



Hoppers Wearing Thin. LifeLiner™ Guarantees Protection for Life.

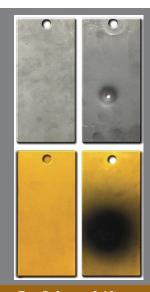
Faced with extreme wear and corrosion in the interior hoppers of their street sweepers, Elgin sought a solution. LifeLast was able to create a high-wear, chemical resistant lining system that protected the customer's investment and Elgin's position as the technological industry leader.

Case Study: Hopper Liner at Elgin Street Sweeper

Elgin has produced industry leading street sweepers at their production facility in Elgin, Illinois since 1914. Faced with corrosion issues in the hoppers, in 1999 Elgin approached LifeLast for a solution and a custom urethane was formulated to solve the problem. The relationship was built on problem solving and a shared interest in developing leading edge technology. While the urethane system

provided excellent corrosion protection, the industry demanded more durability in the air and mechanical sweeper hoppers; the manufacturers sought solutions and Elgin again leaned on LifeLast.

Instead of installing stainless steel, like the competition, Elgin looked to build on their success with spray applied liners and offer something that worked better and saved the end user money. After understanding the need, LifeLast formulated a high-wear corrosion protection system, The DuraGard TSX and brought it to Elgin for testing. The test compared a ½" sample of bare stainless steel



Top: Before (L) & After (R) Bottom: Before (L) & After (R)

The Nitty Gritty

Project: Hopper Liner at Elgin Street Sweeper - LifeLiner

Scope: Lining of interior street sweeper hopper for corrosion and wear protection.

Owner: Elgin - A Federal Signal Company

Completion Date:

1991 to present



Case Study: Hopper Liner at Elgin



to a 1/4" A36 steel sample coated with 300 mils of DuraGard TSX. A blast nozzle was used with 70 grit aluminum oxide (one of the most abrasive blast media) to replicate the hopper environment. The time to completely wear through each sample was charted and the TSX coated steel sample was found to be six times more durable than the stainless steel sample.

The system, adopted as Elgin's LifeLiner™, proved so successful that Elgin has been offering a lifetime warranty on the hopper liner since 2006. Elgin continues to look for uses for the LifeLiner in wear areas of their sweepers and recently employed it in the fan housing in-lieu of rubber.

Instead of following industry trends, Elgin looked to create a new solution, through innovation. The partnership between LifeLast and Elgin works because both companies view challenges similarly. Elgin realized they needed a solution provider and LifeLast works very hard to fill that role. By listening to the customer, LifeLast was able to understand the need and work towards providing a unique solution.

Are you seeking a solution to a unique set of challenges? Contact us; we're happy to help.

Email us at: info@LifeLast.com or call (512) 628-2112.



The Nitty Gritty

Project: Hopper Liner at Elgin Street Sweeper - LifeLiner

Scope: Lining of interior street sweeper hopper for corrosion and wear protection.

Owner: Elgin - A Federal Signal Company

Completion Date: 1991 to present

"As the Project Engineering Manager at Elgin Sweeper, I am fortunate to be involved in much of the innovation that Elgin brings to our street sweepers and the marketplace.

I can proudly say that working with LifeLast to develop and implement the LifeLiner system has been one of my greatest accomplishments thus far."

Jeff Tolzin,Project Engineering Manager, Elgin