



Are You Missing Out on Money?

Stainless Steel

In recycling applications, sorting is paramount. This valuable metal is often overlooked in waste streams, but it can be a hidden treasure worth recovering. Stainless steel is a valuable commodity that can be found in a variety of waste streams and by throwing it away, you are throwing money in the trash, as well.

How It Works

Stainless steel is 100% recyclable. There are a variety of different types of stainless steel, but the core components of the material remain the same, which is what matters when it comes to recyclability. While stainless steel does contain iron, the other main elements that it is composed of are highly valuable. These elements include iron, chromium, nickel, and molybdenum. All of these can be recovered when the stainless is melted down without compromising the performance of the material. In summary, when stainless steel goes through the recycling process, it has the same quality and characteristics as a brand-new stainless-steel product.

The Benefits

When it comes to recycling applications, knowing that there will be a reduction in the Earth's carbon footprint is always positive. Beyond that, this added area of business for a **company isn't just cost savings, but rather a money maker**. As it stands currently, the stainless that is flowing through your sorting operations is getting thrown away. Talk about turning trash into treasure.

Products That Can Assist

Industrial Magnetics engineers and manufactures Magnetic Stainless Steel Separator Conveyors that make this area of business easier and more achievable. These are ultra-high gauss magnetic separators designed to capture low grade, or weakly magnetic, stainless steel. This tool was developed to attract and hold low-grade stainless-steel scrap found in electronic scrap, wire chopping lines and auto shredder residue. The objective is to minimize the need for manual picking of smaller pieces of stainless steel out of the waste stream.

Stainless steel can be magnetic, but it depends on its specific grade and composition. For the steel to be magnetic, it must contain iron and have either a martensitic or ferritic crystal structure. Martensitic stainless steels (grades 410, 420, and 440) are magnetic because they contain a high percentage of iron. Ferritic stainless steels (grades 409, 430, and 439) are also magnetic due to their ferrite structure, which is primarily composed of iron.

The Stainless-Steel Separator Conveyors from Industrial Magnetics are programmed to magnetically attract the specific magnetic types of stainless steel. Based on your application, Industrial Magnetics has options that can be crafted to extract the size of stainless steel needed. Our separators are available in 4-inch, 8-inch, and 12-inch diameter circuits. Further customization is available if these sizes do not best meet your application. The narrower the circuit, the higher the Gauss reading, which allows for the attraction of smaller pieces. The magnetic field that Industrial Magnetics engineers can create is strong and dependable, leading to money that can be trusted to be generated for your operations.

Wrap Up

The untapped potential of stainless-steel recycling presents a significant opportunity for businesses to increase revenue and contribute to a more sustainable future. By implementing sorting and separation technologies, companies can effectively extract this material from waste streams, transforming it into a valuable resource and added profits.