

The **X-Ray Sorter** specifically designed for your industry and application.

- **Car shredder zorba:** separation of heavy metals (copper, brass, zinc, lead) from aluminum and magnesium
- **Aluminum smelter:** separation of cast aluminum from aluminum sheet



The SGM X-ray Sorter is based on the latest X-ray through beam technology using high dual energy for metal separation and single low energy for plastic separation.

Working Principle

The materials to be inspected and sorted are evenly distributed onto the sorter's conveyor belt and transported between X-ray emitter (source) and receiver (LDA). The energy emitted by the X-ray source passes through the material under inspection and the receiver measures the residual level of energy which is characteristic of the atomic composition of the material crossed. For metal identification, a dual energy receiver is used to isolate the differences in energy readings due to different thicknesses of material. The information read by the receiver is processed by a computer that decides whether or not to trigger the pneumatic sorting device.

Mechanical Assembly

Extremely robust to suit industrial use.

Software Advantages

Designed by SGM for your application. The user has the possibility to choose from a variety of algorithms and an interactive interface allows simple intuitive setups. The synchronization between the pneumatic rejection system setting and the belt speed setting is automatic.

TECHNICAL SPECIFICATIONS

Basic dimensions



Model	Sources	Valves/ Nozzles	Belt Speed	Belt Width	Weight
XRS 24-R	1	64	5-8 ft/sec.	24"	15,765 lbs
XRS 48-R	2	128	5-8 ft/sec.	52"	20,300 lbs
XRS 72-R	3	192	5-8 ft/sec.	80"	25,400 lbs

- Operating condition: Under roof if installed outdoors
Temperature 40°F - 90°F
- X-Ray radiation level: < 0,5 mR/hr at 5 cm
- Capacity: Based on application and specifications of material to separate, percentage of in-feed material, average size and weight.
- Air compressor: Specifications based on quantity and characteristics of material to be separated.

