

Recycling Industry



Garden Street Installs

Customized Eriez®

Brute Force Feeder to

Reduce Downtime and

Maintenance Costs



Garden Street Iron and Metal Recycling is a family-owned and operated scrap processor with locations in Cincinnati, Ohio, and Fort Meyers, Florida. The company is known for its early adoption of state-of-the-art scrap metal processing equipment and incorporating the latest in scrap recycling technology.

"Utilizing the most advanced technologies has been an objective since our company's founding more than 50 years ago," says Tyler Weber, Cincinnati Operations Manager and grandson of Earl Weber, one of the company's founders. He adds, "A lot of our new technology has come to us through our strong partnership with Eriez, a supplier who has provided us powerful magnetic separators, feeders and other next generation equipment."

As they have many times in the past, Garden Street recently came to Eriez for a customized solution to a problem that plagued the operation for years. More than 140 tons of steel per hour pass over the company's ferrous stacking conveyor systems, causing a lot of wear and tear. The impact from this high volume of ferrous dropping onto the stacking belt

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causes rips and tears in the belt and requires a lot of maintenance on a regular basis, from patching to more demanding repairs. Two 96-inch Eriez P-Rex® Rare Earth Scrap Drums and an Eriez PokerSort™ Separator are located ahead of the stacking conveyor.

Garden Street tracked the annual maintenance costs connected to the stacking conveyor belts and discovered that, on an annual basis, they were replacing \$5,000 conveyor belts, taking three or four employees away from other assignments for a day and often shutting down the shredder. "That's an expensive problem to face every year," Weber points out. "On top of that, our head tail pulleys needed to be replaced every two years, which was another \$2,000 expense."

Weber says, "We needed to change the conveyor belt again at the beginning of 2021. Almost immediately, we saw holes and tears appearing in the belts after

installation. We started to the patch the belt as we have always done, but decided in March we had to take action, so we turned to Mike Shattuck, our primary contact at Eriez."

Shattuck is Eriez Market Manager—Metal Recycling. Shattuck states, "Our team considered the Brute Force (BF) Feeder right from the start because it is ideal for high impact applications. In this case, iron and scrap from one belt was being fed to a second belt." He adds, "This application was particularly challenging as we had limited workspace."

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Mike Shattuck
 Market Manager—Metal Recycling
 Eriez

As the design team moved forward, the BF Feeder still seemed to be the right choice to satisfy Garden Street's needs. Shattuck says, "We knew the feeder would take the beating, handle more than 200 tons per hour and pass the ferrous gently onto the stacking conveyor."

Eriez Product Manager of Vibratory Screening Rob Yandrick was on the design team. He explains, "The abrasion resistant steel tray we installed is unique. This was a tight spot—48 inches by 46 inches by 6 inches—so a unique tray geometry was required to fit the existing layout. In fact, we designed the overhead drive to keep the motors up and out of way." According to Eriez, the tray is wider at the rear to ensure the material from the infeed conveyor belt is captured and nothing falls on the ground, and it narrows at the discharge to help ensure there is not any spillage as the ferrous lands on the stacker conveyor belt.

"The BF Feeder stands up to the demanding application and lays down the material on the next belt. The feeder takes the hit and smoothly moves the ferrous forward," Yandrick says. He adds that the tray has replaceable wear liners to help provide years of equipment life.

Garden Street is experiencing exactly what they expected since the installation of its Brute Force Feeder: elimination of costly repairs, unscheduled maintenance and interruptions to shredder operation.

Weber describes, "We have not experienced any piercing of our stacker conveyor belt for more than a month. The shaker system really works well. And," he adds, "we know if there are problems, Eriez will be there to provide the service and spare parts we need. We used competitive equipment at one time but we could never get service. We took out their equipment and replaced it with Eriez."

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Based on early observations, Garden Street expects this new feeder will increase belt longevity, decrease the cost of maintenance and reduce the chance of downtime, according to Weber.



World Headquarters 2200 Asbury Road Erie, PA 16506 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.

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