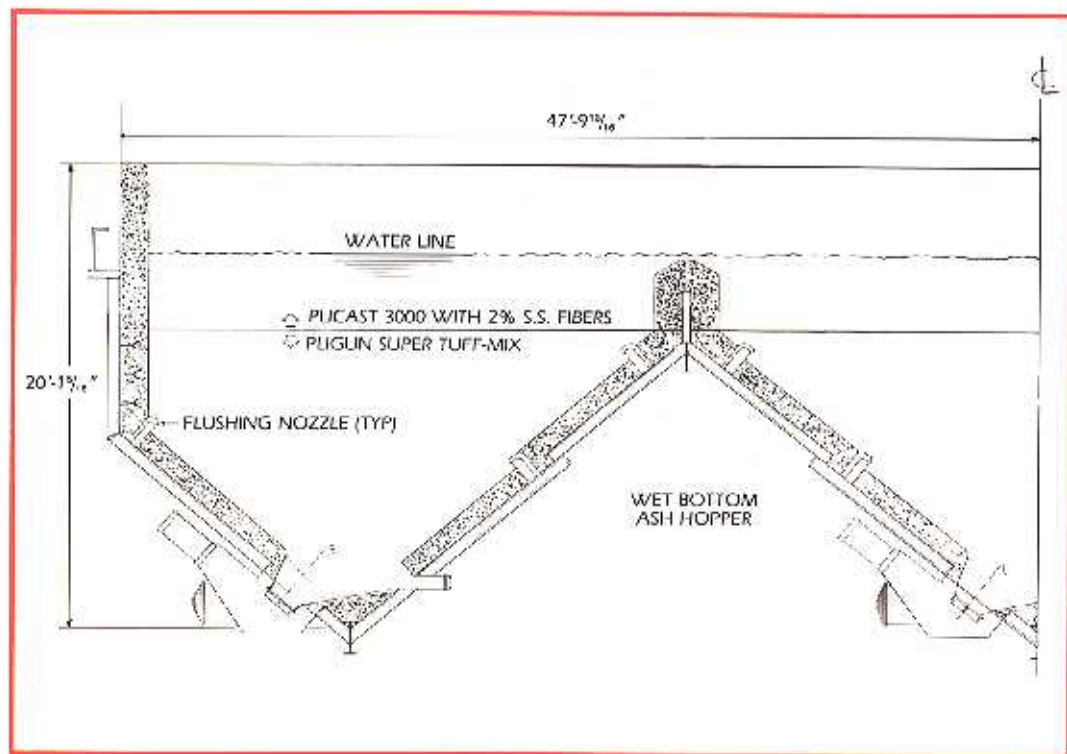
On-site modifications relocate vulnerable overflow boxes

When a midwestern power company was plagued by excessive ash hopper refractory maintenance, Plibrico engineering solved the problem. A careful inspection uncovered the flaw.

Overflow boxes located on the sidewall provided for only 3 inches of water covering the cricket. Large clinkers constantly bombarded the cricket and ricocheted against the lining covering the vulnerable boxes.

Immediately, and on the spot, plans were quickly drafted for moving the overflow boxes to the end wall and elevating them 9 inches, thus giving greater protection to the cricket. Coupled with these design modifications, the refractory was upgraded to rugged Plicast 3000 fortified by stainless steel fibers, uniquely capable of resisting the punishment from the sizable clinkers.

All the refractory installation plus all the mechanical work entailed in relocating the overflow boxes was capably carried out by competent craftsmen from the local Plibrico office.



Material and cricket design recommendations pass the torture test . . . gain approval for two complete hopper linings

A Plibrico engineered cricket excelled when literally put to the test against a rival second cricket in the wet bottom ash hopper of another mid-west power station. Plibrico's design featured Plicast 3000 formed in place. This super duty castable delivers such superior hot strengths it's highly impervious to mechanical abuse and abrasion. For greater flexural strength and thermal shock resistance, it's augmented with 2% stainless steel fibers. To take the brunt of clinker impingement, Plibrico's design also incorporated impact plates capping and spanning the entire cricket.

The excellent record achieved by this cricket led to the complete ash hopper installation illustrated above when the station added another boiler. Again, impact plates cap both crickets, with a refinement of reinforcing gussets between them and the cricket bar. As you see, Plicast 3000 with all its beneficial properties protects the crickets as well as the upper vertical walls. The sloping bottoms feature a companion product, Pligrin Super Tuff-Mix, gunned in place. Was this an effective installation? One year later, the complete hopper of the first boiler was refined in the same way!