



THE METAL WATCHDOG

For **Schnitzer Steel Industries**, the **Metal Loss Monitor** paid for itself after detecting metal losses even operators could not spot.

When it comes to metal left in loads of auto shredder residue (ASR) that auto shredder operators send to landfills, less is more. The less metal that makes its way to the landfill, the more money recyclers can earn. Yet, many recyclers are not aware how much metal they lose to landfills. As the saying goes, you can't fix what you don't measure.

Fortunately, Eriez (Erie, Pennsylvania) has introduced equipment that measures metal loss trends over time by recording metal counts in 10-minute intervals. The Metal Loss Monitor is an analytic tool that offers data that recyclers can use to lessen metal losses while providing shredder operators with more data on their operations and potential revenue streams. In addition to counting metals half-inch or larger in size and recording data that can be viewed in charts, the Metal Loss Monitor sends user-defined alerts via text message and email to notify operators when the metal count crosses a preset threshold.

Schnitzer Steel Industries Inc., Portland, Oregon, uses the Metal Loss Monitor in two of its auto shredding yards, with a third installation in the works. The company's appetite for the technology has grown so much that Chris Cooney, Schnitzer director of research and development, says it plans to add the Metal Loss Monitor at other auto shredding facilities.

As with typical installations, the cantilever-designed Metal Loss Monitor wraps around the final conveyor before landfill material goes

to a stockpile.

"By avoiding the metal loss in the landfill, you are reducing your cost of doing business and increasing your revenues," Cooney says.

Of the Metal Loss Monitor, he adds, "It's the simplest system that I'm aware of that can monitor metal loss, and it's also affordable as far as its price point."

"It's our watchdog."

Cooney says Schnitzer's reasons for using the Metal Loss Monitor are twofold: to consistently monitor metal loss and to identify improvements to operations. The Metal Loss Monitor has met both objectives for Schnitzer. Cooney shares how the Metal Loss Monitor detected metal loss better than on-site operators and justified the purchase of the machine in one scenario.

Cooney explains, "We received an alert. Then another. Over time, the alerts became more frequent. We also noticed that the level of acceptance over the defined threshold was increasing. We thought there might be a problem with the Metal Loss Monitor itself.

But, after we analyzed the data, we recognized that we should make some adjustments to the processing equipment and the alerts subsided."

Regarding this situation, Cooney says the Metal Loss Monitor, "justified the purchase be-

cause something like that could have gone unnoticed on for quite some time. The Metal Loss Monitor was able to detect metal loss increase, that negative trend, better than our operators because they could not see the metal that was being lost. We confirmed that the monitor was not failing; it was something we needed to correct within plant operations."

In another scenario, Cooney says Schnitzer recognized that at one of its yards the Metal Loss Monitor recorded a difference in metal loss between the first and second shifts. "We were getting more reports of over threshold conditions on our second shift," he says. With this information, Schnitzer could focus on the second-shift crew members and advise them on how to improve operations.

The extra attention to detail regarding data collection as well as the alerts provide benefits as well. Cooney says the Metal Loss Monitor also has helped the company to focus maintenance operations in specific areas. "This access to trending and the Metal Loss Monitor portal, a cloud-based software program that is part of the package, is what sets Eriez apart," Cooney says.

"Where Eriez hit it right on this particular item is the Metal Loss Monitor Smart Portal. There really aren't any other manufacturers in our industry that produce something that is comparable and also affordable. We have not seen any similar products with the same level of detail," Cooney says of Eriez and the Metal Loss Monitor. "We look forward to working with Eriez on future projects."

For now, Schnitzer will continue to work toward installing Metal Loss Monitors at other auto shredder operations—and recovering more metals in the end.

For more information on Eriez's Metal Loss Monitor, visit <http://eriez.recyclingtoday.com> or call 1-800-345-4946.

