



Processing Industry



Eriez® Metal Detectors and Magnetic Separators Help Lakeshore Technologies Grow as a Business Leader in Metal Contamination Removal

Since 1997, Lakeshore Technologies has grown from a small start-up business to a recognized leader in toll processing services for the food and pharmaceutical industries. The company, located in Norton Shores, Michigan, has become a contract manufacturer of choice when it comes to micronizing, blending, repackaging, sifting, metal detection and removal.

“When food and pharmaceutical companies have metal contamination problems they can’t solve, they come to us,” says Ricardo Lopez, Lakeshore Technologies president. “And when their problem becomes our challenge, we contact Eriez® for their high-performance metal detection equipment and magnetic separation products.”

Finding the right magnetic separators

Lopez explains that Lakeshore Technologies found Eriez when they set out to uncover the best magnetic separation solutions on the market to solve the contamination issues their high-profile customers face. He says, “We really looked into finding the greatest magnet out there. We went through a

“We really looked into finding the greatest magnet out there. We went through a couple of magnetic separator suppliers until we came across Eriez and learned about their magnet’s ability to take 99 percent of the metal out of the product before going to the metal detector..”

~ Ricardo Lopez
President, Lakeshore Technologies

couple of magnetic separator suppliers until we came across Eriez and learned about their magnet’s ability to take 99 percent of the metal out of the product before going to the metal detector.”

According to Lopez, it was shortly after that when Lakeshore started attracting customers because they were successfully finding metal in product after nothing customers tried on their own worked. When others heard about the incredible magnets Lakeshore had in its systems, they sent their product to Lakeshore.

“We proposed and created a system where we re-pack and run the customer’s product over our Eriez magnetic separators. Sure enough, we pull out a lot of metal from the customer’s product after it has already been run through their magnets,” Lopez explains. “This approach helped us create a business that appeals to a few large customers having metal contamination problems.”

Lopez says that they have been sold on Eriez since their first experience and upgrade products as the company unveils new technology. “Every time there is a new product, we’re quick to hurry up to buy because we want to stay ahead of the competition.”

Eriez rare earth technology

An independent research team proved Eriez’ rare earth tube magnets are able to remove metal contamination with a pull-test strength that is 13 to 40 percent stronger than other commercially available models. Eriez commissioned The Pennsylvania State University (Penn State), to determine which commercial tube magnet most effectively removes dangerous ferrous metal and weakly magnetic contaminants from process flows. (The study is available at <https://www.eriez.com/RE7PennStatePerformance.pdf>.) Thirteen tube magnets from various suppliers were stripped of brand identity and then provided to Penn State, the Behrend College, for testing.

“We use the study as part of some of our audits to show how we compare to competitive offerings and provide evidence as to how and why our system is better,” says Lopez.

“Metal detection you can understand”

Lopez explains that Lakeshore has the same high standards for metal detection equipment as it does for magnetic separation products. Therefore, the company only wanted the best-of-the-best in metal detectors. Unfortunately, after purchasing its first metal detector, Lakeshore was not satisfied with the unit’s performance. “We were buying what the industry would say is the best brand, but it wasn’t meeting our standards.” Then, Russ Campbell, the Eriez sales representative from Hi-Pro Equipment in Kalamazoo, introduced Lopez to the Eriez Xtreme® Metal Detector. “We wanted to give it a try,” says Lopez. “Within a month, we were in love with it. I learned more about how metal detectors work in the first six months that we owned Eriez than in the 18 years we owned the competitor product.”

“I learned more about how metal detectors work in the first six months that we owned Eriez than in the 18 years we owned the competitor product.”

~ Ricardo Lopez
President, Lakeshore Technologies

Lopez believes that the team that designed the metal detector had the operator in mind. “They made it intuitive,” he says. “Dealing with the settings on a screen is easy and you can see what’s going on. It helps a lot when you have an understanding of what your products are doing and where.”

“It’s very important to the Lakeshore story that Eriez stocks a lot of products for rush orders. When something breaks, we don’t have to make the customer wait.”

~ Ricardo Lopez
President, Lakeshore Technologies

In addition, Russ Campbell and the Eriez team set up the Lakeshore metal detectors and provided training. Campbell explains, “It’s very important to the Lakeshore story that Eriez stocks a lot of products for rush orders. When something breaks, we don’t have to make the customer wait.” Campbell continues, “Having a lot of key components on the shelf Lakeshore can assemble is critical. For example, Lakeshore had a customer that indicated they needed to double production. They wanted Lakeshore to open up a second line. The problem was that other line



did not have a metal detector to the specifications that the customer wanted. Fortunately, Eriez had one in its Quick Ship Program.”

In less than a month, Lakeshore was in operation. “And that was amid a global pandemic,” Lopez points out.

Lopez emphasizes that Lakeshore Technologies offers customers a process. “Typically, we have a customer who presents us with a metal contamination problem and wants the contamination removed. Almost 100 percent of the time, that same customer already has magnets and a metal detector. Yet,” he continues, “the contaminant still got through their process. What we’re doing is running product through our Eriez magnets and metal detectors. We take out the contamination and return their product as pure as possible. This is the service we sell.”

The customer service experience

Lopez enjoys sharing the background on why he switched from his previous metal detector to Eriez. “When we first bought a metal detector, we thought it was too good to be true. The industry called it the ‘go to’ name for metal detectors. They’ve been around forever, everyone knows them. We paid a lot for those units. Then, when Russ Campbell compared the Eriez Xtreme Metal Detector to our former metal detector, the cost and performance was better. Then, we started thinking, what else is better? Does Eriez have features that the competitor units didn’t have?”

According to Lopez, “When we matched Eriez to the competitor and saw it operate, we realized how difficult it was to use our old metal detector. We had no idea what the settings really meant. We didn’t understand where that numbers came from or what they actually represented. With the Eriez model, operation is straightforward and understandable.”

Lopez explains that Hi-Pro and Eriez have proven to be accommodating partners. “Most salespeople don’t like us because we build our own equipment, and they want to sell entire systems. However, we may just want one component because it’s the only thing we don’t know how to make, can’t make or don’t have time to make.” He continues, “Nine out of 10 times when we buy a piece of equipment, we immediately take it apart and re-design it because—in our opinion—it’s wrong or could be better. Russ has always been good because he knows the best products and put us in touch with the right vendors. He understands our demand for excellence when it comes to equipment.”

Continued success with Eriez

“I think the biggest benefit of using Eriez metal detection is that we’re more apt than before to tell a customer we can deliver whenever a metal detector is needed,” Lopez says. “We used to steer them away in the past because we hated metal detectors. In fact, we only owned a couple at one time. We would prefer to run product through magnets, but customers did not accept this approach. We lost a lot of business because we weren’t willing to

“I think the biggest benefit of using Eriez metal detection is that we’re more apt than before to tell a customer we can deliver whenever a metal detector is needed.”

~ Ricardo Lopez
President, Lakeshore Technologies

invest in a metal detector. Now the Eriez Xtreme series is something we believe in. We are ready to buy our third one. Now when a customer comes to us and says they have a metal detecting problem, we’ll install an Eriez metal detector.” He concludes, “We recently had our biggest month in years. We believe Eriez products and service is playing an important role in our ongoing success.”



Eriez is recognized as the world authority in separation technologies. The company’s magnetic separation, metal detection, material handling, fluid recycling and advanced flotation technologies have application in the mining, processing, packaging, food, recycling, aggregate, plastics and metalworking industries. Eriez designs, manufactures and markets these products through 13 international subsidiaries located on six continents.

World Headquarters
2200 Asbury Road
Erie, PA 16506

CALL: 814-835-6000 **EMAIL:** eriez@eriez.com **VISIT:** www.eriez.com