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PRODUCT CATALOG



SEPARATION SYSTEMS

2025







ITR Recycling Solutions® AIR Aeraulic Separators

The ITR AIR Series Aeraulic Separators efficiently separate light and heavy fractions from preshredded or screened waste, including mixed plastics, MSW, bulky waste, and mixed metals. Light materials like plastic films, paper, wires, and sponges are separated from heavier items such as stones, glass, metals, and dense plastics. These separators can be seamlessly integrated into existing recycling plants between primary shredders and secondary grinders. Their integration reduces maintenance expenses, minimizes downtime, and enhances separation efficiency for materials of different densities. This leads to improved recovery rates and increased economic value for materials like aluminum and heavy plastics. Their versatility makes them essential for optimizing waste management and recycling processes.





ITR Recycling Solutions® Eddy Current Separators

The ITR Recycling Systems ECS Separator is designed to separate non-ferrous metals from inert materials using advanced eddy current separation technology. A high-speed rotating magnetic field generates electric currents in non-ferrous metals such as aluminum and copper, causing them to be repelled and effectively separated from non-metallic materials like plastics, wood, and glass. The system features a vibrating screen that ensures precise material metering, enabling consistent feeding and improving separation accuracy. An independent electrical control panel manages the entire process, ensuring smooth, automated operation with minimal human intervention. This integrated approach maximizes metal recovery rates, enhances material purity, and boosts overall processing efficiency, making the ECS Separator a valuable asset for modern recycling facilities.







ITR Recycling Solutions® Air separation systems | ITR SZZ

The SZZ Air Separator by ITR Recycling Systems efficiently separates lightweight materials such as plastic, nylon, and rubber from heavier substances like metals and dense plastics. Its innovative zigzag design maximizes separation performance by creating a controlled air flow that sorts materials based on weight and density. Available in various capacities, the SZZ Air Separator can be customized to meet specific production requirements. An independent electrical control panel ensures smooth, autonomous operation, allowing it to function as a standalone unit or seamlessly integrate into processing lines. It is particularly effective in applications like separating ferrous and non-ferrous metals from municipal solid waste (MSW), enhancing sorting efficiency and material recovery.



ITR Recycling Solutions® Air Separator Systems | ITR AS

ITR Recycling Systems – AS Air Separators are advanced machines designed to separate lightweight materials from heavier ones using controlled airflow.

By creating a stream of air that lifts and directs lighter components such as plastics, paper, and films away from denser materials like metals, glass, and heavy plastics, they ensure efficient waste separation. The system's performance is optimized through adjustable deflectors and airspeed control mechanisms, allowing precise separation across various waste types and material densities. This flexibility makes ITR AS Air Separators ideal for applications in recycling plants handling diverse waste streams, enhancing material recovery and processing efficiency.









ITR Recycling Solutions® Ballistic separators | ITR BSP

ITR Recycling Systems Ballistic Separators are advanced sorting machines designed to classify waste based on density, shape, and elasticity, making them essential in modern waste processing. Using oscillating blades, they efficiently separate materials into three categories: lightweight 2D items like paper, films, and textiles; rigid 3D objects such as bottles, cans, and other rolling items; and heavy materials, including metals, stones, and glass, which fall through the separator's grilles. This precise sorting process improves the efficiency of downstream recycling and recovery operations, ensuring higher material purity and reducing processing costs. The versatile design makes ITR Ballistic Separators suitable for various waste management applications, from municipal solid waste (MSW) processing to specialized recycling facilities.





ITR Recycling Solutions® Magnetic Separation | ITR SPA

ITR's Alternating Poles Magnetic Separation Systems utilize a magnetic drum with alternating poles to create a dynamic magnetic field for efficient separation of ferrous materials from non-ferrous and inert components. The alternating magnetic poles ensure continuous shifting of the magnetic attraction, enabling precise separation even for small or irregularly shaped ferrous particles. Material flow is controlled by a vibrating step table, enhancing separation performance and reducing processing inefficiencies. An independent electrical panel manages the entire system for seamless, automated operation. These systems are ideal for advanced refining tasks such as cleaning copper wire from electric motors, removing rubber and textile residues from high-tensile steel in ELT recycling, and separating mixed metal shavings. The result is consistently HQ output and improved recovery rates.



CORDERATE HARDER

Equipment and Solutions for the Circular Economy

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