INDUCTION SENSOR SEPARATOR
MODELS EMSEF-R & EMSEF-C

The SGM Induction Sensor Separator is a high-precision belt sorting system specifically engineered to **recover non-ferrous metals that are not effectively detected by traditional Eddy Current Separators (ECS)**. These residual metals, typically representing 2% to 5% of ECS waste, fall into two key categories:

- Zurik – Primarily stainless steel.
- Copper Wires – Both insulated and bare.

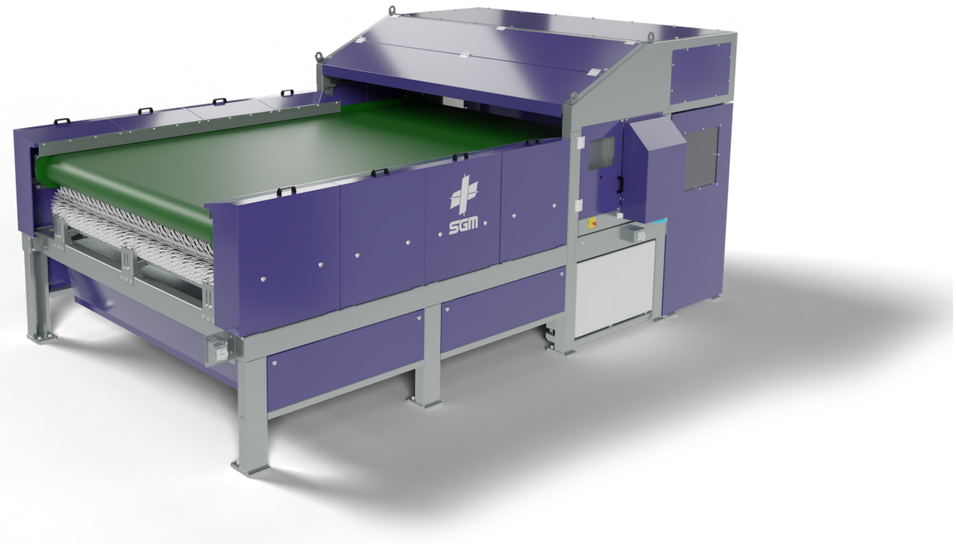
By incorporating cutting-edge induction sensor technology, this system maximizes metal recovery, improves overall recycling efficiency, and significantly reduces valuable material loss.

HOW IT WORKS

The Induction Sensor Separator utilizes high-resolution inductive sensors positioned beneath the conveyor belt to detect metallic particles as they pass through an electromagnetic field. Once metal is identified, the system transmits data to a central control unit that activates a series of precision pneumatic rejector valves at the belt's discharge point. A top (EMSEF-R) or bottom (EMSEF-C) blowing air jet system then expels the metal particles with a targeted burst of air, ensuring accurate separation. This process is especially effective for insulated copper wires and irregularly shaped stainless steel fragments, which require a broader air spectrum and optimized rejection force to achieve clean ejection and superior sorting quality.

Key Features & Benefits:

- Recovers residual metals from ECS waste, increasing overall recovery rates.
- Selectable sorting modes: *All Metals*, *Stainless Steel*, *and Copper Wires*.
- Adjustable sensor sensitivity: High, Medium, or Low.
- Modular, scalable design: allows for cascade installation without altering conveyor levels.
- Real-time monitoring ensures optimal feeding and sorting performance.
- User-friendly 12" touchscreen interface for intuitive system management.



TYPICAL APPLICATIONS

- Automotive Shredder Residue (ASR)
- Ash from MSW incinerator (IBA)
- Glass waste
- Electronic scrap (WEEE)
- Wood waste

MODEL	SENSORS	VALVES/ NOZZLES	ADJUSTABLE BELT SPEED	BELT WIDTH	LENGTH	WIDTH	HEIGHT	WEIGHT
EMSEF-R 48	60	120	2-2.8 m/sec 6.5-9 ft/sec	1200 mm 48"	5250 mm 207"	2200 mm 87"	2400 mm 95"	2,800 Kg 6,173 lbs
EMSEF-R 80	90	180	2-2.8 m/sec 6.5-9 ft/sec	1800 mm 70"	5250 mm 207"	2800 mm 87"	2400 mm 95"	3,400 Kg 7,496 lbs
EMSEF-R 96	116	232	2-2.8 m/sec 6.5-9 ft/sec	2300 mm 90"	5250 mm 207"	3300 mm 87"	2400 mm 95"	3,900 Kg 8,598 lbs

MODEL	SENSORS	VALVES/ NOZZLES	ADJUSTABLE BELT SPEED	BELT SPEED BELT WIDTH	LENGTH	WIDTH	HEIGHT	WEIGHT
EMSEF-C 48	60	120	2-2.8 m/sec 6.5-9 ft/sec	1200 mm 48"	6340 mm 250"	2200 mm 87"	2400 mm 95"	3,300 Kg 7,276 lbs
EMSEF-C 80	90	180	2-2.8 m/sec 6.5-9 ft/sec	1800 mm 70"	6340 mm 250"	2800 mm 110"	2400 mm 95"	3,800 Kg 8,380 lbs
EMSEF-C 96	116	232	2-2.8 m/sec 6.5-9 ft/sec	2300 mm 90"	6340 mm 250"	3300 mm 130"	2400 mm 95"	4,200 Kg 9,260 lbs