Garden Street Iron & Metal runs a state-of-the-art auto shredding facility at its Fort Myers, Florida, location. The company has a long-standing reputation for being a quality supplier of ferrous scrap to industry consumers. Superior quality aside, Rob Weber, the company’s owner, was unhappy with production and some of the shredder’s operating costs. “We were continually seeing our knuckles and other rounds, like meatballs, roll off our drum magnets.”

Losing this material had become such a problem that Weber had to set up a secondary line to rerun it. “This is some of the densest scrap coming out of our shredder. You need it to maintain your overall density to satisfy your mill customers,” Weber says. “Much of this material was heading toward the nonferrous line,” he continues. “Our head pulley in front of that line was catching so much ferrous that we’d fill a 15-cubic-yard container each day. All of that material had to be rerun.”

P-Rex changes everything
In March of 2018, Garden Street installed two Eriez P-Rex permanent magnets to replace its previous units. “Eriez made it easy for us because they built our P-Rex magnets to fit my existing stands. That made the upgrade easy to install,” Weber says. “The most difficult part of the change out was having to change our chutes under the magnets to heavy stainless because of the strength of the new drums.”

“We realized a dramatic change immediately. These magnets are incredibly strong, and the knuckles and rounds stayed put,” Weber says.

The P-Rex design uses permanent magnets and bucking poles to project a deep magnetic field. This powerful field is combined with a heavy manganese steel external shell that’s abrasion resistant for extended operating life.

“We found that the drum shells also prevented material from getting away; it really sticks in a way we’ve never seen with previous drums,” Weber explains. “Once our P-Rex units were up and running, we went from emptying that container daily to touching it once a week, and it might accumulate 5 cubic yards of material. The P-Rex just catches it all.”

Efficiency increases
When Garden Street installed its P-Rex units, it also used an innovative design whereby the first drum is an overflow and the second is an underflow. This layout helps to remove pokers in the line while aggressively agitating material for better separation.

“Because we changed the drum configuration, we realized in-line efficiency in the operation,” Weber says. “Pokers were removed, and the over-to-under drop decreased from 10 feet to 5 feet. This has allowed much more efficient flow and decreased downtime.”

“Because we no longer have to rerun material, we’ve saved tremendously on labor. It’s been a huge improvement to our operation,” he adds.

Lesson learned
“The only mistake I made in this process was letting these P-Rex units sit around for six months before I installed them. My brother installed two at his Cincinnati shredder years ago and told me how good they were. I didn’t believe it.”

Weber continues, “The P-Rex drums are everything Eriez says they are and more. We could not be happier with them. We have been running them for a year now and have had zero issues.”

For more information on Eriez’ P-Rex drum magnets, visit http://eriez.recyclingtoday.com or call 814-835-6000.