When an Eriez Metal Loss Monitor warning is received by Triple M Metal, the company knows it is a money-saving notification.

Whether on a ship at sea or in a large building, when an alarm sounds the effect is jarring but the intention is good. Responses to an alarm can prevent trouble or even save lives.

At metal shredding facilities, the Eriez Metal Loss Monitor (MLM) is unlikely to have life-saving implications, but the device absolutely has been designed to prevent trouble in the form of lost metal revenue.

Brampton, Ontario, Canada-based Triple M Metal has two MLMs installed at its Hamilton, Ontario, sorting facility, and the company’s Manager of Engineering Brad Pollard is clear about the valuable role they play for the company. “Metal recycling is our business, and we do not want to buy metal to then send it to landfill,” he states. “Our goal is to capture as much metal as possible, and the MLM helps us achieve that goal,” he says of the two devices, each of which is placed to monitor the firm’s auto shredder residue (ASR) stream.

Pollard says the company installed its first MLM in 2013 and the second in 2016. “We have them both located on our final ASR belt,” he says. “One is located after our sorting equipment waste drop and another one is located after our air separation landfill drop. After the ASR travels past the MLMs it is stacked for landfill.” Material passing by the units can be anywhere from 3/8-of-an-inch to five inches in size, says Pollard.

Triple M employees know to “react accordingly,” says Pollard, if either of the two MLMs sound an alarm because they are “detecting more metal than they should.” He continues, “If we detect the first MLM alarm going off [the one positioned immediately after the sorting equipment], this tells us there is something wrong with our separation equipment. If the MLM count was reasonable leading up to the alarm this will tell us a piece of equipment is set wrong and we are losing too much metal,” says Pollard.

When alarms from that initial MLM become too frequent, adds Pollard, “This indicates the separation equipment requires some additional maintenance.” In one instance, he notes, “We noticed the counts and alarms continued to increase over a span of two months. After a thorough inspection it was found that a number of nozzles in our separation equipment were not working properly.” With those nozzles replaced, he remarks, “The MLM counts went back to normal.”

If an alarm sounds from the second MLM, at the final pre-landfill point, “This tells us we have an issue with our air separation equipment, so we will go out and check it,” says Pollard. He says responding by clearing a jam and doing some cleaning can soon mean the line goes back to normal. “This MLM helps us on a day-to-day basis when it has detected a jam prior to it creating a mess and shutting the entire plant down.”

Pollard says the Eriez MLMs have quickly yielded return on investment (ROI), and Eriez has helped ensure the MLMs work as they should. “Eriez has been great. They assisted with startup commissioning of the MLM, and after supplying the second MLM they were able to calibrate both units so we collect data and understand the losses between two processes within our plant.”

In terms of ROI, Pollard states, “The MLM only had to show us one time that our metal count was increasing [after] our separation equipment to pay for itself. It is a great insurance policy. If anything goes haywire, the MLM will let us know.”

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