



new!

SHRED1™

Ballistic Separator

*Automatically
produces a premium
low-copper shred*

The Shred1 Ballistic Separator from Eriez uses ballistics to efficiently separate iron-rich ferrous from much of the mixed metals and waste material in the post drum magnet flow.

This new separator delivers three distinct fractions:

- 1 a premium low-copper ferrous product
- 2 a traditional mixed metal shred
- 3 a heavy/light/waste mix.

Ballistics is the science of mechanics that deals with the flight, behaviour and effects of projectiles... the science or art of designing and accelerating projectiles so as to achieve a desired performance.



The value of a premium ferrous project

Clearly, worldwide demand for steel is on the rise. Scrap processors able to supply steel mills with a very high grade ferrous product are positioned well for the future.

However, with decline in availability of pure, high quality industrial scrap, processors are shredding more consumer waste than ever before. Post consumer waste items like vehicles and appliances contain lots of motors, condensers and wire harnesses as well as cast aluminium pieces, all of which

have steel housing, shafts or cores. This presents a big problem for most yards using current processing technology.

The **Shred1** changes this dynamic and allows processors to differentiate themselves with a premium ferrous shred and demand a higher value per ton.

Fraction 1

- Produces highly magnetic metals
- 70-80% of flow
- Contains less than 0.2% of copper

The first fraction is a high value, low-copper content ferrous product worth considerably more than fraction 2. Demand for this premium product is on the rise.

Fraction 2

- Produces lightly magnetic metals
- 10-20% of flow
- Copper/steel
- Aluminium/steel

The second fraction represents less than 20% of the flow and contains mostly mixed metals, copper and aluminium with steel housings or cores. Hand sorting can be accomplished with relatively few pickers.

Fraction 3

- Heavy and light material
- 5-7% of flow
- Heavy steel objects
- Light, residual fluff, rubber, wire

The final low volume fraction consists of heavy steel objects and light material such as fluff, rubber and some wire. This fraction can be picked or sorted.

Equipment effectiveness to remove copper



Contaminants	Shred1	X-ray	traditional hand picking
Small electric motors	Yes	No	Difficult
Wire harnesses	Possibly	No	Difficult
Aluminium pieces	Yes	No	No
Meatballs (armatures) in housings	Yes	No	Possibly
Refrigerator compressors	Yes	No	Difficult
Meatballs (armatures)	Yes	Possibly	Yes
Copper Nickel	Yes	Yes	Difficult



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